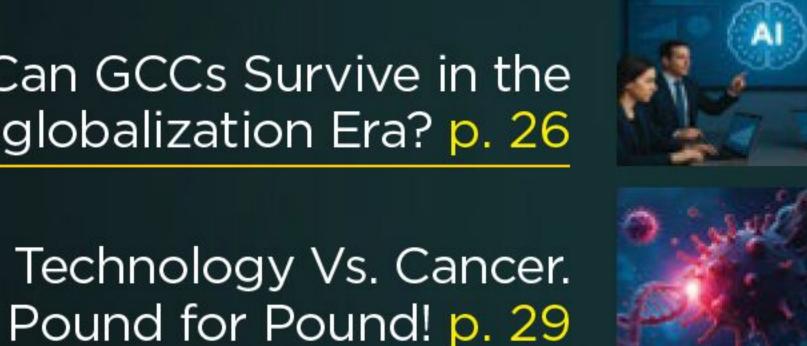
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VOL XLI No 10 | OCTOBER 2025 | ₹100

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THE BUSINESS OF INFOTECH

INDIA'S JOURNEY FROM COST ARBITRAGE TO INNOVATION



BENGALURU LEADS INDIA'S GCC STORY AS KARNATAKA BUILDS **FUTURE-READY TALENT**

PRIYANK KHARGE Minister for Electronics, IT & BT, Government of Karnataka















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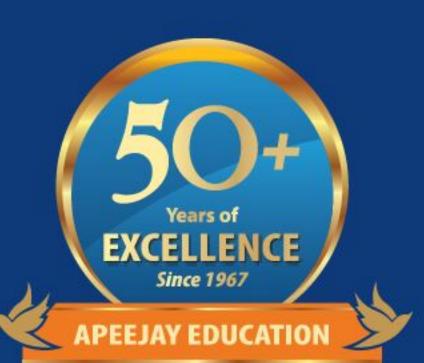
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Partner at Catalines and former Chairman and Managing Director of Cognizant, India

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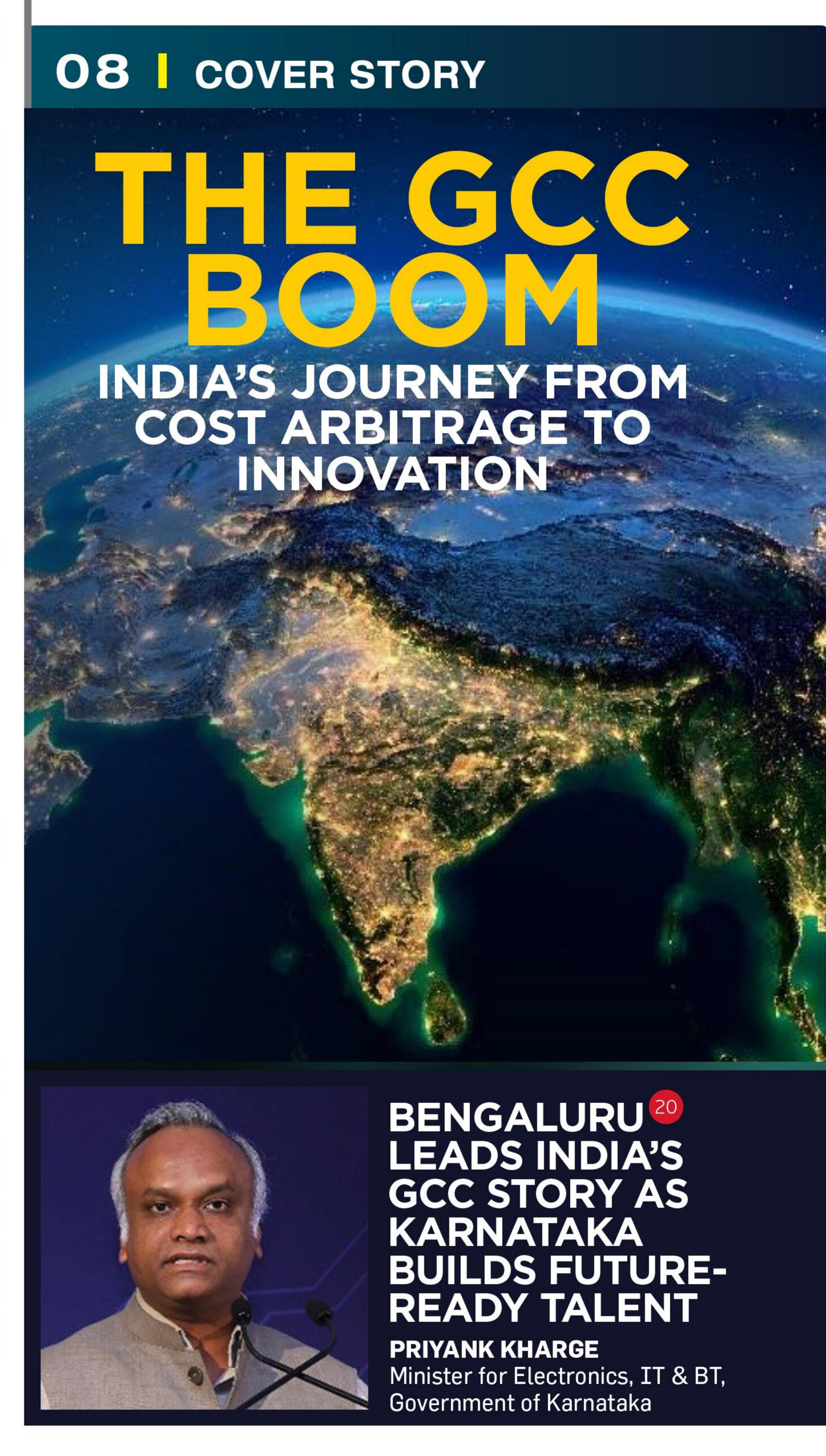


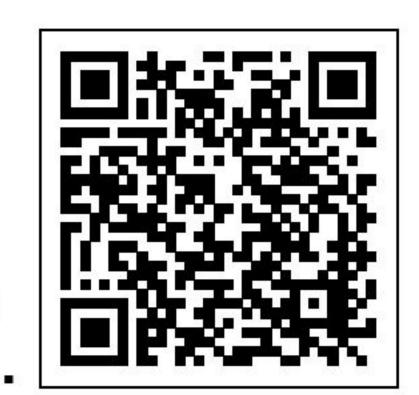
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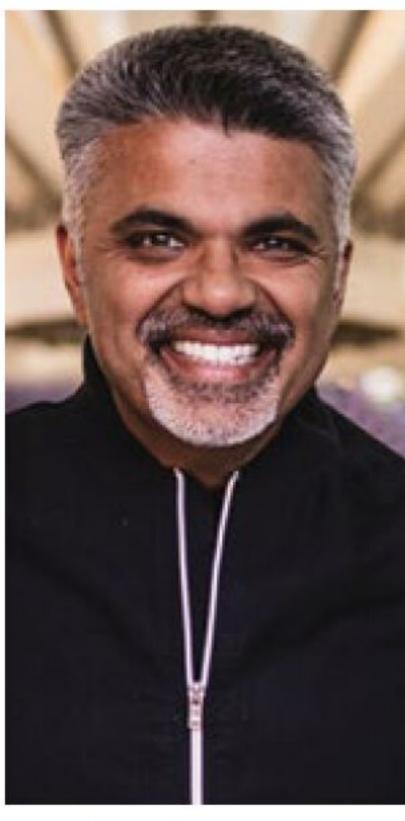
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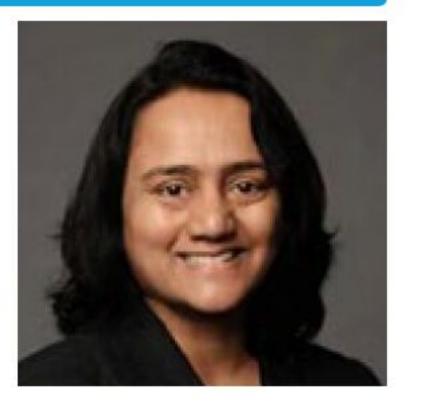
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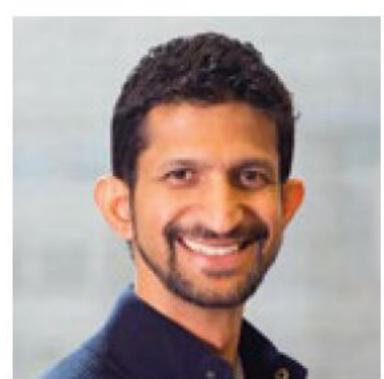
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Dataquest (not affiliated with Dataquest Inc., a division of Gartner Group, USA), is printed and published by Pradeep Gupta, on behalf of Cyber Media (India) Ltd, printed at M/s Archna Printers, D-127, Okhla Industrial Area, Phase-1, New Delhi 110020, published at D-74, Panchsheel Enclave, New Delhi 110017, India. Editor Shrikanth G. Distributors in India by IBH Books & Magazines Dist. Pvt. Ltd, Mumbai. Subscription (Inland): ₹1200 (12 issues)

(For subscription queries, please email: subscriptions@cybermedia.co.in or send a WhatsApp message to 9289870545.)

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Edit

IS INDIA'S GCC BOOM A STRATEGIC TECH RESET?

The story of India's Global Capability Centres (GCCs) is no longer one of scale alone. It's a story of reinvention. Once built on cost arbitrage, GCCs are now becoming the epicentres of innovation, shaping enterprise strategies, products, and platforms for the world. The October 2025 issue of Dataquest captures this decisive shift: from back offices to boardroom influence.

As the cover story shows, India's 1,700-plus GCCs are driving value, speed, and digital capability for global corporations. They are building new-age products, accelerating R&D, and enabling AI-driven operations that directly impact outcomes. The rise of these centres marks India's transition from an outsourcing destination to a global innovation powerhouse.



Shrikanth G shrikanthg@cybermedia.co.in

Equally interesting is the emergence of "nano GCCs"- compact, high-impact innovation pods set up by mid-sized and niche firms. These are agile units where experimentation thrives, linking deep domain knowledge with rapid prototyping. They are redefining how innovation is distributed, not centralised - signalling a more inclusive, multicity tech future.

Beyond enterprise walls, innovation is also transforming lives. Our feature on tech in cancer care explores how AI and machine learning models are reshaping early detection and diagnosis, turning data into life-saving insights. This human-centred application of AI reminds us that technology's truest purpose lies in solving what truly matters. A classic case of tech for good.

Yet, all this progress unfolds against a complex global backdrop. Deglobalisation, new tariff regimes, and shifting geopolitical equations are redrawing the boundaries of trade and technology. But amid these headwinds, India is quietly building its own momentum: a blend of talent, trust, and technological depth that positions it uniquely for future.

I hope these stories resonate with you, and spark new ways of thinking about how India's tech journey continues to evolve - resilient, creative, and unstoppable.

TECHTONIC NORMANI ©OZI That means you will work 24/7! Great news! We are now a Global Capability Center and will work to serve all time zones!

The GCC Boom: India's Journey from Cost Arbitrage to Innovation

India's 1,700+ GCCs are shifting from cost to cocreation. Can India convert scale, AI depth, and leadership ambition into true orchestration power for global enterprises?



India's Global Capability Centres (GCCs) have travelled a long road from their back-office origins. What began as a search for cost efficiency has matured into a strategic engine that now shapes how global enterprises build, ship, and scale their tech. Across India, centres that once focused on tasks now own products, steward platforms, and deliver measurable outcomes for the enterprise. The scale is undeniable, more than 1,700 centres already employ close to two million professionals, and Zinnov's projections point to 2,200 centres and 2.8 million jobs by 2030. Yet scale is not the headline. What matters is the shift in strategic evolution: the cost-to-value evolution. Clearly, India is no longer only the world's tech delivery engine and is positioning itself as the orchestration hub of modern enterprise.

That shift comes through in how leaders describe India's GCC centres today. The definition of success is changing from headcount to outcomes, from hours logged to products launched, platforms reused, and resilience during disruption.

In this evolution, one layer of opportunity and complexity is the rise of Generative AI that has accelerated this change, not as a tool layered over old processes, but as a nudge to redesign work itself, to split roles into tasks, allocate them between people and machines, and recombine them into faster, safer, more creative operating models.

It is in this context that India's most mature GCCs are winning global mandates for product

ownership, data science, platform leadership, and risk management, mandates that once lived only at headquarters. That is the inflection point this story explores, why India's GCCs are being trusted to orchestrate, not just execute.

Echoing the buoyancy, Karthik Padmanabhan, Managing Partner, Zinnov (a global management and strategy consultancy firm), says, "At Zinnov, we've seen this journey not in theory but in practice. After setting up and transforming more than 200 GCCs, we've watched these centers evolve from cost-driven outposts to transformation hubs that anchor global strategy. The GCCs that win are those that anchor themselves to value metrics, build leadership depth, and create AI-native, domain-driven talent pipelines. These are not back offices anymore. They are command centers of transformation. If India sustains this momentum, it will not only remain the largest GCC hub, it will set the blueprint for how modern enterprises are designed and run."

INDIA'S GCC VALUE BEYOND COST

For nearly two decades, India's proposition was framed around labour arbitrage. That story has shifted decisively. Enterprises now look to India for innovation capacity, product stewardship, and speed to value. In boardrooms, leaders do not ask how many seats a centre has, they ask what the centre ships and how quickly those releases move into production or markets. This reframe is rooted in a deeper STEM



At Zinnov, we've seen this journey not in theory but in practice... They are command centers of transformation.

Karthik Padmanabhan
 Managing Partner, Zinnov



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India's GCC opportunity lies in moving beyond cost arbitrage, with the potential to grow into a USD 110 billion market by 2030.

Eric Pagdiwalla
 Senior Vice President and Head – GCC, Persistent Systems

base, a confident product culture, and a widening geography of talent. Notwithstanding, we have a range of skilling issues.

"India's GCC opportunity lies in moving beyond cost arbitrage, with the potential to grow into a USD 110 billion market by 2030. With a rich STEM talent pool, strong AI and R&D momentum, the foundations are already in place. The National GCC Framework and initiatives like Smart Cities are rapidly expanding the ecosystem into tier-II and tier-III cities, strengthening both the talent and infrastructure base. It's important to build deep capability COEs, for example, a GenAI COE, that can define and accelerate the GenAI agenda for clients, positioning GCCs as strategic hubs that fuel innovation and deliver measurable business value," observes Eric Pagdiwalla, Senior Vice President and Head – GCC, Persistent Systems.

In essence, Pagdiwalla's point is striking: if centres can define and accelerate an enterprise's AI agenda, they are no longer just part of a delivery plan, they are part of strategy formation. This has altered how global firms plan footprint, with India seen as the place where experimentation can be industrialised at pace and scale.

The question many global leaders are asking now is whether India's centres can credibly act as hubs of leadership and design, not only in engineering. In travel technology, where product and platform decisions have visible business impact, the answer is increasingly yes.

Reflecting on this, Rency Mathew, People Leader – APAC and Managing Director, Sabre Bengaluru

says, "India has long been a key player in the GCC landscape, and its value proposition extends far beyond cost advantages. The true strength lies in its rich talent pool and the ability to continuously build on that foundation. To maintain momentum, it's essential that GCCs evolve from being mere execution centers to becoming strategic value hubs that shape the blueprint of global enterprises."

Clearly, the centre of gravity is moving not only because of capability, but also because of where demand is emerging. India finds itself at the intersection of supply and demand for talent and technology.

"A compelling example is the emergence of global leadership roles being successfully executed from India, driven by the availability of skilled talent and the confidence in local capabilities. Additionally, with Asia Pacific now leading global travel trends, India is strategically positioned to capitalise on this shift. The region's growing population, particularly in India and China, is ambitious and eager to engage globally, further reinforcing India's potential as a future leader in the GCC space," adds Mathew.

This broadening mandate is visible across sectors, from enterprise technology to healthcare and retail. It is also visible across the map, as tier-II and tier-III cities start to anchor new centres and Centres of Excellence.

Explaining this transactional-to-tactical-tostrategic shift, Nitin Chandel, Group Vice President and India Country Manager, UKG says, "India's biggest advantage is its deep and diverse talent pool. What started as back offices has now matured into





Nearly 70 to 78 percent of GCCs in India are already investing in AI and ML upskilling, supported by over 120,000 AI professionals and 185 plus Centres of Excellence.

– Kavita Mehra

Senior Consultant and Head – India GCC, Dell Technologies



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The real strength lies in talent and the ability to build on that foundation. India is no longer just executing; it is shaping the blueprint of enterprises.

Rency Mathew

People Leader – APAC and Managing Director, Sabre Bengaluru

strategic hubs of innovation, especially in technology, R&D, and finance. Today, many global organisations are driving mission-critical innovation out of India; it is no longer a support function location but a part of their location strategy, that helps deliver direct value to the customers. India remains at the forefront of offering such diverse, unique, and scalable talent, while other countries lack the scale."

Chandel's assessment underscores a larger mindset shift, execution alone is no longer the sole criterion. Ownership and innovation are what win trust from headquarters, and that trust then attracts even larger mandates.

"In today's fast-evolving business landscape, execution alone is no longer the benchmark of excellence, ownership and innovation are, and India is leading that. This mindset reflects a broader transformation. India is emerging not just as a centre of capability, but as a crucible of product leadership and innovation. Our talent here is driving outcomes, reimagining workflows, and influencing global strategy with bold ideas and deep technical insight," adds Chandel.

Chandel also points to how the map is changing. "Another exciting trend is the rise of Tier-2 and Tier-3 cities. The talent emerging from these regions is expanding the GCC footprint beyond traditional metros. UKG launched a new Centre of Excellence in Pune recently, specifically to focus on AI. This is a clear example of how cities like Pune have been increasingly drawing the attention of global corporates, beyond traditional metro locations like Bengaluru, Mumbai, Delhi, Hyderabad, and Chennai."

Policy has a role too, as state frameworks lower friction for investment and talent mobility. "Combining this with proactive government support, states like Karnataka, Gujarat, Andhra Pradesh, Telangana, Uttar Pradesh, and Madhya Pradesh already have GCC-friendly frameworks in place or are in the process. With this, India's value proposition becomes even stronger," adds Chandel.

THE TALENT EQUATION

Talent is the foundation of India's advantage, and the pressure point that could slow momentum if not addressed. Multiple leaders call out the same paradox, India produces the talent the world needs, yet employability gaps, leadership depth, and specialised skills can lag enterprise demand.

"One of the most pressing challenges is ensuring that the workforce is not only technically proficient but also equipped with strong leadership and soft skills. While India produces many engineering graduates, there remains a gap in behavioural competencies and communication skills that are essential for global roles," emphasises Mathew.

Mathew's point recurs across sectors, the move from execution to ownership requires a step change in communication, stakeholder management, and decision-making.

Then how do we navigate the talent challenges? "To address this, there must be a sustained investment in offering training in both technical and behavioural skills," says Mathew. "This includes fostering global mindsets, enhancing people management capabilities, and developing communication skills that enable



Execution alone is no longer the benchmark of excellence, ownership and innovation are, and India is leading that.

- Nitin Chandel

Group Vice President and India Country Manager, UKG



Retaining niche skills in AI, sustainability, and cybersecurity requires a renewed focus on employee value propositions and upskilling opportunities.

Rajasekar Rajagopal

Assurance Leader, EY Global Delivery Services India LLP

professionals to lead by example. Bridging this gap will be crucial to sustaining and accelerating GCC growth in India," adds Mathew.

Talent grooming is vital. And the employability gap is visible in the data. "India produces 31 percent of the world's STEM graduates and ranks second globally in AI skill penetration. Yet only 43 percent of graduates are considered industry-ready, and over 50 percent of GCCs cite challenges in accessing skilled talent. This disconnect between academic output and enterprise needs is a growing concern. The pace of change demands continuous upskilling, which current academic curricula struggle to match and bridging this gap is critical for sustaining growth," observes Chandel.

As centres move up the value chain, specialised skills matter. "The most critical challenge lies in sustaining the talent pipeline, especially in advanced engineering, digital, and leadership roles. As GCCs move up the value chain and take on strategic mandates, the demand for specialised skills is rising sharply. If the ecosystem does not evolve in step with these requirements, India risks losing its edge," says Brathaban Karuppaiah, Country General Manager, SBM Offshore India.

Karuppaiah argues for tighter collaboration with academia so that students see end-to-end product lifecycles, not just coursework. That model builds confidence and craft, and it tends to create higher retention.

The talent conversation is also about cost and retention. "As GCCs evolve into strategic entities, the current functional scope will expand, making

traditional tax models inadequate. Without robust transfer pricing policies, GCCs risk double taxation and operational ambiguity, which could potentially deter future investments. Additionally, talent attrition and rising workforce costs, which are expected to grow 30 percent by 2030, pose a threat to scalability. While India's talent pool is vast, retaining niche skills in sustainability audits, AI and cybersecurity requires a renewed focus on employee value propositions and upskilling opportunities," according to Rajasekar Rajagopal, Assurance Leader, EY Global Delivery Services India LLP.

Maturity levels vary widely across centres. "Collaborations with startups and academia partnerships can provide GCCs access to latest and trending technology, as well as build a pipeline of the best talent. Many hubs also face the risk of stagnation, becoming trapped as low-value cost centres due to rigid processes and resistance to change, with more than 60 percent yet to achieve adequate standardization and fewer than 10 percent reaching the highest levels of maturity," observes John Dawber, Corporate Vice President and Managing Director, Global Business Services, Novo Nordisk.

Devesh Amin, Director Global Infrastructure Engineering & APAC IT, Intuit, says, "A critical challenge remains the availability of specialized talent, particularly in areas like AI, data science, cybersecurity, and design thinking."

These risks do not diminish the opportunity, they clarify where leadership focus must go, skills, leadership, mobility, and the systems that make learning continuous.



44

GCCs in India have moved beyond cost arbitrage to become true outcome drivers, accelerating product pipelines, improving patient outcomes, and building new digital capabilities.

 John Dawber, Corporate Vice President and Managing Director, Global Business Services, Novo Nordisk



Our India teams own product roadmaps, drive customer-first solutions, and measure themselves against business KPIs.

- Rohit Kaila

Head of Technology and Site Leader, Wayfair India TDC

AI-NATIVE OPERATING MODELS

Generative AI has become a force, pivoting transformation. The most mature centres are not grafting AI onto legacy workflows, they are reconstructing how work works, with data contracts, observability, and clear guardrails.

"India's GCCs must embed AI-first thinking across functions, adopt platform-led architectures, and co-create solutions that drive global business outcomes. Centre of Excellence-as-a-service, vendor consolidation, functional scale-up, and horizontal technology offerings are a few areas that provide anywhere from a 25 percent to a 40 percent business impact compared to existing operating models that merely involve being a commodity supplier. It's about scaling fast and taking full ownership of the product lifecycle, from ideation to optimization," points out Pagdiwalla.

Pagdiwalla gives examples from client work to show what this looks like in practice. "We have worked with industry leaders, enabling them to launch production-ready GCCs in about 6 to 8 weeks. With SASVA, our AI-powered platform, we accelerate releases with reduced time-to-market, while iAURA tackles complex data challenges for seamless AI deployment. For a global cloud data management provider, our AI-driven, scalable GCC model delivered a 30 percent reduction in costs, while for a security management unicorn, we helped establish a GCC that drove 50 percent faster resolution rates and accelerated release cycles."

The idea of innovation arbitrage is central here, the notion that India can turn its combination of startup

energy, consulting depth, and engineering scale into a repeatable engine for outcomes.

"India's GCC story is no longer about scale and cost. The real opportunity is innovation arbitrage, leveraging India's startup ecosystem, global consulting depth, and leadership talent to create hubs that drive strategic value. With over 2,500 centers expected by 2029, the compelling value lies in building AI-native, outcome-focused GCCs that serve as North Stars for their parent organizations," says Monish Singhal, Group Vice President, Publicis Sapient.

UKG's Chandel offers a concrete illustration of what AI-first looks like when ownership resides in India. "For instance, at UKG, our core platform or product development is led out of India. Our India Centre of Excellence has played a significant part in our development of more than 40 AI agents. Today, India contributes more than 50 percent of UKG's R&D globally."

FROM SUPPORT TO STEWARDSHIP

The centres that make the leap from delivery to orchestration are those that own roadmaps end-toend. Ownership changes measures of success, it brings customer metrics, speed to market, and revenue into the local dashboard, and it elevates leadership.

"India's GCCs must embed AI-first thinking across functions, adopt platform-led architectures, lead in digital transformation initiatives, and co-create solutions that drive global business outcomes. It's about scaling fast and taking full ownership of the product lifecycle, from ideation to optimization," underscores Pagdiwalla.



Riveron's GCC in Pune was established with the vision of helping our clients expand beyond cost arbitrage.

- Rajesh Pawar Managing Director, Riveron



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We are embedding design thinking, advanced analytics, and product engineering to co-create solutions with headquarters.

- **Prakash Kumar,** Head of Corporate IT, ZEISS India Global Capability Center

For instance, retail and e-commerce provide a good test case because they operate at the sharp end of customer experience and logistics. "For GCCs in India to become true engines of innovation, they must cultivate a culture that actively encourages experimentation, agility, and continuous learning. Equally important is strong, empowered leadership within the GCC. Leaders must articulate a clear vision for the centre's strategic role, inspire their teams, and drive initiatives that create meaningful business impact. At Wayfair, this leadership mindset is foundational to how we scale innovation across our global teams," says Rohit Kaila, Head of Technology and Site Leader, Wayfair India TDC.

Ownership is also showing up in finance and advisory. "India's GCCs are evolving rapidly, poised to transition from centres of operational efficiency to centres of innovation, at which point the most effective GCCs will expand to shape global strategy. Riveron's GCC in Pune was established with the vision of helping our clients expand beyond cost arbitrage, instead, we focus on developing deep domain capabilities and embedding AI in delivery efficiencies at scale," says Rajesh Pawar, Managing Director, Riveron.

Even in advanced manufacturing and optics, design thinking and engineering craft are shifting to India. "Moving beyond cost arbitrage to deliver innovation and strategic value is a journey that takes time and deliberate effort. India's GCCs have already begun this transition, but the next phase requires building stronger capabilities in areas such as AI, advanced analytics, product engineering, and design thinking.

GCCs must embed themselves deeper into global strategy, moving from support functions to cocreating solutions alongside headquarters," observes Prakash Kumar, Head of Corporate IT, ZEISS India Global Capability Center.

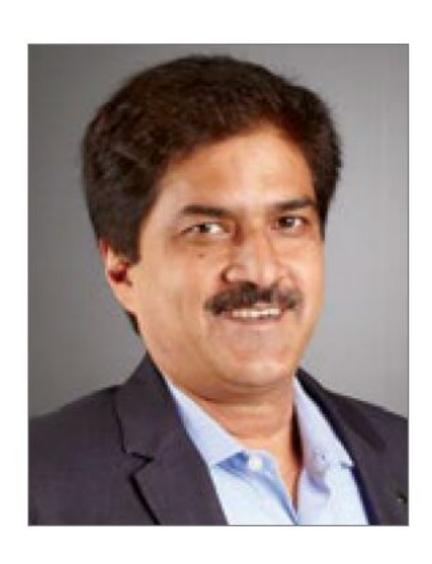
THE ECOSYSTEM EFFECT

No centre succeeds alone. The strongest hubs are porous, they partner with startups for speed, universities for emerging skills, and services firms for scale. This networked model is becoming a competitive advantage for India.

"With approximately 1,800 GCCs, nearly 1.9 million professionals, and USD 64.6 billion in annual value creation, India offers one of the world's most vibrant talent ecosystems. Progressive initiatives such as the Karnataka GCC Policy are fostering collaboration among enterprises, startups, academia, and government, further strengthening this ecosystem," says Kavita Mehra, Senior Consultant and Head – India GCC, Dell Technologies.

Mehra notes the capability stack that supports this ecosystem. "Nearly 70 to 78 percent of GCCs in India are already investing in AI and ML upskilling, supported by over 120,000 AI professionals and 185 plus Centres of Excellence. Tier-2 cities are also emerging as significant hubs, expanding the talent pipeline and reinforcing India's leadership in advanced technologies including GenAI, cloud, and cybersecurity," says Mehra.

For those looking at tangible success, financial services offers an instructive example of ecosystem execution at scale. "India's greatest opportunity to



Our Chennai centre has scaled AI pilots globally and continues to support our enterprise modernization efforts.

Debasis Panda, Senior Vice President,
 Operations and Head, TransUnion GCCs



We are developing digital twins, asset integrity, and supply chain hubs from India.

- Brathaban Karuppaiah Country General Manager, SBM Offshore India

further strengthen its position as a GCC hub lies in its ability to drive impact-led innovation at scale. At the TransUnion GCC India, we have seen this transformation first-hand, our Chennai centre, for example, has scaled AI pilots globally and continues to support our enterprise modernization efforts," shares Debasis Panda, Senior Vice President, Operations and Head, TransUnion GCCs.

Panda points to the learning engine that makes this sustainable. "Mature GCCs are solving real-world challenges such as financial inclusion and fraud prevention in partnership with startups, academia and policy networks. This rapid evolution of technology demands sustained investment in learning and skills initiatives, especially now that skills are seen as the new global currency. For example, TU Connect, our holistic, experiential and continuous learning program, helps us build a future-ready workforce," adds Panda.

Segments like consulting and assurance also see a similar pattern. "To transcend cost arbitrage, GCCs must embrace a dual transformation that includes internal capability building and external ecosystem collaboration. Research has shown that leading GCCs are now co-creating IP with academic institutions and incubating startups to drive disruptive innovation. Internally, GCCs must invest in governance structures that scale innovation programs and nurture talent in next-gen technologies like AI, quantum computing and advanced analytics," underscores Rajagopal.

Meanwhile, energy and engineering centres demonstrate how sector context multiplies the value of technology. "SBM Offshore India is building

expertise in areas like front-end engineering design, centralised supply chain hubs, asset integrity, digital twins and digital platforms powered by AI and the Power Platform. These initiatives illustrate how GCCs can move from efficiency engines to true value creators by contributing innovation, intellectual property, and solutions that are globally competitive," says Karuppaiah.

GCCs AND IT SERVICES, CONVERGENCE NOT COMPETITION

The relationship between GCCs and IT services firms is often framed as competition. The leaders we spoke with insist the future is collaborative, a hybrid where innovation is incubated inside GCCs and industrialised by service providers with scale and compliance muscle.

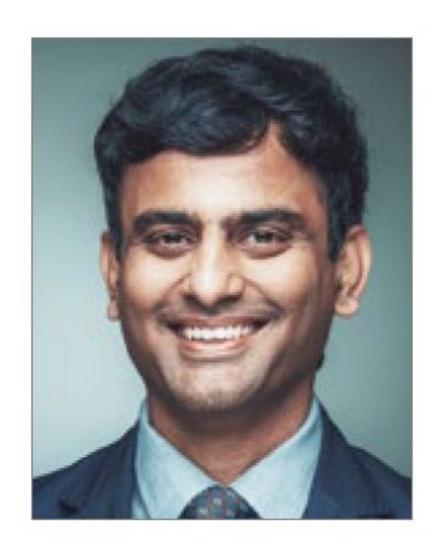
"I strongly believe that the relationship with service providers will increasingly be defined by collaboration and convergence, with partnerships focused on unlocking greater value creation. Service providers positioning themselves as mere commodity suppliers risk being relegated to handling tactical, low-value operational processes. However, service providers that bring forward-looking consulting, deep domain and technology expertise, flexible GCC operating and commercial models, GenAI accelerators, and innovation pods, along with true thought leadership and expertise, will become indispensable partners," notes Pagdiwalla.

The players in the fray also echo that view. "The future is defined by convergence. IT services bring scale, delivery discipline, and industry breadth, while



The future is convergence. GCCs will drive product and data decisions, while IT services bring scale and specialist skills.

- Piyush Kedia Co-Founder & CEO, InCommon



The magic happens when we build hybrid models that combine the best of both worlds. In this model, GCCs can focus on strategic, innovation-led initiatives, while IT services provide the operational scale needed to deliver solutions globally

- Venkat Raghavan, Group Director, Analytics and Data Sciences, Tesco Business Solutions.

GCCs incubate innovation, pilot next-generation solutions, and develop strategic IP. Together, they form a complementary ecosystem where speed and innovation combine with scale and execution excellence," explains Mehra.

Meanwhile, assurance and consulting see the same pattern. "The future lies in convergence. GCCs and IT services firms are increasingly coexisting in a symbiotic ecosystem. While GCCs offer strategic control and deep domain expertise, IT services bring scale, agility and specialized capabilities. Our analysis shows that over 80 percent of GCC leaders are open to engaging new service providers to fill talent and capability gaps," says Rajagopal.

Other industries like healthcare and life sciences add nuance. "There will be areas of competition, especially in transactional or commodity delivery, where IT services and GCCs overlap. But this gap can be reduced through continued collaboration and convergence. While scaling, integration expertise and platform engineering capabilities are provided by the IT services industry, GCCs can provide domain depth, product vision and regulatory expertise," says Dawber.

Digital natives frame it as a one-company mindset. "It's not GCCs versus services, it's GCCs with services. The future is convergence, blending execution excellence with innovation to drive transformation at scale," observes Singhal.

Meanwhile, organisations like Xebia describe how new operating models are emerging to support

this partnership. "The relationship between GCCs in India and the traditional IT services industry is evolving toward convergence, with strong elements of collaboration. Xebia's own experience with models like Company-as-a-Service highlights how GCCs can start small and grow into fully functional entities, with the right partnership ensuring reduced risk, faster scalability, and stronger strategic impact," says Glory Nelson, India Country Head, Xebia.

Interestingly, telecom and product engineering specialists also see a complementary fit. "GCCs can serve as a growth vector for IT service companies because these companies have the capabilities to address some of the inherent limitations of the GCC model itself. IT service providers can undertake end-to-end work, as they possess extended expertise. Beyond just capacity, IT service providers also bring diverse and deep expertise across multiple technology domains and industry verticals," observes Yogesh Rathi, Global Head of Delivery, Sasken Technologies.

Piyush Kedia, Co-Founder & CEO of InCommon, says, "The future is about convergence. GCCs will own core product and data decisions while also setting the standards for architecture, security, and quality. IT services, in turn, will provide surge capacity, specialist skills, accelerators, and managed modules."

"The best setup is one where both sides know exactly where their role starts and ends, and where they measure success the same way. It's not about picking one over the other, it's about each doing what





GCCs bring deep domain expertise, agility, and innovation especially in areas like AI/ML and advanced data solutions. IT service partners bring maturity in scaling, compliance, and process excellence.

- Glory Nelson, Country Head - India Capability Center, Xebia

they are best at, while following the same standards. That's how you get both speed and quality at the same time," adds Piyush.

THE ROAD AHEAD

The path forward is clear and contested. Eastern Europe, Latin America, and Southeast Asia are building credible alternatives. Wage inflation, leadership gaps, and regulation could blunt India's edge if not addressed with urgency. Yet the ingredients for sustained leadership are already present, the talent density, the ecosystem depth, and the confidence of global enterprises to place strategic bets in India.

Retail analytics leaders distil the opportunity succinctly. "India's journey from a global services hub to a strategic powerhouse is truly exciting. We see the biggest opportunity in moving GCCs beyond being just service providers and into the engine rooms of global enterprises. The value proposition is no longer about cost, it's about a unique blend of scale, strategic talent, and digital fluency," says Venkat Raghavan, Group Director, Analytics and Data Sciences, Tesco Business Solutions.

Raghavan emphasises the shift from reporting to decision support. "For us at Tesco, our Analytics CoE in India has evolved from a reporting function into a global hub that's influencing group-wide decisions and shaping our business strategy. This shift proves the measurable impact GCCs can deliver when they're empowered to innovate," adds Raghavan.

Singhal of Publicis Sapient sums up the operating model change he believes will define leaders. "GCCs must reimagine themselves not as delivery arms, but as innovation hubs and strategic partners embedded within their parent organizations. This means building multi-capability teams, not just technologists, but strategists, product managers, experience designers, and data scientists working together. The path forward lies in rejecting the old zero-sum lens of 'GCC vs. services' and instead building one crew in the same boat, leveraging

each model's strengths to deliver end-to-end digital transformation for global enterprises.'

And organisations like UKG frame the call to action for headquarters. "It starts with a mindset shift at the parent company. GCCs don't have to be seen as merely extensions of headquarters, but as true partners, product owners, and innovation leaders. When teams in India are given end-to-end ownership, they do not just execute, they innovate, problem-solve, and contribute strategic value," says Chandel.

ZEISS and Wayfair underline the importance of design, engineering, and empowered local leadership. "Over time, these steps will position India not just as a delivery hub, but as a true centre of global innovation and strategic influence," says Kumar.

Adds Kaila, "Our India teams own product roadmaps, drive customer-first solutions, and measure themselves against business KPIs such as customer experience, speed to market, and revenue growth."

Finally, TransUnion's view captures both the promise and the risk. "Skills are the new global currency. This rapid evolution of technology demands sustained investment in learning and skills initiatives. Unless India invests at speed and scale, its GCC momentum could plateau," observes Panda.

India's GCC moment is as defining today as the IT outsourcing pivot was after Y2K, the very shift that prompted Thomas Friedman to write The World is Flat. That was another age and another time. Now, in a world where bots and AI work alongside us as collaborators – and against the backdrop of sweeping geopolitical change - India stands at the cusp of an even greater tech evolution. This is perhaps the most important inflection point in our technology journey. The time is now for India to assert its tech supremacy without compromise, to rise, shine, and carve out its identity, riding every crisis as an opportunity. This is not just India's GCC moment, it is India's technology destiny in the making.

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Nano GCCs and India's strategic edge in global capability centres

Ramkumar Ramamoorthy, Partner at Catalincs and former Chairman and Managing Director of Cognizant, India, shares his insights on the next phase of India's GCC growth.

By Shrikanth G

amkumar Ramamoorthy has had a ringside view of the evolution of India's Global Capability Centres(GCC). He joined Cognizant in its early years and went on to become the Chairman and Managing Director of Cognizant, India, where he was responsible for operations spanning more than 200,000 employees. During his 22-year tenure, he incubated and scaled multiple portfolios, and was closely associated with the acquisition and integration of a dozen GCCs, including those of UBS, Invensys, T-Systems and KBC Bank.

After stepping down from Cognizant in 2020, Ramkumar co-founded Catalincs, a technology advisory firm that helps niche technology companies build the capabilities for rapid growth. With Cognizant itself having begun as the technology captive of Dun & Bradstreet in Chennai, Ramkumar has seen the GCC story unfold first-hand — from 200 employees in 1994 to Cognizant's 340,000-strong workforce today serving hundreds of global clients.

In a conversation with Dataquest, he reflects on the opportunities, challenges, and shifts shaping India's GCC journey.

We are now witnessing a new wave of 'nano GCCs' in India, focusing on high-end techno-business talent to develop innovative products and bleedingedge solutions.



RAMKUMAR RAMAMOORTHY
Partner at Catalincs and former Chairman and Managing Director of Cognizant, India



No progressive global business today can afford not to have access to digital and AI capabilities at scale - and no country offers it like India does.

What do you see as the biggest opportunity for India to strengthen its position as the global GCC hub over the next five years? What's the compelling value proposition right now?

Over three decades, we have seen multiple waves of Fortune 500 and Global 2000 companies establishing their GCCs in India. What started with financial services, chip manufacturers and software companies in the United States soon expanded to European and Pan-Asian companies across industries such as manufacturing, telecom, healthcare, pharmaceuticals, energy, consumer goods, utilities and media.

We are now witnessing a new wave of 'nano GCCs' coming to India. These are venture capital and private equity-backed specialist companies, which are keen on tapping into the incredible talent in India in newer areas such as next-gen hardware, in-memory and edge computing, space technology, genomics and synthetic biology. Unlike in the earlier waves, these nano GCCs may not hire in thousands, but focus on high-end techno-business talent to develop innovative products, platforms and bleeding-edge solutions.

I expect these nano GCCs to play a larger role in the transfer of technology through R&D, sharing of best practices in newer areas such as product development, cyber forensics and quantum computing, through deep collaboration with academia and the start-up ecosystem in India, thereby driving higher levels of innovation and intellectual property.

It is important to note that no progressive global business today can afford not to have access to digital and AI capabilities at scale. With no other country in the world having the digital and AI capabilities at scale that India has, many of these GCCs do not have a choice but to make a beeline for India.

What do you consider the most critical challenge that could slow or limit India's GCC growth story if not addressed in time?

In addition to the challenge of going beyond cost arbitrage and driving transformational value, I would call out the ability to attract and retain

exceptional talent and give them a career path over longer periods of time as the biggest challenge. The growth of any GCC is directly linked to the growth of the parent organisation and therefore addressing the career growth aspirations of everyone is extremely important. Otherwise, they could get acquired by a traditional IT services company, as happened earlier with Citigroup, UBS, American Express, Unilever, Invensys, MasterCard, Deutsche Telekom, among others.

There are two pathways for growth to happen at GCCs. One, the parent should continue to grow organically or inorganically to provide the growth momentum needed. Or two, at an appropriate time, start servicing companies beyond the parent, as happened with Cognizant, Genpact, EXL, WNS, Optum, among others. These companies started as captive technology or business process arms for reputable companies such as Dun & Bradstreet, GE, Conseco, British Airways and United Healthcare, and went on to become global leaders in their own right.

How will the traditional IT services industry intersect with the GCC model: will it be competition, collaboration, or convergence?

While in the short run, traditional IT services companies will see some revenue cannibalisation and opportunity loss, in the medium to long run, they will create newer business models and flourish in them.

In addition to the time-tested strategic staff augmentation model, we are already witnessing more and more traditional IT services companies incubating newer GCCs using build-operate-transfer (BOT), joint venture (JV), virtual captive and other models, as well as co-locating and co-innovating with GCCs through their Centres of Excellence. It is estimated that GCCs already contribute to anywhere between 4 and 10 percent of the annual revenues for traditional large and mid-sized IT companies.

Just as hybrid workplace models are evolving, we will see hybrid models in techno-business collaboration and entrepreneurship between traditional IT services companies and GCCs.

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Karnataka's mid-market GCC wave: agility, innovation, and inclusive growth

Karnataka hosts 570+ GCCs, 230 mid-market units, 660K talent, and 50% of India's AI base, driving innovation with India's first GCC policy.

By Shrikanth G



new report by Zinnov, in collaboration with the Karnataka Digital Economy Mission (KDEM) and the state government, was recently released to spotlight the evolving role of mid-market Global Capability Centers (GCCs) in Karnataka. The study, Mid-Market GCCs in Karnataka: Leading India's Next Wave of Innovation, highlights how these centres are reshaping India's technology and innovation narrative with their agility, lean models, and strategic focus.

Karnataka's journey as India's premier GCC hub began with Texas Instruments in Bengaluru in the 1980s. Four decades later, the state has cemented its status as the "GCC capital of the world." It now hosts 570+ GCCs employing 660,000 professionals, and accounts for nearly 34% of India's GCC market, with its own GCC market size valued at USD 22.2 billion.

Bengaluru accounts for 35% of India's GCC talent and houses 230+ mid-market GCCs, making it the nerve center of global enterprise transformation.



The state also boasts 50% of India's AI talent and a quarter of India's digital workforce, underlining why global corporations see Karnataka as their first choice for innovation and digital growth.

Priyank M. Kharge, Minister for IT & BT, Government of Karnataka, underlined this positioning at the report launch: "Through India's first-ever GCC policy (2024–2029), Karnataka is setting a benchmark for others, with incentives spanning innovation, skilling, and infrastructure support."

THE RISE OF MID-MARKET GCCS

The Zinnov-KDEM report spotlights the rapid ascent of mid-market GCCs, which are leaner and more innovation-driven than their larger counterparts. One in two mid-market GCCs in India is based in Karnataka, employing 70,000+ professionals and growing at a pace 1.4x faster than large GCCs.

These centres differ in operational style: they are agile, own end-to-end product development, and focus on emerging technologies such as AI/ML, advanced analytics, and cybersecurity. Unlike large GCCs, which often focus on scale, mid-market centres act as strategic innovation partners for global enterprises.

Their global footprint also reveals an interesting trend: 68% are from North America, 25% from EMEA, and 7% from APAC.

INDIA'S FIRST GCC POLICY: KARNATAKA LEADS

In 2024, Karnataka became the first Indian state to unveil a dedicated GCC policy (2024-2029). Designed to attract new players and deepen existing investments, the policy is built around four pillars:

Ease of Doing Business: Through the KATALYST single-window facilitation cell, with approvals in less than 45 days.

Talent Development and Skilling: 50% reimbursement for internships, 20% for skilling expenses (up to ₹36,000 per graduate), and dedicated AI skilling councils.

Infrastructure Innovation: Reimbursement of 40-75% capex for R&D labs and CoEs, 50% reimbursement for recruitment costs, rental assistance, and telecom reimbursements.

Industry Collaboration: IP filing reimbursements, innovation challenges, and startup access to GCC labs.

Special focus is reserved for Beyond Bengaluru clusters, like, Mysuru, Mangaluru, Hubballi-Dharwad-Belagavi, Kalaburagi, Shivamogga, and Tumakuru. The incentives encourage companies to expand outside the capital city by offering 25% lower operating costs, 50% lower attrition rates, and targeted benefits for smaller "Nano GCCs."

THE INNOVATION IN KARNATAKA'S DNA

Clearly, Karnataka's ecosystem goes well beyond scale. The state is home to 18,300+ startups, 21 Centres of Excellence, and 400+ global R&D centres. Bengaluru accounts for 37% of India's open innovation programs, with a thriving base of incubators and accelerators.

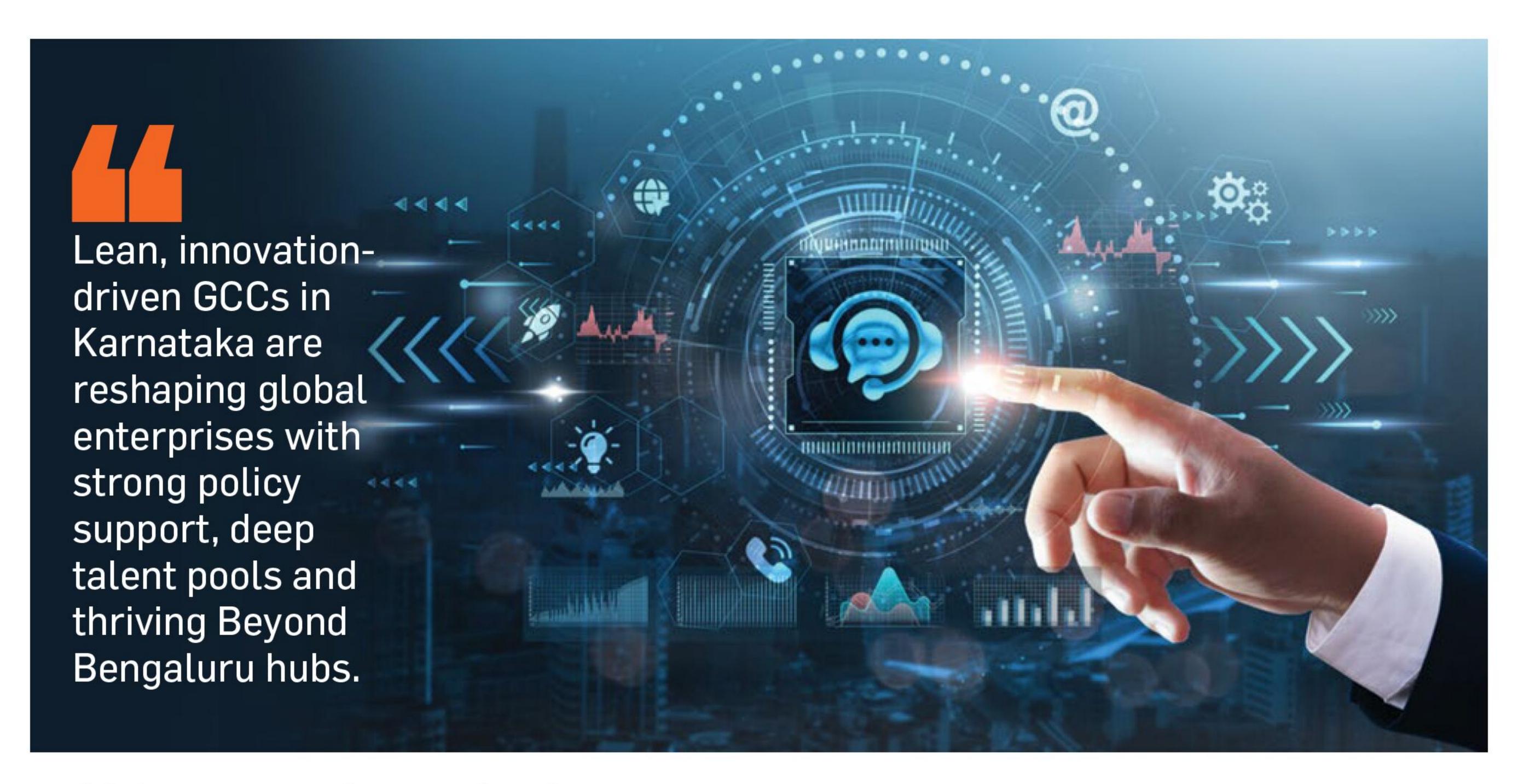
The report highlights several marquee collaborations: IISc-Microsoft Research on machine learning and cryptography; Wipro GE Healthcare's MoU with IISc for healthcare innovation; BT India Research Centre's partnership with IISc in quantum communications; and IIMB's "AI for Managers" programme with SAP Labs India.

This depth of collaboration strengthens the state's position as India's AI nerve centre. Bengaluru alone accounts for 62% of India's AI startup investments and hosts 44% of India's top AI startups.

TALENT AND ACADEMIA SYNERGY

Karnataka produces 100,000+ fresh tech graduates annually and has the highest inflow of senior and mid-level IT talent in India. The state enjoys a 64,000+ positive talent balance (more inflow than outflow), making it uniquely positioned to scale GCCs quickly.

Leading institutes such as IISc, IIM-B, IIIT-B, NIT-K, and IIT-Dharwad feed directly into the GCC ecosystem, supported by industry-academia programs. For example, Bosch has collaborated with RV College of Engineering to build an EV lab; Novo Nordisk partners with IIIT-B to explore digital health; Toshiba works with IIIT-B on 5G security; and Boeing India collaborates with IISc's incubation programs.



Global corporations also invest directly in Karnataka's talent pool. Amazon expanded its Future Engineer program across 100 residential schools in the state; Siemens, Shell, and Zeiss fund fellowships at IISc; and Bosch and LAM Research run training initiatives in Dharwad and Bengaluru.

CASE STUDIES: GLOBAL NAMES BETTING ON KARNATAKA

The report illustrates Karnataka's leadership with concrete success stories:

- Global Bank (Bengaluru): Established its GCC in 2005, scaled to a 1.12M sq. ft. campus. Reports 10–20% efficiency gains through AI-driven coding assistants and partners with the Ministry of Skill Development for advanced training.
- German Automotive Leader (Bengaluru): Its largest R&D hub outside Germany, pioneering Software-Defined Vehicles and sustainable mobility. Collaborated with KPIT Technologies to accelerate next-gen automotive solutions.
- Japanese Pharma MNC (Bengaluru): Launched its first Innovation Capability Center in Asia in 2025. Focuses on AI-driven drug platforms, SaMD (software as a medical device), and digital health systems. Targets 750+ digital roles by end-2025.
- Danish IT Organization (Mangaluru):
 Established in 2022, scaled from 30 professionals
 to 800+ employees by 2025, leveraging the Beyond
 Bengaluru initiative. Focused on vertical software
 development and innovation for Nordic markets.

BEYOND BENGALURU: THE NEXT FRONTIER

While Bengaluru continues to dominate, the Beyond Bengaluru initiative is strategically decentralising GCC growth. Cities like Mysuru, Mangaluru, Hubballi-Dharwad-Belagavi, Kalaburagi, Shivamogga, and Tumakuru offer high-quality talent pools, lower attrition, and better work-life balance.

Mangaluru, for instance, has already attracted large IT organisations, with hackathons like HackToFuture 3.0 and state-backed programs strengthening its ecosystem. Mysuru and Hubballi are also emerging as credible alternatives for engineering and BPM talent.

KARNATAKA'S STRATEGIC EDGE

The Zinnov-KDEM report makes it clear: Karnataka is not just India's GCC hub - it is redefining how mid-market GCCs operate, scale, and innovate. With policy-led support, talent depth, and a strong AI-driven innovation ecosystem, the state is catalysing the next wave of global enterprise transformation.

Going by the report findings, Karnataka is scripting a new chapter where lean, innovation-heavy GCCs will drive the global digital economy forward. With a more focused and holistic push to improve the city's infrastructure, decongest traffic, and improve the overall quality of life, Karnataka will be India's GCC North Star.

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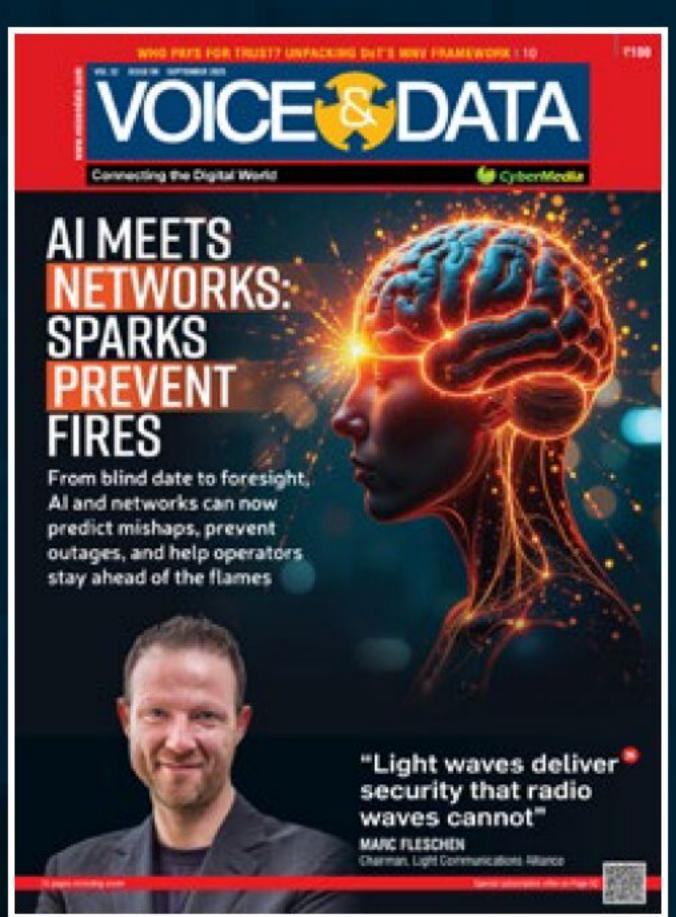


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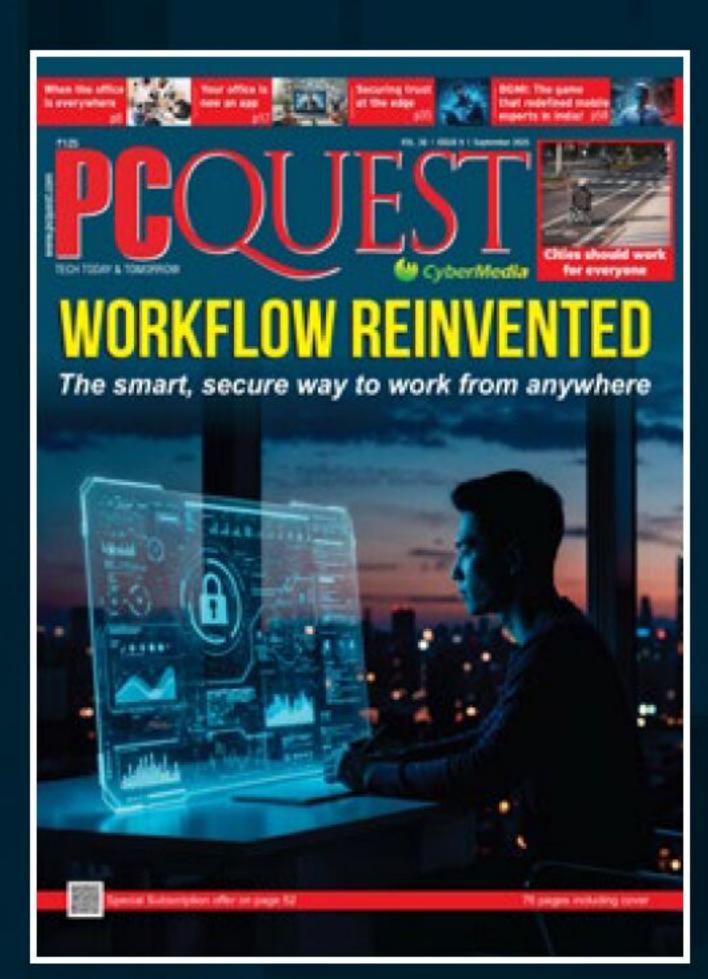
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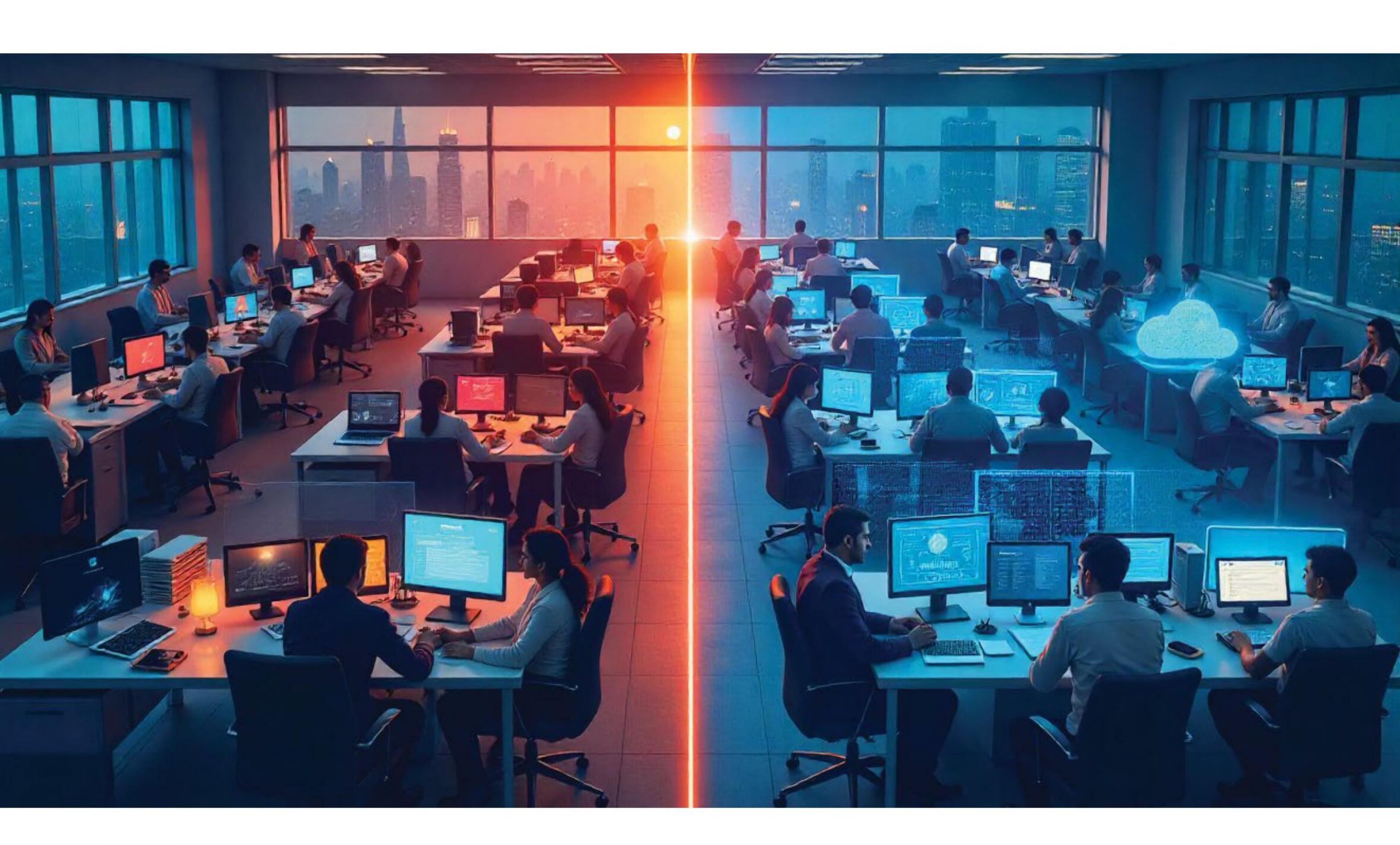
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GCCs vs IT services: How India's GCCs are rewriting the talent story

India's GCC boom is reshaping careers with demand for AI, cloud, and digital roles. IT services still scale with volume, but talent strategies now diverge sharply.

By Andrew Simoes



f jobs were music, GCCs swapped elevator tunes for a live DJ set. That's how the hiring scene in India feels today. For decades, IT services set the beat – mass hiring, predictable roles, and a focus on delivery at scale. Safe, reliable, and efficient. But GCCs have stepped in and changed the vibe completely. They're chasing talent that can do more than just keep the lights on; they want people who can build what's next.

India now proudly calls itself the "GCC Capital of the World." The numbers are staggering: 1,700+ centres, nearly 1.9 million people employed, and revenues touching USD 64.6 billion in 2024. By 2030, this could grow to over 2,100 centres and as many as 2.8 million employees, with revenues of USD 99–105 billion. And it isn't just about size – it's about momentum. In 2024–25, GCCs hired over 100,000 professionals, compared to 90,000 the year before.



net new hiring (NASSCOM-Zinnov).

DIFFERENT TALENT NEEDS

So, what's different about GCCs? They're hiring for depth, not just breadth. AI, machine learning, cybersecurity, product management, digital engineering, cloud - these are the skills GCCs are snapping up. IT services still focus on deliveryheavy skills: Java, .NET, SAP, testing, infrastructure management. Important, yes, but not exactly the skills you brag about over dinner.

But here's the bigger story: this is not just about GCCs outpacing IT services in tech. They're becoming one-stop shops. Alongside digital roles, they're scaling rapidly in Global Business Services (finance, HR, analytics, supply chain, compliance) and Engineering, Research & Development (design, testing, product development, patents). In fact, ER&D is growing faster than tech in Indian GCCs right now. And it's not just about headcount - the economics are shifting too. Earlier this year, KPO and BPO exports, often tied to the GBS model, actually outpaced IT services exports. Much of this is on account of the growth of GCCs. The benefit for multinationals is huge - faster decision-making, tighter integration, and capabilities that go beyond cost-saving into real value creation.

The data paints it clearly. The GCC India Talentscope Survey 2025 shows AI and ML topping the demand charts - 68% of financial services GCCs and 55% of IT/tech GCCs call it their number one hiring priority. Add cybersecurity and cloud to the mix, and you see why salaries are spiking and why talent with these skills can practically pick their next employer.

WHY PROFESSIONALS ARE SWITCHING

Naturally, professionals are voting with their feet. GCCs are attractive because they offer something IT services often don't: global exposure, ownership of

Two years in a row now, they've beaten IT services in projects, and work that feels cutting-edge. IT services still pull in thousands of fresh grads each year thanks to structured training and a predictable career ladder. But after a few years, many of those same employees move over to GCCs for faster growth and more challenging opportunities.

> The geography of this story is shifting too. Once locked into Bengaluru and Hyderabad, GCCs are now spreading into Pune, Chennai, NCR, and even tier-2 and tier-3 cities like Coimbatore, Kochi, Ahmedabad, and Jaipur. The IT services industry already had a head start on this, but its hiring remains more about volume than specialisation.

> Of course, neither model is perfect. GCCs face the headache of a limited supply of niche skills, constant retention battles, and rising salary pressures. IT services are dealing with mid-level attrition and the enormous challenge of reskilling huge workforces for an AI-first world. Both know automation is coming for them, and both are trying to get ahead of it.

But the direction of travel is obvious. GCCs are becoming the innovation engines of global business, right here in India. IT services will continue to be the scale players, but powered more and more by AI and automation. Both will thrive - but their talent strategies will keep pulling them further apart.

The talent game has shifted from "how many" to "what kind." Companies need to figure out not just where the people are, but what they want, how much to pay them, and how to hold onto them. Organisations need to read these signals and design smarter hiring strategies. Because in the end, the

winners won't be the ones offering the biggest number of jobs - they'll be the ones offering growth, ownership, and purpose.

Andrew Simoes is a Associate Director - GCC Consulting, Michael Page. maildqindia@cybermedia.co.in



Can GCCs Survive in the Deglobalization Era?

Focus on AI, big data and cloud optimization strategies to enhance ops efficiency & biz impact to thrive.

By Raju Chellam



uring a GCC (global capability center) strategy retreat, the chief innovation officer proudly introduced the company's new "Tech Hub"—a modest repurposed storage room outfitted with a beanbag chair, a lava lamp, and a whiteboard still faintly marked "Janitorial Roster."

"This is where transformative ideas will ignite," he proclaimed. Within a week, an attempt to power a 3D printer triggered a building-wide outage. The space was discreetly renamed "The Reflection Room" and soon became a haven for robust conversations with smuggled beer and spicy snacks. Surprisingly, productivity shot by 25%.

If that anecdote made you smile, these statistics should make you think for a while: The global GCC market is set to reach US\$403.22 billion by 2032—up from US\$172.34 billion in 2024—growing at a CAGR of 11.21% during the period, according to DataM Intelligence, an Indian market research firm.

"The GCC landscape is evolving rapidly with value-

driven operations," the firm says. "There's more focus on innovation, advanced analytics and automation to deliver strategic business outcomes using AI, automation technologies and cloud computing."

The shape of GCCs has changed significantly after the Covid-19 pandemic. GCCs have shifted from shared service centers focused on simple transactional tasks to become their organization's primary resource for foundational support functions including finance, infocommunctions, innovation and product development.

THE FLIP SIDE

Leading global centers have achieved that shift in three phases, McKinsey notes. First, they earned the "right-to-play" in more complex business activities by demonstrating the ability to deliver high levels of service, quality and cost efficiency. Second, they earned the "right-to-partner" by demonstrating the ability to help the wider enterprise develop better

processes and adopt new technologies. Third, they earned the "right-to-lead" by demonstrating that they can consistently deliver the best solution available. And now, leading global centers are poised to take the next evolutionary step by becoming a source of strategic competitive advantage for their enterprises by driving talent growth, customer experience, leadership and innovation.

The key is to first focus on ABC (AI, big data, cloud) optimization strategies to enhance operational efficiency and business impact. GCCs are accelerating digital transformation by adopting hyperautomation and integrating technologies such as AI, RPA (robotic process automation) and ML (machine learning) to build self-optimizing business processes. The goal is to enable employees to focus on strategic, high-value tasks and let automation handle repetitive operations.

"To stay competitive, service providers must align their offerings with AI-first, automation-led, insight-driven operating models that support realtime decision-making and seamless enterprise integration," Accenture advises. "GCCs that successfully embed AI and automation can unlock sustainable cost efficiencies, enhance decision quality, and deliver superior customer experiences."

Big data is also central to GCCs' evolution into strategic hubs. By analyzing large volumes of data, GCCs can enable faster, smarter decision-making, predictive insights and operational efficiency. That's because real-time analytics support automation and enhance agility. When effectively leveraged, big data analytics can transform GCCs from mere support functions into drivers of innovation and enterprise value.

A cloud-first approach is becoming a foundational principle for GCCs to enable enhanced security, scalability and agility, Accenture says. "Beyond structural decisions, enterprises must also focus on digital and AI readiness, ensuring that modern GCCs are built with cloud-first, automation-driven architectures," the firm says.

Another equally critical pillar is talent. To build future-ready GCCs, enterprises must invest in talent across AI, data analytics and cybersecurity. This is where India stands out with an estimated 5.5 million ICT professionals and a consistent influx of STEM (science, technology, engineering, mathematics) graduates entering the workforce annually. According to a report by BCG (Boston Consulting Group), India accounts for 16% of the global AI talent pool, ranking second only to the US in AI skills penetration and contributions to open-source AI projects on GitHub.

THE FLOP SIDE

So far so good. The moot question: Can GCCs survive in the deglobalization and protectionist era?

As global economic policies shift towards protectionism and national self-reliance, GCCs face increasing pressure. Governments are imposing stricter data residency laws, reshoring mandates and trade barriers that challenge the cross-border flow of talent, tech and services—core pillars of GCC operations. GCCs were traditionally built on global labor arbitrage and centralized service delivery. They now risk fragmentation as countries prioritize domestic capabilities and local employment.

Rising geopolitical tensions and supply chain nationalism are also prompting enterprises to rethink offshore strategies. In this climate, GCCs may struggle to justify their centralized, crossborder models. Without adapting to the new normal, many GCCs could face downsizing, repurposing, or even closure. The shift from globalization to regionalization will require a fundamental rethinking of the GCC value proposition.

While GCCs are evolving rapidly in scope and ambition, the majority remain focused on delivery execution, underutilizing their potential to act as capability hubs powering enterprise-wide transformation. "Only 8% of GCCs have advanced significantly across the three dimensions most critical to enterprise value: innovation, competitive differentiation, and operational efficiency," BCG reports. "Based on our global survey covering GCC and enterprise leaders across industries, the report reveals a sharp maturity divide."

BCG ranked the top seven countries in GCC maturity with India leading the pack, followed by Malaysia, Mexico, Philippines, Poland, Singapore, and the US. "India strikes a rare balance with about 30% of GCCs being mature performers, while underperformance is limited to just 6%," BCG notes. "Despite no underperformance in Poland, only 9% of GCCs there are above average, suggesting a stagnant mid-tier with minimal progression into higher maturity. As for the US, it has the highest share of top and above average performers (35%) but 10% underperformers indicating polarized maturity."

AI presents both opportunities and challenges. While it can significantly enhance operational efficiency, it also poses risks to employment. For example, HDFC reduced call center costs by 30% through chatbot automation. HSBC in Hong Kong automated 90% of its loan approvals. In July,

The flip side in all nuke scenarios? Foremost is the issue of what to do with nuclear waste. SMRs produce radioactive waste that must be carefully managed, although the actual quantity is surprisingly low.

Microsoft announced a reduction of 9,000 jobs about 4% of its global workforce—as part of a major restructuring linked to its AI investments, including tools like GitHub Copilot that now perform tasks previously handled by humans.

This trend underscores a broader issue beyond tech deployment: the strategic decision-making process at the executive level. Often made in isolation, without wider consultation, these decisions can be misaligned with organizational realities. McKinsey estimates that poor strategic choices have cost Asian banks over US\$10 billion annually. Yet, within these same organizations, AI is predominantly used to automate lower-tier functions while senior leadership who approve these deployments remain largely unaffected by automation. This imbalance raises critical questions about fairness, transparency and long-term workforce strategy.

TWELVE TIPS

As global markets shift towards protectionist policies and regionalization, GCCs must evolve to remain relevant and resilient. Here are 12 strategic recommendations—in alphabetical order—to help GCCs survive and thrive:

Accelerate: Automation and AI adoption. Leverage AI, ML and automation to mitigate rising operational costs and talent shortages while maintaining elevated levels of productivity and service quality.

Build: Digital sovereignty. Develop infrastructure and capabilities that reduce dependence on foreign technologies, particularly in cloud computing, data management and AI platforms.

Create: Innovation hubs. Reposition GCCs from cost-saving units to strategic centers of innovation, agility and enterprise transformation.

Diversify: Service portfolios. Expand beyond traditional IT and support functions by offering highvalue services such as AI, cybersecurity and digital transformation consulting.

Enhance: Cultural and language adaptability. Equip teams with regional language skills and cultural fluency to better engage with local markets and stakeholders.

Focus: On ESG. Align GCC operations with ESG (environmental, social and governance) goals to

meet growing expectations from regulators, clients and investors.

Grow: Government relationships; Proactively engage with local governments to influence policy, access incentives and participate in national digital initiatives.

Harvest: Multi-hub strategies. Adopt a distributed model by establishing regional micro-hubs to reduce geopolitical risk and enhance operational resilience.

Invest: In local talent. Shift from global hiring models to cultivating strong local talent pipelines through partnerships with universities and tertiary institutions.

Juxtapose: Public-private partnerships. Collaborate with government agencies, industry bodies and academic institutions to co-create innovation ecosystems and shape policy direction.

Keep: Cybersecurity close. Strengthen cybersecurity and data governance frameworks to comply with local regulations and safeguard enterprise assets.

Leverage: Local leadership. Empower regional teams by developing local leadership, ensuring decisions are aligned with market realities and building trust with host countries.

Since we started with a productivity joke, let's end with another. At the leadership summit, the CEO declared: "We're embracing AI to future-proof our decisions." A chatbot was deployed to assist senior executives. It could analyze reports, schedule meetings and even generate strategy slides. The CFO asked it to predict stock prices. The CMO wanted it to write inspirational tweets. The CIO tried to teach it empathy. The intern used AI to automate the execs' weekly reports. The data showed productivity rose by 25% even though nobody did anything different. The result: the intern now chairs the AI Steering Committee. @

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Technology Vs. Cancer. Pound for Pound!

The Battle's Over. The War's On. How long will it take to finally swirl the victory flag?

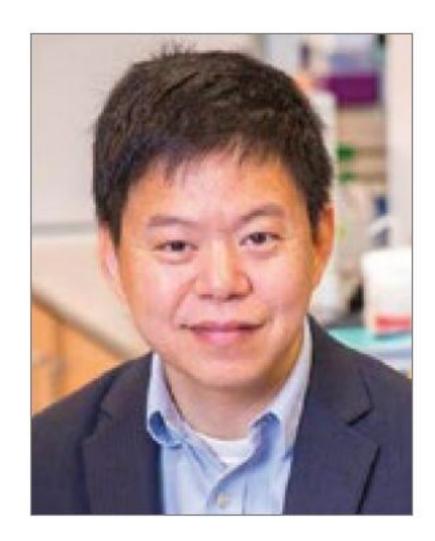


hildren with cancer have higher cure rates than adults with cancer, and I wonder if the reason is their natural, unthinking bravery. Sometimes little kids seem better equipped to deal with cancer than grown-ups are. They're very determined little characters and you don't have to give them big pep talks. Adults know too much about failure; they're more cynical and resigned and fearful. Kids say "I want to play. Hurry up, and make me better." That's all they want.'

In his book 'It's not about the bike' Lance Armstrong also quotes Dr. Nicholas, the oncologist in his story -"In a way, cancer is the Tour De France of illnesses."

It shouldn't be. But it is. Slippery. Stealthy. Silent. Sisyphean. Always just that tad inch beyond one's grasp. Making people fight an enemy they can't even see. A battle they don't know they have won for sure when it feels like winning. An adversary that can be a nightmarish Hydra-rising from somewhere else when one thinks that its head has been cut off.

Special Focus | Healthtech



Tumors are mosaics that adapt under therapy pressure. And microenviroments like Hypoxia, fibrosis, myeloid suppression, and T-cell exhaustion block attacks. Late detection & sanctuary sites are also a challenge as many cancers present late; brain/bone cores are hard to reach.

- Prof. Peter Yingxiao Wang, Dwight C. and Hildagarde E. Baum Professor, Department Chair of Biomedical Engineering, University of Southern California.

That's exactly why we need technology. Both as Iolaus to cauterise the fresh wounds so that new ones do not arise; and as Heracles to cut off the main head and bury it under some solid rock. Can technology stand up to the task? Has it? Perhaps. Almost. Right now, in 2025, it looks like we are caught up between the 'Tour De France' and 'Hurry up' here. And here's why.

WHAT ARE WE FIGHTING EXACTLY?

First- Why is the battle against cancer still so tough? This big question haunts humanity and specially those donning lab coats and white coats as they wrestle against this cryptic nemesis.

It has to do with a number of factors, chiefly evolution & heterogeneity as well as hostile microenvironments, captures Prof. Peter Yingxiao Wang, Department Chair, Dwight C. and Hildagarde E. Baum Professor, Alfred E. Mann Department of Biomedical Engineering, Department of Molecular Microbiology and Immunology, Department of Stem Cell Biology and Regenerative Medicine, Department of Quantitative and Computational Biology and Norris Cancer Center, University of Southern California. "Tumors are mosaics that adapt under therapy pressure. And microenviroments like Hypoxia, fibrosis, myeloid suppression, and T-cell exhaustion block attacks. Late detection & sanctuary sites are also a challenge as many cancers present late; brain/bone cores are hard to reach." To top that there is the aspect of human systems because trial access, cost, and variable care dilute the impact of breakthroughs, he adds.

THE BATTLES WON

As hard as it is to wrap our heads around this idea, we do have stuff now that has taken us way ahead than where we were some years back in this war between humanity and cancer. Today we have camera robots as pills to be swallowed-investigational medical devices that can navigate inside human body in a

- Data collection and fragmentation issues
- Precision without blind spots
- Handling false positives and negatives
- Fine-tuned and proactive imaging
- Affordability of solutions
- Easy distribution and awareness
- Faster, AI-native and decentralised clinical trials

non-invasive way for faster and easier diagnosis as well as treatment. Many Micro-robotics innovations are currently under evaluation and not available for commercial use-but they are exciting new steps in this long journey.

For instance - Consider what Endiatx envisions after integrating AI to enhance PillBot's against stomach cancer, - it would autonomously scan the stomach, analyse data, and provide precise diagnostics. Similarly, there are super-charged immune cells - for focused attacks on stubborn solid tumors – tools that can destroy cancer cells without getting exhausted. USC biomedical engineers are working on what they call "EchoBack CAR T-cell," - which is expected to be a leap in the field of cancer immunotherapy.

They are strapped with ultrasound technology that works as an 'on switch' for the CAR T-cells, engineered to respond to a short 10-minute pulse of ultrasound. This can trigger the cells to sense cancer cells in their surroundings.

There is also something happening in the same atmosphere that cracked the Gods' particle. At the European Laboratory for Particle Physics (CERN), where researchers are working on radiotherapy treatment breakthroughs - with Flash (radiation at ultra-high dose rates, with exposures of less than a second, to destroy tumours in rodents while sparing healthy tissue). This could bring in unthinkable



If I had to name one breakthrough that best illustrates how science is changing cancer outcomes, I would pick CAR-T and engineered cell therapies. They show us that by combining biopsy insights with genetic engineering, we can sometimes achieve complete remission in patients where nothing else worked.

- Dr. Hridaya Khatri, Medical professional and health entrepreneur

precision in attacking tumors and without any scattering effect. Sub-atomic particles like photons, or protons can be handy in treating deeper tumours, and carbon ions and helium particles can be sent for very specialised cases.

These examples may sound experimentative and explorative but we have, indeed, come a long way from the struggle to spot tumours and from the slippery uphill walk of wiping it away at the right spot.

As Dr Rohit Pai, Consultant Medical Oncology, Bombay Hospital, Mumbai weighs in, there is a lot of help gained with next-gen sequencing. "Molecular diagnosis of mutations in tumors is an area where technology has played a significant role. In various cancer treatments, precision oncology and targeted therapy are based on this. This bolsters a lot of efforts-like in lung cancer targeted treatments."

GROWING FAST- FROM THERE TO HERE

1775: Connection found by Percivall Pott between exposure to chimney soot and the incidence of squamous cell carcinoma – the first environmental exposure link discovered

1882: The First Breast Cancer Radical Mastectomy by William Halsted

1899: Demonstration by Swedish physicians Tor Stenbeck and Tage Sjogren for skin cancers basal cell carcinoma and squamous cell carcinoma by X-ray therapy

2019: Childhood Cancer Data Initiative launched for collecting, analysing, and sharing data amongst children's hospitals, clinics, or networks

2020: International Pan-Cancer Analysis of over 2,600 whole genomes from 38 types of cancer

2023: Pan-Cancer Proteogenomic Dataset released from studies of more than 1,000 tumors across 10 cancer types

By 2025:

- Immunotherapy refinements (peri-operative use, TIL therapy) and targeted drugs, e.g. KRAS(G12C)
- ADCs turning modest targets into effective therapies
- Robotic camera and treatment pills
- Ultrasound- or promoter-gated gene/cell therapy; synNotch/logic CARs
- Single-cell/spatial omics + AI pathology
- Radiation Oncology, AI-driven diagnostics and real-time monitoring
- Magnetic Resonance Imaging (MRI), Positron Emission Tomography (PET), and Computed Tomography (CT) scans
- Flash treatment, Use of sub-atomic particles
- Intensity-Modulated Radiation Therapy integrates real-time imaging with radiation delivery, allowing precise targeting of tumors while curtailing radiation exposure to surrounding organs
- Stereotactic body radiation therapy (SBRT) or stereotactic ablative radiotherapy (SABR). targets small, welldefined tumors and delivers high doses of radiation in a limited number of treatments
- Proton therapy proton beams can target tumors precisely exposing nearby tissues to only the least amount of radiation

www.dqindia.com

Precise 3D photographs of the cancer made of Computed Tomography (CT) or MRI scans

Source: As corralled from various reports and experts



Molecular diagnosis of mutations in tumors is an area where technology has played a significant role.

- **Dr Rohit Pai**Consultant Medical Oncology

Ask a young doctor who is fluent in both medical science and technology and knows exactly where they cross paths- and we see that the future is not too far off. Dr. Hridaya Khatri reminds us of advancements like liquid biopsy and multi-cancer blood tests. "These blood tests detect cancer DNA signals and hold the promise of catching cancers early. The sensitivity, of course, varies with type and stage, but the direction is hopeful. AI is another powerful tool. It can help to spot suspicious regions on scans, prioritise pathology slides, and reduce human error." Sometimes a tumor can be right in front of the eyes but missed due to exhaustion or human limitation. This is where AI brings value speeding up diagnosis and improving accuracy. Advanced scans, genetic testing, and even simple AI-based apps are helping doctors identify patterns that were previously hard to detect. We now have targeted medicine and immunotherapy that attack cancer cells more directly instead of affecting the whole body. CAR-T (Chimeric Antigen Receptor) is one example."

The most convincing glimpse of technology's help is precision oncology, the combination of diagnostics with targeted therapy, opines Dr. Neeraj Lal, Regional Director-Maharashtra and Karnataka Region, Medicover Hospitals. "I've seen patients who were failing multiple lines of chemotherapy respond beautifully when we discovered a genetic mutation and prescribed the right drug. It shows how powerful personalised treatment can be when backed by the right technology." He also notes CAR-T cell therapy as another striking example.

"Although it's still in its early days in India and costs are very high, the results in certain blood cancers are remarkable. It gives us a glimpse of what the future of cancer treatment could look like, where therapy is designed around each patient's unique biology."

Prof. Wang picks out some more achievements that can be credited to technology. Immunotherapy refinements (peri-operative use, TIL therapy) and targeted drugs, e.g. KRAS(G12C). "Also, Single-cell/spatial omics and AI pathology for better patient selection and resistance tracking."

If there is a poster-boy here though, it is Remotely/locally controlled immunotherapy Prof. Wang indicates. "Technology like ultrasound- or promoter-gated gene/cell therapy; synNotch/logic CARs - that marries precision with safety and repeat dosing. Also Antibody Drug Conjugates or ADCs—they are scalable, repeatable, and rapidly expanding across solid tumors; turning modest targets into effective therapies."

Dr. Lal reckons advancements beyond the labs too- like Digital tumour boards (by connecting doctors across cities through virtual platforms, families can get world-class advice without travelling long distances) and Robotic surgery (to perform highly-precise operations, which means less pain, quicker recovery, and better functional outcomes for patients). He also calls Immunotherapy a gamechanger. "I recall a patient with advanced lung cancer who had exhausted options, and immunotherapy helped him live a meaningful, active life again. Radiation, too, has advanced — with tools like MR-Linac and CyberKnife, we can target tumours with remarkable accuracy.".



If we invest more in awareness, screening, and creating regional cancer centres, we can shift the fight earlier – where outcomes are far better.

- Dr. Neeraj Lal

Regional Director-Maharashtra and Karnataka Region, Medicover Hospitals



IMRT uses computer-controlled linear accelerators to deliver varying radiation doses to different areas of the tumor.

- Dr. Kinjal Jani Director & Head- Radiation Oncology, HCG Cancer Centre

While treatment is still something where technology has to get better and faster, a lot of technology's scope today is in the area of pathology and radiology, as Dr. Pai observes. "In pathology, automated interpretation of slides is a good step. It saves from the fatigue that humans go through. 3D reconstruction of cells also helps in better drug design. Machine Learning is a big answer for helping with scans in radiology and studying inflammationwith speed and with training data making a machine precise and accurate about the scans."

Technologies like Artificial Intelligence (AI) and Machine Learning (ML) can actually equip humans with more accuracy, less errors and less exhaustion. Sometimes a tumor can be right in front of the eyes but missed due to exhaustion or human limitation, seconds Dr. Khatri. "This is where AI brings value—speeding up diagnosis and improving accuracy. Advanced scans, genetic testing, and even simple AI-based apps are helping doctors identify patterns that were previously hard to detect."

In the resilient fight against cancer, radiation oncology has long been the cornerstone of cancer treatment, offering hope and healing to millions globally, as shared by Dr. Kinjal Jani, Director & Head-Radiation Oncology, HCG Cancer Centre, Ahmedabad with Dataquest earlier. "The advancements in technology have transformed radiation oncology over the years, making the treatment process precise, effective, and even more customised for each patient's needs."

Enhanced imaging technology is something that Dr. Jani highlights particularly here. "With these techniques, oncologists are able to precisely delineate tumor boundaries while sparing surrounding healthy tissues from trauma or hemorrhage by obtaining detailed anatomical and functional information. Integrating advanced molecular imaging into the treatment planning process further helps clinicians in identifying right patients for radiation therapy, guiding radiation

treatment decisions and planning, and ultimately keeping patients' cancer under control."

Dr. Lal echoes that - marking an area that has benefitted the most as precision treatment. "With genetic testing and molecular diagnostics, we now have the ability to identify which therapy will work best for a particular patient. This spares patients from unnecessary chemotherapy and directs them toward targeted drugs that have a much higher chance of success. I've seen breast cancer patients avoid the toxicities of chemo because a simple test showed a better option. That is a huge shift in practice."

Intensity-Modulated Radiation Therapy or IMRT is what Dr. Jani cites as a major stepping stone too. "It helps in delivering highly conformal doses of radiation to tumors while sparing adjacent healthy tissues. In contrast to conventional radiotherapy techniques, which deliver uniform radiation doses, IMRT dynamically adjusts the intensity and shape of radiation beams to conform to the tumor's shape. It uses computer-controlled linear accelerators to deliver varying radiation doses to different areas of the tumor."

THE BATTLES THAT REMAIN

Despite the big list we have just covered, why is the fight against cancer so long-drawn and so tough? Because cancer isn't one disease, it's hundreds, captures Madhuram Khatri, Founder & CEO -Writelyf (AI-first Health OS), and a Biomedical Engineering student based in Chicago. Tumors mutate, resist, and adapt quickly, and by the time most are diagnosed, iit's already too late to intervene easily, he underlines. "In Fall'24, we worked on an Ingestible Biopsy Device for Digestive Tract Cancers - a capsule-based diagnostic tool for early detection. I focused on CAD modeling, mechanical design, and biocompatibility research. Interestingly, by January-February this year, scientists had already developed similar prototypes." This semester, he is diving into brain and neuroscience projects and he knows where



CAR-T and immunotherapy are powerful, but my choice is liquid biopsy and ingestible devices. They make early detection painless, scalable, and accessible and that saves the most lives.

- Madhuram Khatri, Founder & CEO - Writelyf

to head next. "Early diagnosis is where I see the biggest leap, whether it's AI-supported imaging or capsule devices like ours. Detecting at Stage I instead of Stage 3 makes all the difference."

Drug discovery tooling (structure prediction, generative chemistry, CRISPR screens) is transformative but clinical payoff trails the tooling, as Prof. Wang assesses the progress-curve. "Precision treatment shows the most clinical wins (Antibody Drug Conjugates or ADCs). Early diagnosis is rising fast. But prevention remains under-instrumented beyond HPV/HBV vaccination and risk programs."

If doctors, oncologists, patients, nurses, supportfighters and patients are asked for a Christmas wish-list from technology- the conversation usually hovers around speed and clarity.

Dr. Pai hopes that we get to a stage where subjectivity about treatment-response assessment can be replaced with objectivity. "Some tumors shrink. Some don't. Some are hard to figure out. Some respond better. AI can be of a good use here in helping with precise and accurate visualisation and assessments."

As pointed out by Girish Raghavan, CTO – Women's Health & X-Ray and VP – Engineering at GE HealthCare Technology Centre India in an interview earlier with Cybermedia's Shrikanth G- One of the biggest challenges in AI adoption in Indian healthcare is the complexity and fragmentation of data—much of it is unstructured, like clinical notes, images, wearables, and behavioural data. Traditional AI models struggle here, as they often require retraining for specific diseases, slowing adoption and scalability.

Dr. Lal suggests how data and tele-healthcare can help with the much-needed scale and equity in this area. "India needs a strong national cancer registry to track outcomes and learn what really works in our population. Without reliable data, we are often borrowing Western protocols that don't always translate to Indian patients. If we measure better

and link treatment with outcomes, we will make more informed decisions and improve survival across the board."

Solid-tumor cell therapy (trafficking/antigen escape), CNS disease, durable resistance control, equitable access/cost are gaps that Prof. Wang points out too.

WINNING THE BATTLE - FOR EVERYONE

There is a lot, a lot, I repeat, a lot that we have to add in our ammunition.

Madhuram stresses that Cancer tech needs to move beyond elite hospitals and reach Tier-2/Tier-3 cities. "Affordable genomics, AI-driven drug trials, and point-of-care diagnostics should be the focus."

He urges us to face some real questions too.

"The real question is: Are these solutions equitable and affordable? Big Pharma can both accelerate and block progress, but tech has the power to democratise access if used wisely."

Is Big Pharma an accelerator or a speed-bump? Prof. Wang opines it's both. "It brings CMC, capital, and global trials (essential), but portfolio inertia can slow disruption." But there are solutions too, as he suggests-like pre-competitive consortia, shared manufacturing, outcomes-based funding, and faster tech-transfer from academia/startups.

There are other gaps that remain, sighs Dr. Hridaya as she brings in the big question about democratisation of cure. "And that's what makes me sad—because many people in India and other parts of the world don't have access to these advanced tools. Sometimes it's cost, sometimes lack of awareness, or sometimes just distance from a facility. What truly hurts me is that even though these advances exist, a person's inability to pay for them is costing lives. That just shouldn't happen."

We do struggle with the cost and accessibility of advanced treatments, Dr. Lal points that out too. "A patient in a metro city may get cutting-edge therapies, but someone in a tier-2 city might not even have access to a proper oncology set-up. So,

Each patient's cancer behaves differently, even if it's in the same organ. That makes treatment complicated. Another big challenge is that many patients in India still come late, often when the disease is already advanced. By then, even the best technology or drugs cannot achieve the same results as early detection.

the battle is tough because of biology, late diagnosis, cost, and uneven infrastructure."

Dr. Lal affirms that technology has made a visible difference in the last decade. "However, these benefits are not evenly distributed. Most of this technology is available only in a handful of premium centres. For the average patient in a smaller city, these remain out of reach, both geographically and financially. Promising tools like liquid biopsies, which could make early detection much easier, are still too costly to be scaled up widely."

Have we achieved enough democracy & affordability? Not yet, Prof. Wang avers. But Tech can help via Platformisation (reusable vectors, CAR backbones, ADC scaffolds) and Automation/ standardisation (closed-system cell therapy; continuous bioprocessing). There is also a lot of help that technology can give through AI-enabled, decentralised trials to broaden access and cut waste. And through Data commons & value-based contracts, as Prof. Wang espouses.

There are many challenges that are far far beyond the labs where breakthroughs are being worked upon. "Each patient's cancer behaves differently, even if it's in the same organ. That makes treatment complicated. Another big challenge is that many patients in India still come late, often when the disease is already advanced. By then, even the best technology or drugs cannot achieve the same results as early detection." Dr. Lal argues.

For India, I still believe the biggest opportunity lies in early diagnosis and prevention, Dr. Lal emphasises. "HPV vaccination is one shining example – wherever it has been introduced, cervical cancer rates have dropped dramatically. Similarly, organised breast screening programs, if scaled up, could save thousands of lives. Precision treatment may be where technology has delivered most so far, but prevention and screening are where the real population-level impact will come."

STRONGER THAN THE ENEMY OR BRAVER?

In the next five years, we should be aiming to close in on new milestones, like these that Prof. Wang underlines: "Programmable, locally activated immunotherapies (logic-gated/energy-gated cells or genes) to confine potency to tumors. ADCs with smarter linkers, new targets, and brainpenetrant designs. And AI-native, adaptive trials with decentralised participation to cut time/cost and improve diversity. Along with industrialised manufacturing (closed-system cell/vector/ADC lines) to lower COGS and expand access."

There are questions that we should be asking as well - he adds. "How do we confine potent biology in space/time to boost efficacy and safety? Can we automate manufacturing and trials as aggressively as discovery?"

The bigger challenge is that no two cancers are the same, Dr. Hridaya reminds. "What works for one person may not work for another. Sometimes cancer hides, sometimes it returns even after treatment. That's what makes it feel like such a long, unpredictable fight-for patients, for families, and for doctors."

The odds may be against us now but losing hope is the first step to losing this war- and something we just cannot afford to do. Armstrong also says in that book - 'If children have the ability to ignore the odds and percentages, then maybe we can all learn from them. When you think about it, what other chance is there but to hope? We have two options, medically and emotionally: Give up, or fight like hell.'

This warrants repeating - Fight. Like. Hell. (Dedicated to all the survivors and fighters of Cancer - on both sides of the Doctor's table. And to a special warrior who started on another journey last month - our beloved Sunil Rajguru Sir who fought bravely, cheerfully and un-whiningly - with the same childlike spirit of 'I have got work to do, life to live. Hurry up.') 🚳

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Inside Wipro's Innovation Network: CTO Sandhya Arun on ethics, AI-first delivery and reimagining the enterprise

Wipro CTO Sandhya Arun explains how the Innovation Network is reshaping AI, ethics, talent and delivery models, moving from pilots to scalable business impact.

By Shrikanth G

recently, Sandhya Arun, Chief Technology Officer at Wipro, went beyond corporate talking points to offer a candid view of how the company is reimagining innovation. From the launch of the Wipro Innovation Network to her views on AI ethics and delivery transformation, she outlined a vision that is both practical and ambitious.

MOVING FROM LABS TO NETWORKS

Wipro believes that innovation can no longer happen in closed rooms. Wipro Innovation Network (WIN) is designed to accelerate strategic, client-centric co-innovation. The network will leverage frontier technologies ranging from AI to Quantum Computing to solve some of the most challenging problems for clients across industries.

"As a company, we believe that collaboration fuels innovation," said Srini Pallia, CEO and Managing Director, Wipro. "The Wipro Innovation Network is a catalyst for AI-powered co-innovation. By bringing together our global clients, partners, academia, and tech communities, we aim to accelerate innovation that solves real-world challenges, unlocks bold new possibilities, and drives competitive edge for our clients."

The 60,000 sq. ft. Innovation Lab in Kodathi, Bengaluru, is now a flagship hub where clients work with Wipro experts to explore frontier technologies and compliments with other centres globally. WIN focuses on five strategic frontier themes: agentic AI, embodied AI and robotics, quantum computing, blockchain and digital ledger technologies, and quantum and AI safe cyber resilience.

APPLIED INNOVATION IN ACTION

During the roundtable, Wipro showcased real-world



SANDHYA ARUN CTO, Wipro

solutions that illustrate WIN's approach. BuildAI is an AI-powered SDLC orchestration tool that accelerates development and boosts collaboration. InspectAI uses drones, robotic dogs and crawlers to transform plant inspections into safer, predictive workflows. Wipro showcased its quantum solution for drug discovery, designed to tackle molecular optimisation challenges and potentially cut down years in pharmaceutical R&D.

These solutions, along with Smart Factories, Wealth AI and the Cloud Car, demonstrate how Wipro is applying AI-first thinking to reshape industries.

Wipro has also introduced WeGA (Wipro Enterprise GenAl Studio) recently as part of its alliance with NVIDIA. WeGA leverages the NVIDIA NeMo SDK and high-performance computing to help enterprises unlock the full potential of generative AI. It is designed with responsible AI controls to strengthen accuracy, performance and transparency, reflecting Wipro's focus on building enterprise-grade GenAI platforms rather than experimental pilots.

ETHICS AND GOVERNANCE MATTER

When I asked her directly about the ethical framework around AI, Arun was clear that responsibility sits at the centre of Wipro's adoption strategy. "We have a strong Responsible AI leader, Ivana, and a council that meets every week with representatives from across the company," she said. "AI cannot own IP. We have had deep legal discussions on patents and what we must put into contracts." On productivity claims, Arun was emphatic. "Do not call out a number. It has no mathematical foundation and it varies by client context. Beyond productivity, the real question is how to reimagine the enterprise with an AI-first mindset."

The Responsible AI programme is led by Ivana Bartoletti, Wipro's Global Chief Privacy & AI Governance Officer. A well-known voice on AI ethics and author of An Artificial Revolution: On Power, Politics and AI, she co-founded the network Women Leading in AI and advises global institutions on governance and rights. At Wipro she anchors the Responsible AI Council, ensuring innovation is backed by legal defensibility and ethical guardrails.

SHIFTING DELIVERY FROM TACTICAL TO STRATEGIC

I also asked her whether developers would move into more strategic roles as AI takes over repetitive work. Arun responded with conviction. "Much of the tactical work is now AI assisted or AI taken over," she said. "Humans must become supervisors of AI, making judgments and reimagining processes. At the same

time she underscored that without strong foundations in business, software and data engineering you cannot use AI effectively."

She described how hackathons are now won by consultants from mergers and acquisitions or presales, not just engineers. "People who understand business and customer experience can leverage AI better," she noted. Wipro is embedding this mindset in its NextGen associates fresh from campus and has mandated AI training for leadership, including board members.

FROM PILOTS TO OUTCOMES

For Arun, impact is the only measure that matters. An idea must become a client solution and then scale across industries. This is backed by Wipro's Horizon programme, which funds innovations with both nearterm ROI and long-term potential.

On the commercial side, she said, "Clients do not care how many agents or people are inside the box. They want outcomes, quality and sustained impact. Pricing is increasingly moving towards outcomebased models."

Examples of this shift include everyday agent solutions for leave and travel management, contract analysis and M&A due diligence, which reduce weeks of effort to hours with humans still in the loop.

THE BIGGER PICTURE

The Innovation Network is powered by around 200 direct innovation staff and 100 distinguished technologists, supported by thousands more through ventures, partners and crowdsourcing. "Criticism of R&D spend is easy," Arun said in closing. "What matters is impact, ideas that transform client businesses and shape industries."

WIPRO'S AI GAME

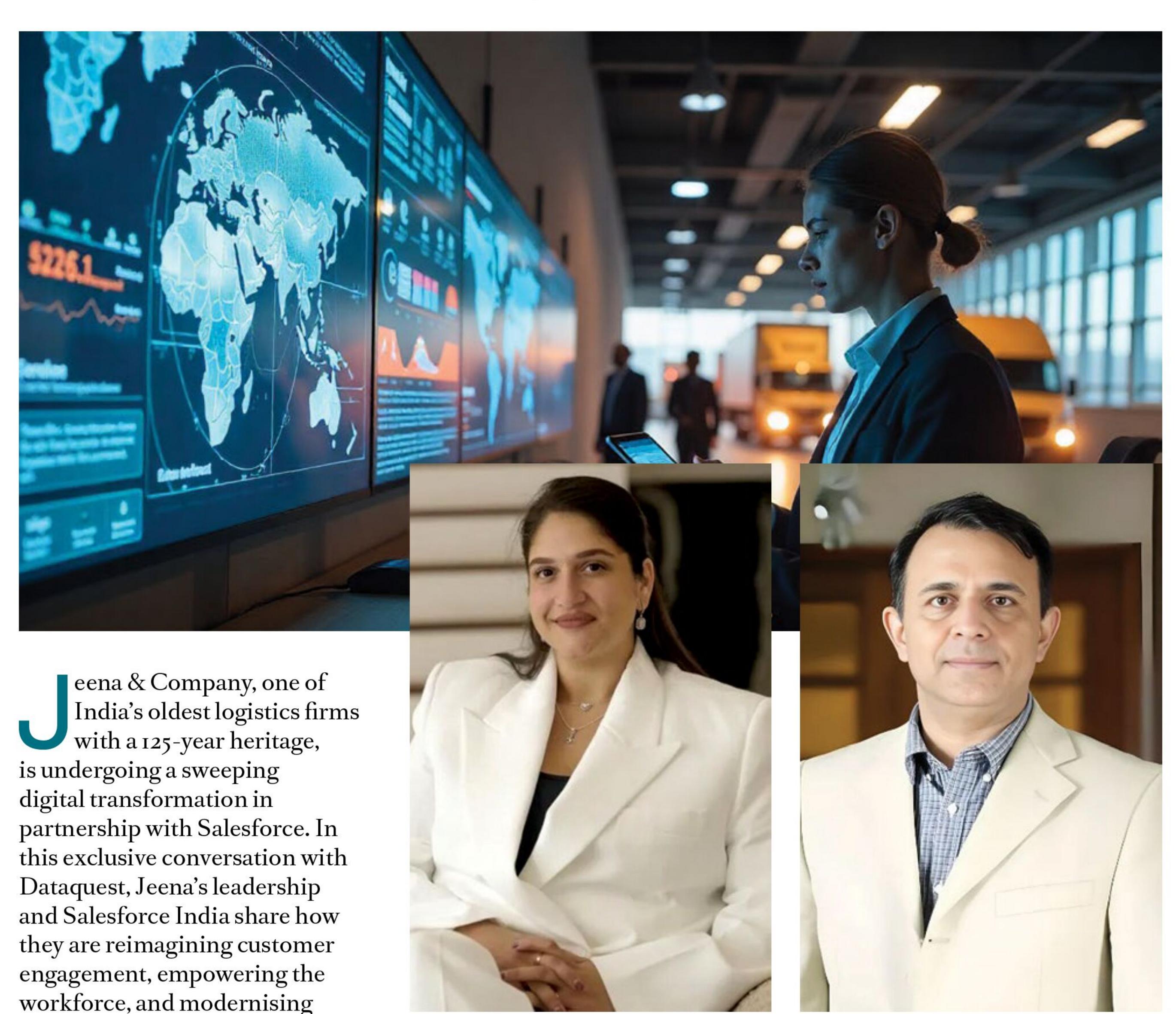
Wipro's AI game is clear. By combining a distributed network of labs, start-ups, partners, and academic collaborations with a strong focus on ethics and delivery transformation, the company is moving beyond pilots to industry-scale solutions. From agentic AI to quantum and blockchain, Sandhya Arun's vision places Wipro in the middle of some of the most consequential shifts in enterprise technology. If the roundtable showed anything, it is that Wipro wants to lead not only in deploying AI, but in reimagining how enterprises work, deliver, and compete in the years ahead.

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Jeena's digital leap: Modernising a 125-year-old logistics legacy with Salesforce

Jeena & Company partners with Salesforce to boost sales visibility, personalise outreach, and modernise operations with AI-ready, connected workflows across logistics.

By Shrikanth G



AYESHA KATGARA Head - Transformation Office, Jeena & Co.

DEEPAK PARGAONKAR VP - Solution Engineering, Salesforce India

legacy processes while staying true

to the values that have sustained

the company for over a century.



A LEGACY OF EARLY TECH ADOPTION

Jeena's relationship with technology stretches back to the late 1990s and early 2000s, when the company was among the first freight forwarding firms to move from paper-based systems to digital operations. Instead of buying ready-made software, it built its own systems to meet the exacting standards of detail and efficiency it demands. As Ayesha Katgara, Head - Transformation Office, Jeena & Company points out, this philosophy has shaped Jeena's evolution: technology is never treated as a cost, but as a strategic investment that ensures the company can serve its customers better and stay ahead of industry shifts.

When it comes to technology partners, Jeena's decision-making goes beyond product capabilities. Ayesha says the company looks for cultural and ethical alignment, strong commitments to data security and privacy, the ability to integrate seamlessly through APIs, and a clear return on investment. Every choice is evaluated through a simple lens: will this make us more efficient and deliver measurable benefits to customers?

FOSTERING CUSTOMER EXPERIENCE AT THE CORE

From Salesforce's perspective, the logistics industry today is built around customer experience at every touchpoint - from acquisition to service delivery and loyalty. Deepak Pargaonkar, VP - Solution Engineering, Salesforce India, notes that customers expect visibility, reliability, and responsiveness across every service channel. The engagement with Jeena is designed to be collaborative, meeting them where they are in their transformation journey and helping them progress at the right pace.

FROM SPREADSHEETS TO A 'MODERN CRM'

Before Salesforce, Jeena's CRM setup was "nonexistent," in Ayesha's words. The company relied on Excel sheets, email threads, and manual coordination, which slowed down decision-making and created inefficiencies. Now, with Salesforce

Sales Cloud, Jeena is improving sales visibility and enabling faster, more integrated engagement across its logistics network. Sales teams have real-time insights at every stage of the deal cycle, helping them close deals quicker, improve conversion rates, and tap into recurring revenue opportunities.

With Salesforce Customer 360 providing a single source of truth for customer data, Jeena can personalise outreach, deepen customer engagement, and lay the foundation for futureproof operations. These intelligent, connected, and AI-ready workflows are transforming how teams work, making engagement more strategic and boosting motivation across the sales force.

Mankiran Chowhan, Managing Director & SVP - India, Sales & Distribution, Salesforce, described the collaboration as a crucial step in combining Jeena's deep industry expertise with future-ready technologies. "The logistics sector faces increasing demand and a constantly changing supply chain, making real-time visibility more crucial than ever," she noted. "By leveraging our platform and the power of AI-led transformation, Jeena is modernising operations, streamlining data, expediting decisions, and creating more connected experiences for its customers."

MANAGING CHANGE IN A LEGACY ORGANISATION

Ayesha acknowledges that change in an organisation with such a long history inevitably meets resistance, but sees it as a journey. Leadership provides the direction, but employees at all levels contribute through workshops and feedback loops. Understanding why some people still prefer older tools like Excel often reveals process gaps that can be addressed, making adoption smoother.

Deepak agrees, adding that transformation in legacy organisations also depends on ecosystem readiness. Customers, partners, and regulators may need to upgrade or open their systems to achieve true end-to-end digital integration, making API readiness and interoperability crucial.



Jeena is modernising operations, streamlining data, expediting decisions, and creating more connected experiences for its customers.



CO-INNOVATION FOR COMPETITIVE EDGE

Salesforce's approach with Jeena centres on coinnovation – using the company's rich organisational data, shaping its AI strategy, and building capabilities that create competitive differentiation. The aim is to enhance customer service through improved insights, faster workflows, and potentially new offerings that set Jeena apart in the market.

The first phase of Salesforce rollout to 20 users has already sparked enthusiasm. During training workshops, sales managers were particularly excited by the ability to view consolidated data, drill into volumes and gross profit, and access actionable insights with a few clicks. The improved visibility has started to influence how teams plan and execute their sales strategies.

A DIGITAL TRANSFORMATION PLAYBOOK FOR CXOS

Ayesha's experience has crystallised key lessons for other leaders undertaking digital transformation. The first, she says, is to set clear and realistic timelines for implementation. The second is to secure buyin from the people who will use the systems every
day – without that, even the best tools will fail to
deliver their potential. And the third is to evaluate
AI critically, not emotionally. "Don't adopt AI just
because it's the trend," she stresses. "Adopt it because
it can deliver meaningful returns and improve the way
you work."

THE ROAD AHEAD

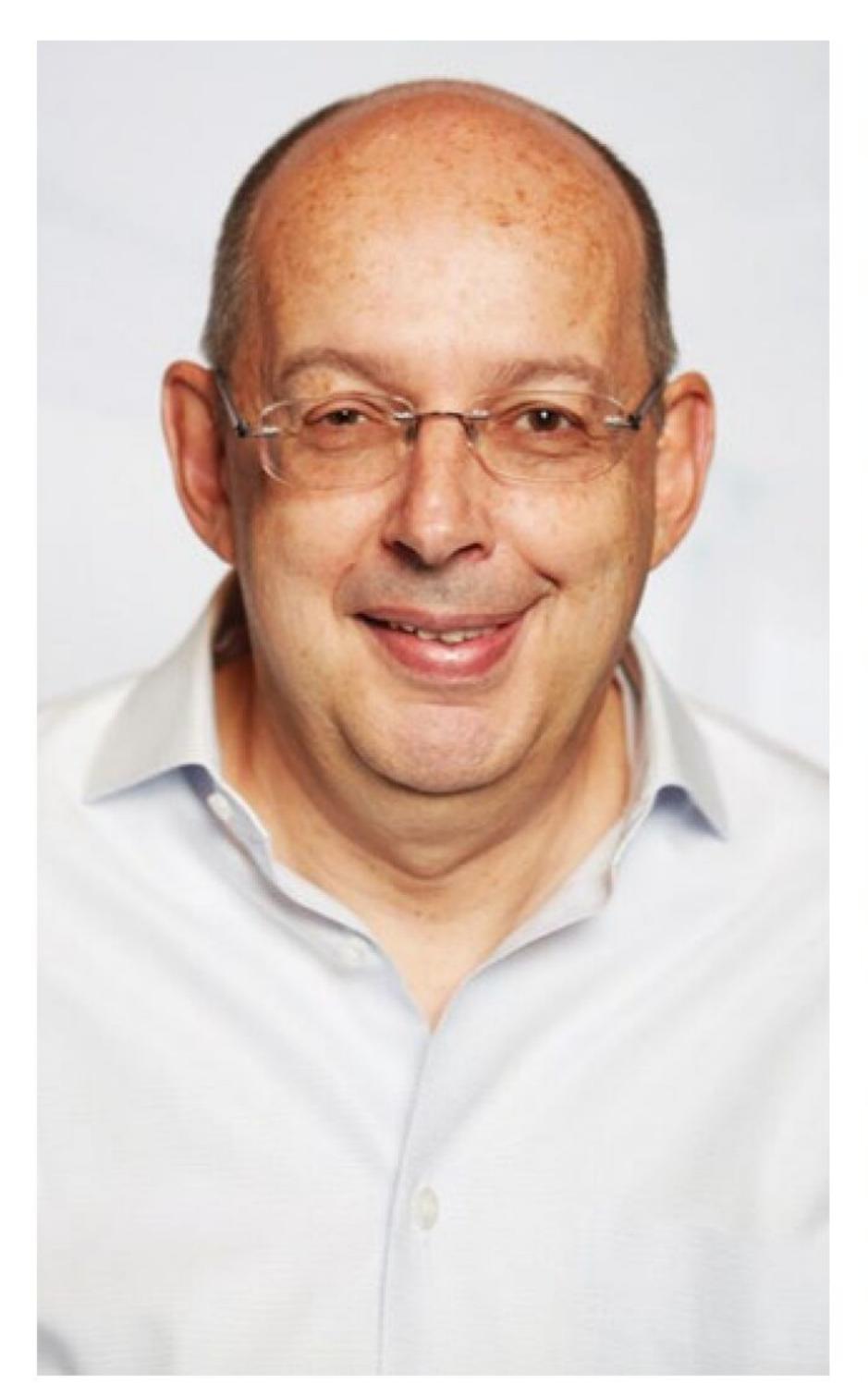
Over the next year, Jeena's focus will be on achieving full adoption of Salesforce and completing its ERP build (part of its larger IT mandate beyond Salesforce), with AI layered into processes where it can deliver measurable value. For Salesforce, the next phase is about helping Jeena leverage its organisational data for sales excellence, enabling better collaboration across multiple stakeholders, and enhancing the customer experience through advanced analytics and AI-driven insights.

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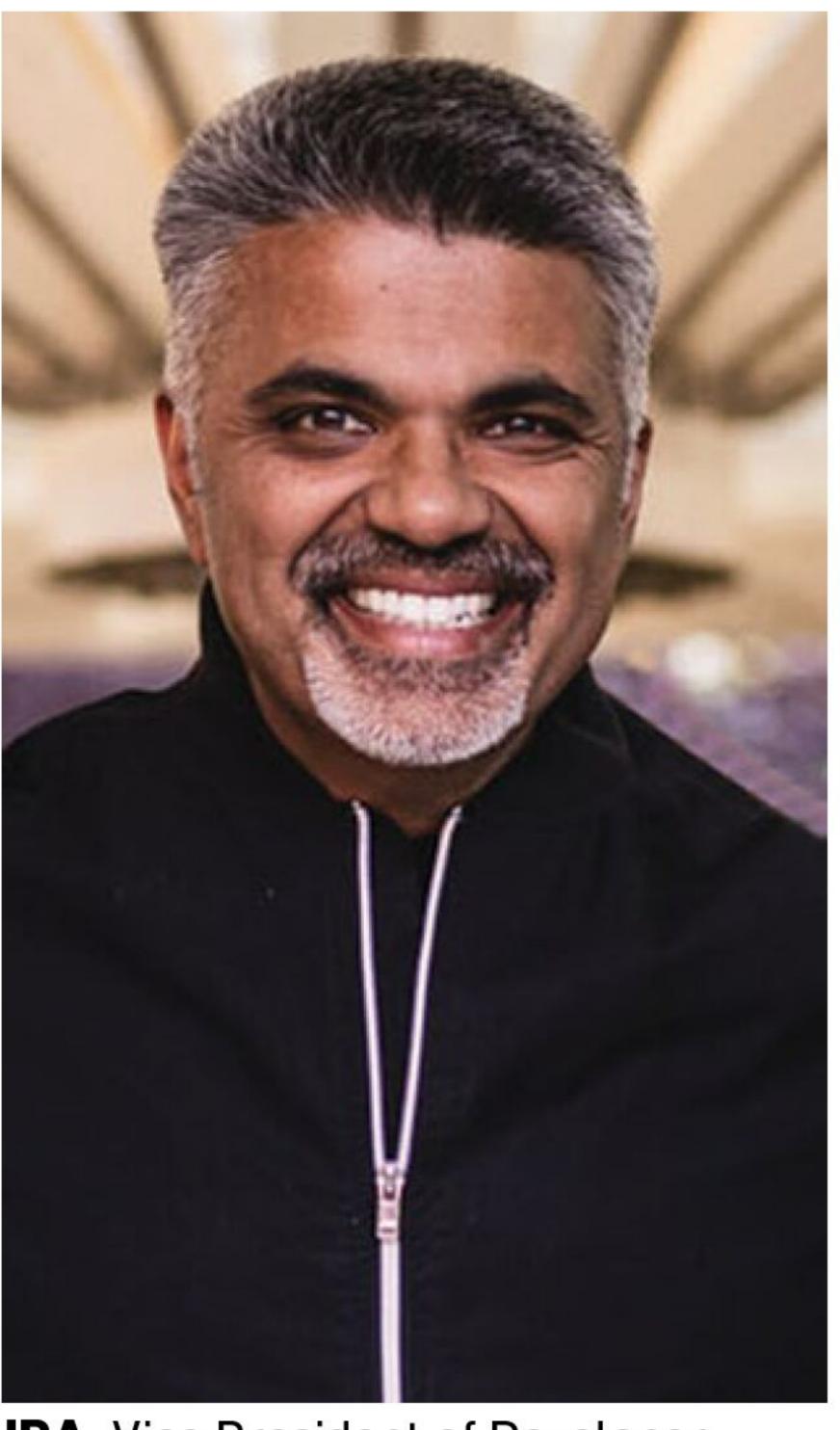
Java at 30: Oracle leaders on why Java 25 matters for the next decade

Marking 30 years of Java's evolution, Java 25 blends simplicity with enterprise power, boosting AI readiness and security to stay relevant in the decade ahead.

By Shrikanth G







BERNARD TRAVERSAT, Vice President of Software Development; CHAD ARIMURA, Vice President of Developer Relations; SHARAT CHANDER, Senior Director, Java Product Management, Oracle

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n the fast-changing world of technology, very few programming languages can claim a three-decade run at the centre of enterprise IT. Java, born in the mid-1990s, turned 30 this year, still powering critical workloads across banking, telecom, retail, and government systems. Against a backdrop where newer languages rise and fade in less than a decade, Java continues to reinvent itself. With the release of Java 25, Oracle is signalling not just another upgrade, but a thoughtful re-architecting of how the platform will remain relevant in an AI-driven, cloud-native world.

In an exclusive interaction with Dataquest, Oracle executives - Bernard Traversat, Vice President of Software Development; Chad Arimura, Vice

President of Developer Relations; Sharat Chander, Senior Director, Java Product Management, Oracleshared why Java has endured, how Java 25 strikes a balance between simplicity and enterprise power, and what the roadmap looks like for the next decade.

THE SECRET SAUCE: 30 YEARS OF STEWARDSHIP AND THOUGHTFUL EVOLUTION

Asked about Java's resilience, Chad Arimura pointed first to stewardship. "At the top of the list is the incredible commitment by Sun and now Oracle to continue to shepherd the ecosystem forward. OpenJDK, which Oracle stewards and contributes to, has been central to this continuity."



Oracle is signalling not just another upgrade, but a thoughtful re-architecting of how the platform will remain relevant in an AI-driven, cloud-native world.

Sharat Chander reframed Java's journey as "a rise and thoughtful rise," rather than a cycle of rise and fall. "Year after year, the ecosystem has grown to tens of millions of developers and tens of thousands of customers. That is because investments have consistently gone into innovating for modern workloads, ensuring enterprise value, and sustaining robust relationships with developers."

Another turning point was the six-month release cadence, introduced eight years ago. "It keeps innovation flowing steadily. After 30 years, the pipeline is stronger than ever," he noted.

LOWERING THE ENTRY BARRIER WITHOUT LOSING POWER

One of Java 25's biggest themes is accessibility. Features such as Compact Source Files (JDK Enhancement Proposal, JEP 512) and Module Import Declarations (JEP 511) simplify how beginners start coding. (JEPs are the formal blueprints that describe new features in the Java Development Kit, or JDK.) At the same time, Flexible Constructor Bodies (JEP 513) and refinements across the platform support enterprise developers.

Bernard Traversat explained the philosophy: "We know today's new developers may not have the same patience for complexity. So we wanted to simplify the on-ramp, the 'Hello World' experience, without creating dead ends. What you learn on day one scales naturally as you grow, leading all the way up to mission-critical enterprise workloads."

This balance, approachable for beginners yet robust for veterans, is central to keeping Java relevant in an era where developer preferences shift quickly.

JAVA 25 IN THE AI ERA

The enterprise landscape has changed dramatically, with real-time transactions, AI inference, and data streaming at massive scale. Java 25 responds to this with new concurrency and performance features.

Projects like Loom introduce virtual threads, dramatically simplifying concurrency by removing the need for heavy thread pooling or complex asynchronous programming. Valhalla rethinks how objects and primitives are handled in memory, introducing new numeric types. Babylon enables Java to reach into GPUs and foreign programming models.

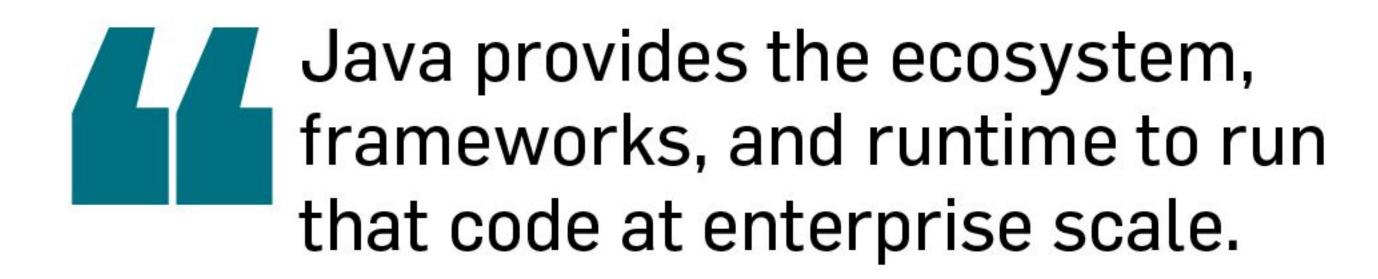
"We have positioned Java 25 as AI-ready," said Arimura, pointing to the Vector API (JEP 508) and Scoped Values (JEP 506). "These are designed to accelerate parallel tasks and computation-heavy workloads, which is critical for AI." The runtime heritage also matters, he added: "Thirty years of Java Virtual Machine (JVM) optimisation means applications often get faster out of the box, without developers changing a line of code."

Beyond features, Java's role in AI is also about trust. As the executives noted, "Generative AI can now generate a Spring Boot app in seconds. But deploying and monitoring that app in production requires stability. Java provides the ecosystem, frameworks, and runtime to run that code at enterprise scale. For the billions of lines of existing Java code, frameworks like Spring AI, which brings AI abstractions into the Spring ecosystem, and LangChain4j, a library that simplifies large language model (LLM) integration into Java applications, make it possible to add generative AI capabilities without rewrites."

PREPARING FOR THE POST-QUANTUM WORLD

Java 25 also lays foundations for the next frontier in security: Post-Quantum Cryptography (PQC). With advances in quantum computing expected to eventually break today's encryption protocols, Oracle is proactively building support.

Arimura explained: "Security has always been in Java's DNA. With quantum computing on the horizon, we have begun implementing post-quantum cryptographic primitives. In Java 24 we delivered JEPs around key encapsulation and digital signatures. In Java 25, we have extended this with the Key Derivation Function API and PEM encodings for cryptographic objects. Once the Internet Engineering Task Force (IETF) finalises standards for post-quantum Transport Layer Security (TLS), we will integrate them and backport them into long-term supported releases like JDK 11, 17, and 21. Enterprises cannot afford to wait."





The principle is clear: enterprises should be quantum-ready before the threat arrives, and without paying a performance penalty.

INDIA'S ROLE AND THE ROAD AHEAD

While technology anchors Java's evolution, community sustains it. Oracle executives pointed to India as a vibrant hub. "There are now 14 Java User Groups across cities like Pune, Hyderabad, Bengaluru, Mumbai, Delhi, and Gujarat, representing nearly 100,000 developers from across tech companies they noted.

Looking ahead, Oracle reaffirmed its commitment to the six-month release cadence. "We are already shipping early access builds of Java 26. The idea is not disruptive leaps, but thoughtful evolution in smaller increments," said Chander. "The focus areas are cloud-native applications, concurrency, start-up performance, AI, and, above all, security by default. In a world of billions of autonomous agents, Java's secure runtime foundation will matter more than ever."

Java's flagship developer conference, JavaOne, returns in 2026, another signal of the community heartbeat that Oracle sees as vital for sustaining the language into its fourth decade.

WHY JAVA 25 MATTERS

The Java 25 release delivers 18 JDK Enhancement Proposals (JEPs), spanning language features, concurrency libraries, security upgrades, performance enhancements, and monitoring improvements. These include:

Making Java easier to learn: Compact Source Files, Module Import Declarations

Making Java AI-ready: Structured Concurrency, Scoped Values, Vector API, Compact Object Headers

Making Java future-proof: Key Derivation API, post-quantum cryptography foundations, enhanced JFR monitoring

With long-term support for at least eight years, enterprises can adopt Java 25 at their own pace, backed by quarterly updates until 2028 and extended support through 2033.

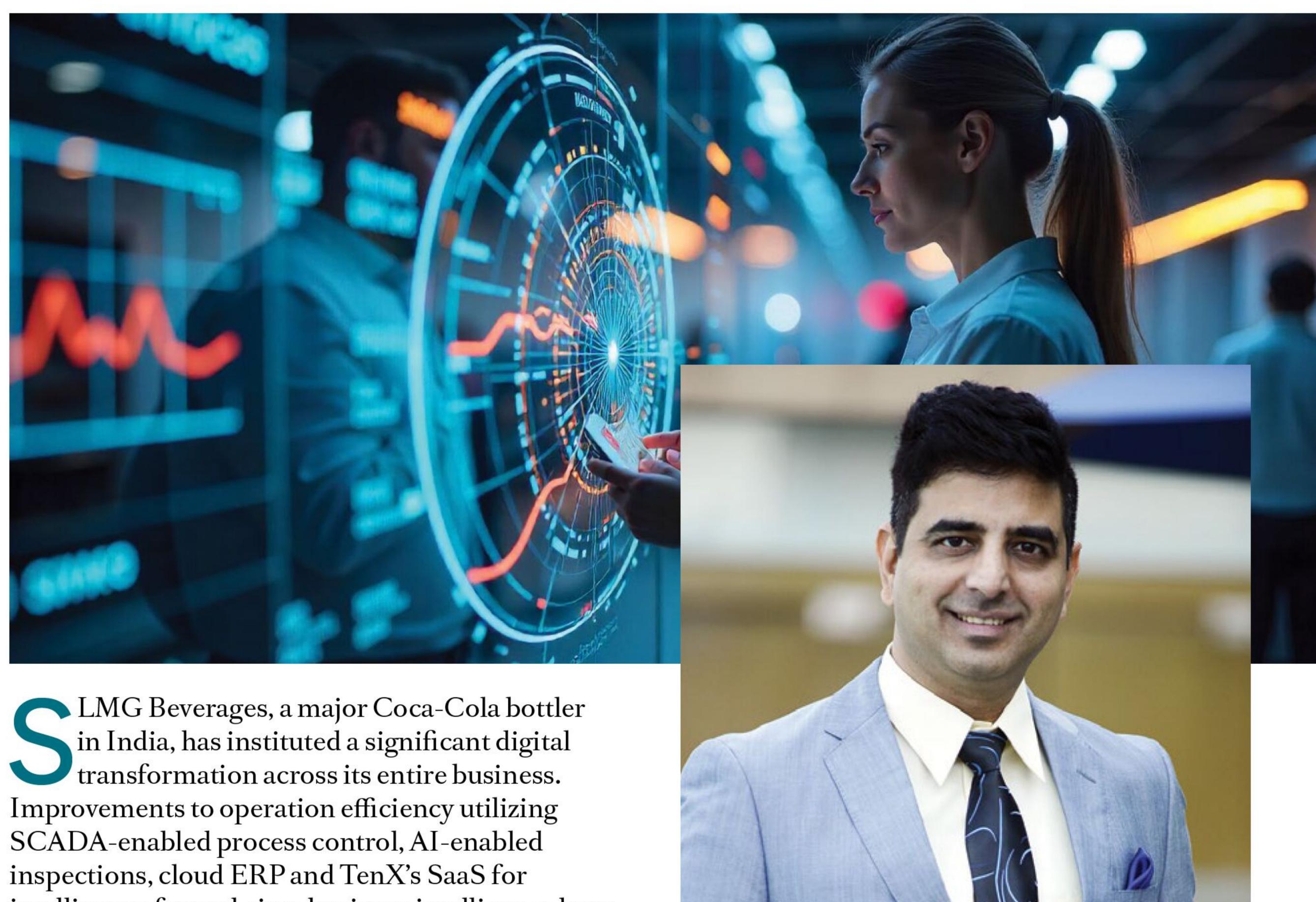
"For developers, the promise is clear: Java 25 lowers the entry barrier, accelerates modern workloads, and future-proofs enterprise security, all while staying true to the language's core philosophy of thoughtful, evolutionary change," summed up Traversat. @

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Don't bolt AI onto ERP—build a connected system from day one

In an exclusive interaction with Dataquest, **Paritosh Ladhani**, Joint Managing Director of SLMG Beverages, outlines how the Coca-Cola bottler has moved from legacy processes to a fully digitised, AI-enabled, smart-factory ecosystem.

By Aanchal Ghatak



In India, has instituted a significant digital transformation across its entire business.

Improvements to operation efficiency utilizing SCADA-enabled process control, AI-enabled inspections, cloud ERP and TenX's SaaS for intelligence for real-time business intelligence have reduced defect levels across SLMG's operations to below 0.1%, while also facilitating a 95% reduction in safety incidents, and ramping production to 33,000 bottles/minute. In addition to efficiency, these various structures have led to a more consistent product, faster decisions and more customer trust.

The following discussion with Joint Managing Director Paritosh Ladhani unveiled the mindset around technology, learning and leadership that made SLMG's evolution to a smart factory from a

PARITOSH LADHANI

JMD & Board Member, SLMG Beverages

more traditional warehousing and bottling business even possible.

What operational gains have you seen from deploying SCADA, Al-powered inspections, EHS solutions, and automated ingredient handling?

SLMG Beverages has taken a modern approach



The real-time visibility into sales, purchases, inventory, goods in transit, production, and financials has allowed SLMG to make decisions faster and more crisply with data.

to plant operations by employing SCADAcontrolled processing, AI-powered high-speed camera inspections, AI-supported EHS solutions, and automated ingredient handling that provide tangible improvements in quality engineering, safety, efficiency, and cost savings.

Defect detection accuracy has topped 99.9%, resulting in defects rates below 0.1%. Real-time rejection analysis allows for the immediate traceability of issues, and, in combination with automated systems, it has now resulted in an estimated 80% reduction in the manual inspection workforce. These changes have also allowed for inspection costs to be trimmed by 15-25% while simultaneously strengthening compliance with FSSAI, FDA, and ISO 22000 standards through improved traceability.

On the safety side of the house, SLMG's tailored AI-based EHS solution—developed jointly with external expertise in partnership with in-house Tech & QC teams—has provided round-the-clock CCTVenabled visibility into the plants. With the predictive analytics tools embedded in the system, automated risk prioritization, and active real-time monitoring of workers, safety incidents have dropped by 95% and timely, informed interventions for risks, stressors, fatigue, and health concerns are now possible.

That said, use of SCADA systems ensures continuous monitoring of temperature, pressure, and Brix-eliminating manual intervention, building assurances against data falsification, and presenting real-time options for data-driven decisions to maintain quality.

Cumulatively, all of this has resulted in reduced downtime, reduced rework, reduced costs, and ensured a safer workplace; and with these developments, SLMG Beverages has surpassed the efforts to create consistency in every bottle produced thereby enhancing customer trust.

You've reported capacity of 33,000 bottles per minute across multiple plants, with plans to reach 13-14 largescale plants within five years. How has automation helped unlock and optimize that capacity?

Automation has been a key enabler in unlocking and

optimizing our reported capacity of 33,000 bottles per minute. With high-speed filling lines, automated quality inspection, and advanced conveyor and palletizing systems, we've been able to drive higher throughput while ensuring precision and consistency.

AI is also playing an important role—helping us enhance safety through real-time online monitoring in partnership with our tech partner, and enabling continuous tracking of line efficiencies for proactive improvements. Automation and AI together minimize downtime, ensure better resource utilization, and allow our teams to focus on innovation.

As we scale towards 13-14 large-scale plants in the next five years, these technologies will remain central to standardizing best practices, maintaining consistent output, and meeting evolving market demands.

The shift to Microsoft Dynamics 365 cloud ERP reportedly unified your legacy IT stacks across four legacy bottling units without disrupting daily operations. What operational gains—from planning to distribution did that consolidation deliver?

With the introduction of Microsoft Dynamics 365 Cloud ERP, SLMG Beverages has integrated four legacy bottling facilities into a single connected platform, enabling end-to-end operational transformation without negatively impacting day-to-day activities. It has simplified planning, manufacturing, quality assurance, and distribution resulting in measurable improvements in speed, efficiency, and the customer experience.

With one cloud backbone, SLMG is now able to run seamless operations 24x7 in plants, warehouses, and offices in Uttar Pradesh, Bihar, and Uttarakhand with no dependency on any legacy local IT infrastructure. The real-time visibility into sales, purchases, inventory, goods in transit, production, and financials has allowed SLMG to make decisions faster and more crisply with data.

The result has been significant: supply chain productivity improved by 88%, inventory shrinkage declined by 97%, and the time to close financials has been reduced 25-35% faster. Additionally, improved production planning has also resulted in better

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Mobile-first, real-time intelligence has made SLMG faster, leaner, and more competitive, changing the agility in business.

product freshness and on-time delivery, enabling customer service levels to reach 90%.

In summary, by consolidating SLMG onto Microsoft Dynamics 365, not only is the SLMG operation now modernized, there is also improved decision-making, product quality, and customer confidence; enabling SLMG to be agile and prepared for the future.

With the SLMG One mobile app and Power BI dashboards in place, how has real-time visibility into sales, logistics, and operations changed the way decisions are made on the ground?

SLMG Beverages has redefined decision making with the SLMG One mobile app and Power BI dashboards, both seamlessly integrated with the Microsoft Fabric Data Lake—the world's fastest data lake technology. As the first Coca-Cola bottler in India to implement Fabric, SLMG now has every member of the leadership team and every second-line manager receiving real-time business intelligence that is at their fingertips.

This single source of truth means hourly and daily performance can be monitored across the value chain across sales, NSR, inventory, breakage and damages, order and production status, purchases, SKU-level trends, and even team performance.

The effect on the business has been profound.

Managers can respond to deviations or opportunities in real time, teams are more accountable with transparent and real-time performance data, and leadership has shifted from reactive firefighting to proactive management, where problems are anticipated and diverted before they can escalate into larger problems, and opportunities can be seized in real time.

In short, mobile-first, real-time intelligence has made SLMG faster, leaner, and more competitive, changing the agility in business and the culture of decision making throughout the organization.

For other traditional bottlers or FMCG manufacturers looking to digitise, what is the one foundational step or investment (e.g. ERP, IoT, AI inspection) that produced the strongest ROI?

Our experience at SLMG Beverages is that no one technology is your silver bullet to best ROI alone. The

most effective value comes when ERP, IoT, AI, and Analytics exist as one unified ecosystem.

Your ERP and IoT systems are the backbone — capturing every transactional and operational signal from the work you do in the business. At SLMG, for example, all this data flows into our Microsoft Fabric Data Lake and serves as the high-speed central data warehouse.

Once ingested, AI and advanced analytics allow us to turn that raw data into real-time insights for leadership visibility and expediency in decision-making.

The point is: don't think of ERP, IoT, or AI as separate projects as much as you would like to think about investing in an integrated backbone. That is where you obtain the strongest and most sustainable ROI.

In executing big-ticket technology interventions—ERP rollout, Smart Factory integration, AI inspection—what practical change-management lessons did you learn in bringing legacy teams up to speed?

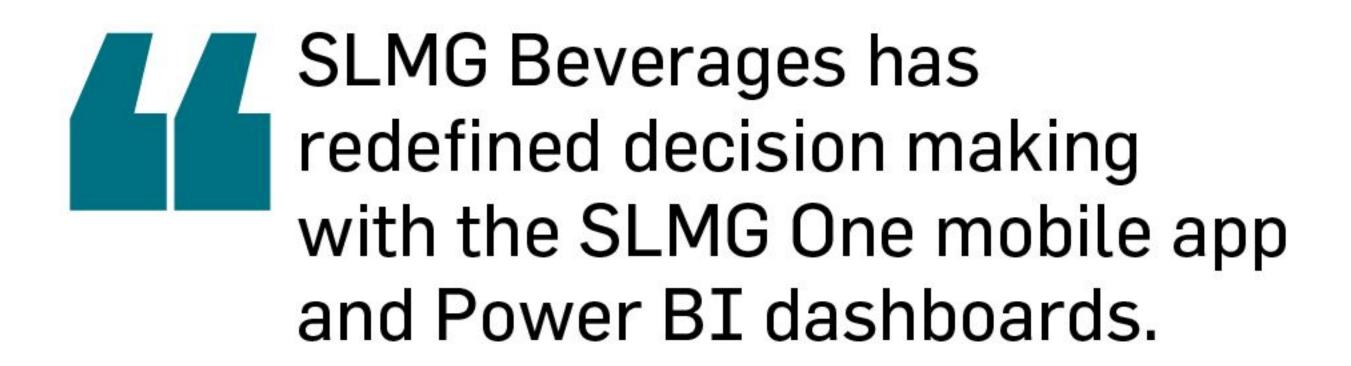
If we look at SLMG Beverages' journey—rolling out Microsoft Dynamics 365 ERP, Smart Factory integration, and AI-based EHS (Environment, Health, and Safety) & inspection Solution—the real test wasn't just the technology. It was moving a large, legacy workforce from decades-old habits into a fast, data-driven way of working without breaking daily operations.

Here are the practical change-management lessons we learned that could help any large bottler or manufacturing company facing a similar leap:

1. Speak in "Benefits They Feel", Not "Features You Like"

- What didn't work: Talking about "cloud ERP" or "AI vision systems" in IT terms—most frontline teams just heard "more work" or "more control."
- What worked: Explaining in their language:
 - "You'll spend less time on manual reporting."
 - "The system will alert you before the line stops."
 - "No need to count crates by hand every night."

Lesson: Frame every tech change as a personal win for the user, not a corporate win.



2. Create Change Champions at Every Site

- Hand-pick respected operators, supervisors, and plant accountants to be "change champions."
- Train them first and deepest—they become inhouse experts and trusted voices.
- Reward them visibly when adoption milestones are hit.

Lesson: People trust peers more than they trust IT or corporate.

3. Train for Tasks, Not Just Tools

- What didn't work: One-time "system overview" training. Users remembered 30% after two weeks.
- What worked:
 - Task-based micro training: "How to post a GRN" or "How to check downtime alerts."
 - Role-based user manuals and quick video clips in local languages.
 - Refresher sessions after 30 and 90 days.

Lesson: Training must be practical, simple and repeated until everyone remembers.

4. Don't Underestimate Emotional Resistance

- Some senior staff saw automation as a threat to job security.
- We addressed it head-on—positioning tech as a skill upgrade opportunity, not a replacement.
- Offered reskilling for those moving from purely manual roles to system-driven ones.

Lesson: Address job security fears openly, not with vague assurances.

5. Make Early Wins Public and Visible

- Example: Smart Factory reduced line downtime alerts by 15% in one plant within 2 months—we celebrated that across the company.
- AI inspection reduced manual QC checks by 40% shared the story with photos and data.

Lesson: Success stories accelerate adoption faster than policy memos.

6. Integrate IT and Operations Teams from Day One

- In the past, tech projects sat with IT until handover.
- For Smart Factory, we embedded IT engineers into plant ops teams during rollout.

• This meant issues got solved in hours, not escalated in weeks.

Lesson: Break silos—make it a joint business-IT project from start to finish.

Final Learning: Change management in big-ticket tech at a legacy manufacturing giant isn't about the software—it's about building trust, lowering fear, and proving value fast. Once people believe the system makes their job easier and safer, adoption becomes self-sustaining.

The leadership pushed to implement Dynamics 365 during the pandemic lockdown but managed to go live ahead of schedule. What made that possible and what would be your advice to firms wanting to replicate such seamless execution?

Launching Microsoft Dynamics 365 ahead of schedule during a pandemic changed the technology conversation from being a technology to a matter of culture and leadership. One of the reasons was that lockdowns and remote work made establishing relationships difficult when teams across functions within the organization treated the ERP rollout as a mission, not just a project.

Discipline kept execution moving, with daily check-ins to get fast decision making and be accountable to get through roadblocks. Employees, who had never used a cloud ERP before, adopted online learning and adapted to new processes quickly due to the on-going leadership support and resources made available, removing blocks for engagement and knowledge sharing a primary objective of an organization to support change - being signaling change was a business priority.

Equally important was collaboration. IT, Operations, Finance,, Sales, and partners became part of the same team sharing ownership, and solving problems "as one" in all areas. A seamless go-live demonstrated that technology really only works when driven by dedication, discipline, and culture of learning.

Having now implemented Smart Factory and full cloud deployment, what role do these systems play in

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Success came from collaboration — IT, Operations, Finance, Sales, and partners worked as one, proving technology succeeds through teamwork, discipline, and continuous learning.

achieving scalability, traceability, and predictive control in your smart factories?

With Smart Factory systems and full cloud deployment, SLMG Beverages gains real-time data visibility and precise process control across all plants—enabling faster, predictive decision-making. End-to-end backward and forward traceability ensures that any product issue can be quickly identified, isolated, and addressed, safeguarding quality, compliance, and customer trust while supporting seamless scalability.

What guidance would you offer other Coca-Cola bottlers in India or Asia considering a fully cloud-based ecosystem, given SLMG's experience as the first to adopt Microsoft D365 ERP in the region?

For SLMG Beverages, migrating to Microsoft Dynamics 365 was not an IT project, it was a business transformation. The success of the project relied on the engagement and collaboration with leaders across the sales, manufacturing, finance, and distribution departments from day one - as business-driven priorities guided overall adoption, not just technology.

At the heart of the project were standardised processes and clean data. By standardising the core processes across the plants and cleaning the master data up front, SLMG avoided costly issues and created efficiencies once they went live. When D365 was live, the ability to connect to tools like Power BI and Power Automate opened the way for real-time dashboards, automations, and pilot IoT connections to production lines that were directly connected to the ERP.

SLMG also invested heavily in connectivity, a staged rollout, and managing change. Upgrading the networks, treating each location as a phased rollout, and training champions at each plant so that the transition didn't disrupt the operation during peak months of sales was a priority. The frontline users got behind the system once they saw the true benefits — less manual data entry, faster reporting, and more transparency.

Today, shifting to a fully cloud-based Microsoft ecosystem has provided SLMG with real-time visibility into manufacturing, distribution, and sales. What used to take days to assess can now be made

into immediate decisions and a foundation for AI-driven forecasting, route optimise and trade promotions analytics.

If you had to start this transformation today in 2025—with AI, cloud, and manufacturing tech advancing rapidly—what would you do differently to stay ahead? If I were commencing digital transformation in 2025, I wouldn't treat ERP, AI, cloud, and IoT as disparate initiatives. Instead, I would design them as a cohesive digital nervous system that continually transforms as the business undergoes continuous transformation. The beginning point isn't the technology, it's the operating model you want to have in 5 to 10 years—then you will configure your tech stack to support it.

That includes treating ERP as an adaptable, flexible platform with APIs and low-code extensions; putting AI into the flow of decision-making from the first day; and cloud and edge running in parallel for scale and speed. Manufacturing technologies like IoT and digital twins should offer a secure connectivity layer between operations technology (OT) and IT. A single governed data lake should provide the real-time insights and context necessary for leadership dashboards and usage throughout the organization. And because the risks of cyber threats will only increase with time, designing in zero-trust security and resilience will have to be built-in, and from the onset.

Success is above all about the people, not the platforms. Upskilling teams regarding data and AI-informed decision-making, creating change agents in every department, and transforming the business from an "IT project" mindset of generating "new" technology to a constant mindset of transformation will drive sustainable adoption. In brief, don't implement ERP first and then consider how AI can be added later. Integrate everything together as a system, in one embrace—because the competitive differentiator is not the latest software, it is the speed with which a company can adapt to anything that happens next.

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The future isn't about isolated robots

C Balaji, PSG Head, TVS Electronics draws a rough, but realistic, picture of factories that embrace robots for new business models as well as faster (and smarter) assembly lines and packaging. It's an age of managed automation, performance-based services, flexible manufacturing, mass customisation, vision-intelligence, serialisation and traceability across all areas. But would this world be with or without taxes, accidents and retrofitting? Let's take a walk with Balaji around what's changing and what's staying.

By Pratima H

How strong is the evolving scope of robotics and automation in manufacturing?

The role of robotics and automation in manufacturing is expanding from doing discrete, high-value tasks to orchestrating entire value chains. We are moving towards factories where automation doesn't just mean faster assembly, but intelligent systems that connect design, production, inspection, and logistics. The real edge will come from combining robotics with Automatic Identification and Data Capture (AIDC) technologies like scanners, RFID, and vision cameras, which allow machines to capture and act on data in real time.

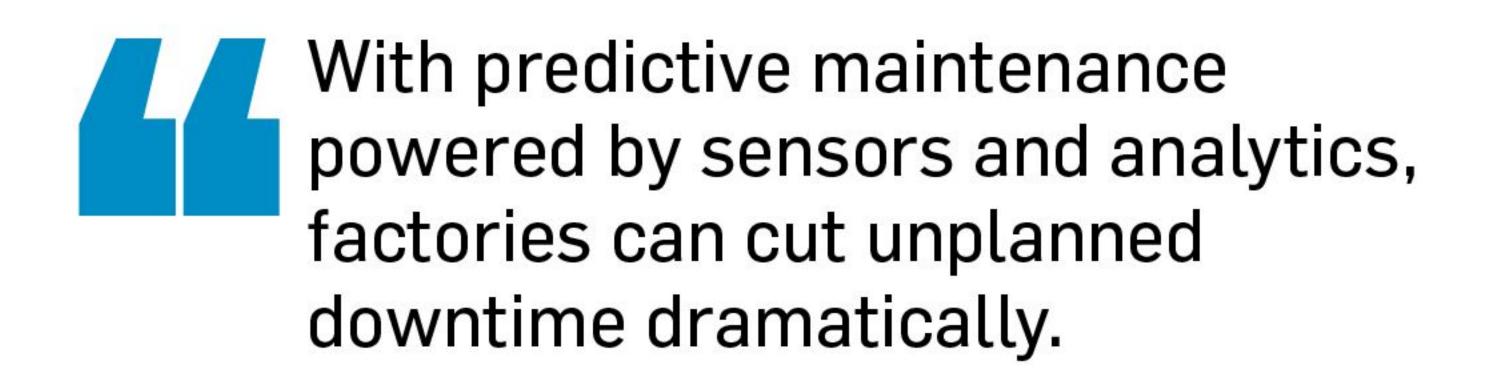
What's helping as a catalyst here?

Falling hardware costs, better AI and vision, and mature integration platforms have made it possible to deploy automation in areas that were once uneconomical. As a result, we'll see factories

Vision-guided robots will help manufacturers handle SKU variations without expensive retooling.



C BALAJI
PSG Head, TVS Electronics



deliver shorter lead times, higher equipment effectiveness, and predictable quality at lower cost. The future isn't about isolated robots, it's about modular, interoperable systems that scale from pilots to full factories and create measurable business outcomes.

Where does India stand? What are our forte areas already, and where do we catch up next?

India already has strong foundations in automotive manufacturing, electronics assembly, and packaging automation. These are areas where high-volume production and established supplier ecosystems have created scale and cost advantages. We've also seen steady demand for conventional automation in packaging for food, beverage, and pharma. But the next leap forward will come from adopting advanced robotics, vision-driven inspection, and intelligent integration of systems.

How?

This means moving from basic mechanisation to true intelligent automation. The way forward is through partnerships with vision specialists and system integrators, building local R&D for sensors and end-effectors, and aggressively skilling engineers in automation and data-driven maintenance. Quick wins can come from running short pilot projects, for example packaging lines with vision checks or traceability systems, before scaling them across plants. India has already built strength in AIDC adoption, particularly in automotive and pharma. The next catch-up lies in using vision and smart packaging automation to meet global export standards more efficiently.

Will this, and how much will it, change aspects like design and assembly lines?

The impact will be significant across all areas. In design, products will increasingly be developed with automation in mind where fixtures, modules, and components will be optimised for robotic handling

and testability. Simulation and digital twins will shorten development cycles and speed up timeto-market. On assembly lines, flexible automation like collaborative and vision-guided robots will help manufacturers handle SKU variations without expensive retooling.

What about side-effects on maintenance and factory uptime?

Maintenance and uptime are perhaps the most transformative areas. With predictive maintenance powered by sensors and analytics, factories can cut unplanned downtime dramatically with pilot studies often showing reductions between 20 and 50 per cent. The key metrics that will matter are overall equipment effectiveness, first-pass yield, mean time between failures, and mean time to repair. By embedding traceability through barcodes or RFID at the design stage, validating every component on the assembly line, and using real-time asset health data, automation supported by AIDC will deliver higher uptime, better quality, and faster cycles.

There are also concerns around this shift-like labor replacement, brownfield turbulence and accidents. What are your thoughts here?

Labor displacement is a sensitive but unavoidable aspect of automation. Many repetitive, manual tasks will be automated, but this does not mean a one-toone replacement of jobs. Instead, we will see a shift where new opportunities open up in areas such as robot maintenance, automation engineering, and data analysis. Companies and governments will need to invest in reskilling programs, redeployment pathways, and incentives that link productivity with employee growth.

Brownfield sites will always face more turbulence compared to greenfield facilities because of legacy systems and physical constraints. Here, modular retrofits such as vision cameras, fixed scanners, or cobots can help minimise disruption and capital

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Brownfield sites will always face more turbulence compared to greenfield facilities because of legacy systems and physical constraints.



expense. Safety is another critical area. Automation reduces human exposure to hazardous tasks, but it introduces new risks around human-robot interaction and system failures. Companies need strict adherence to safety standards, simulation-based testing, and rigorous operator training.

What are your views on robot taxes?

On policy, robot taxes have been debated in a few markets but are rarely implemented in blanket fashion. The balance has to be between encouraging innovation and ensuring a smooth workforce transition.

What else should we be worried about or excited about?

There is a lot more to be excited about than worried about. Automation, robotics, and AIDC together open the door to data-driven manufacturing where every scan, weight, or vision capture becomes a source of intelligence. This enables predictive quality,

dynamic scheduling, and even new business models such as managed automation or performance-based services. Flexible manufacturing will allow companies to handle smaller batch sizes, mass customisation, and faster product launches. At the same time, serialisation, traceability, and compliance-ready automation will make it easier for Indian manufacturers to meet global export requirements in sectors like pharma, F&B, and auto parts.

Is it all risk-proof?

The risks are real but manageable. Integration complexity, cybersecurity, skills gaps, and vendor lock-in need to be addressed with open systems, strong governance, and continuous investment in people. The key is to prioritise automation that drives measurable ROI rather than pursuing novelty. If we get that balance right, India has the opportunity to leapfrog into intelligent automation at scale.

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Feeding the Al beast, with some beauty

Jameson Mendonca, Power Generation Business Leader, Cummins Power System opens up some pistons of carbon hunger of modern data centres while he also shows how Natural gas, Hydrotreated Vegetable Oil, Life Cycle Assessments (LCAs) and Environmental Product Declarations (EPDs) can weld well in this new era. And why we should we worried about scope 1 and 2 in the race to be no.1 in AI.

By Pratima H

rom steam engines to silicon, from diesel to digitisation, from hardware to algorithms, from horsepower to AI jockeys - the world has been taking one big turn after another. But some questions, somehow, keep haunting every jump, every switch and every revolution. Guzzling energy just changes the straw not the appetite. Carbon footprint simply accumulates in a different form of horse-dung. The pattern continues with AI. Let's ask someone who can show a full swing from diesel to new energy realities as he shows us the balanced grip on the new world we are moving towards. Can we ever turbo-charge progress without cranking down sustainability? Mendonca tells us why, and why not.

What is your reckoning of some estimates on how data centres face the brunt of Al-appetite: Like the International Energy Agency (IEA) has estimated that global electricity demand from data centers could double up between 2022 and 2026.

AI-driven growth is placing an unprecedented load on data centres worldwide, and India is poised to shoulder a large share of the incremental electricity,

Under realistic scenarios, AI workloads alone could require on the order of 1–1.5 GW of continuous IT power—equivalent to 8.8–13 TWh annually—in India by 2030.



JAMESON MENDONCA Power Generation Business Leader, **Cummins Power System**



While the low-carbon energy sources like solar and wind have their own downsides like intermittent nature and reliability, Cummins offers solutions like BESS that help overcome some of the issues with these power sources.

real estate, and cooling burden created by rising AI demand. The IEA has estimated a trajectory that AI is accelerating at a rapid pace.

Under realistic scenarios, AI workloads alone could require on the order of 1–1.5 GW of continuous IT power—equivalent to 8.8–13 TWh annually—in India by 2030. This translates into a significant new draw on grids, water resources, and capex for cooling and power infrastructure. Recent analyses indicate that while AI's share of data centre power today stands in the single-digit to low-teens range, it could climb to 20–40 per cent or more by 2030 in some scenarios, fundamentally reshaping the power-consumption profile of digital infrastructure.

What implications does this demand have on diesel energy assets?

Against this backdrop, diesel gensets will continue to be indispensable as reliable backup solutions to meet rising power demands and ensure uninterrupted uptime. At the same time, global forums are actively discussing the shift toward greener pathways, with data centres worldwide exploring solar integration, renewable-backed grids, and hybrid solutions as part of their sustainability roadmaps. India's data centre sector is therefore at a defining inflection point—balancing the imperative of resilient backup power with the responsibility of advancing towards greener, more sustainable energy solutions in the age of AI.

How serious - and easy-to-steer- are Scope 1 and 2 emissions of AI Build-outs - especially with recent headlines on how AI data centre hunger has affected Big Tech (Microsoft, Amazon, Google etc.)'s scorecard on emissions?

The scope 1 and scope 2 emissions for datacenters are bound to increase in the short term. Hence there is a huge focus on reducing carbon footprint of scope 1 and scope 2 emissions, which is done through the usage of renewables and hybrid solutions. The standby diesel engines for data centers are part of scope 1 emissions for data centers. Here Cummins is partnering with the datacenters with

a full portfolio of solutions meeting CPCBIV+ and CAQM emission norms. In addition, Cummins products with their superior fuel economy help reduce the carbon footprint of the scope I emissions. Further through the introduction of BESS (Battery Energy Storage Solutions), Cummins is helping the datacenters reduce the scope I and scope 2 emission footprint.

What's your reckoning of Natural gas solutions for hyper scalers and HVO fuel- are you trying these alternatives? Anything about India that you can share? As part of our product portfolio, Cummins already offers natural gas gensets for datacenters, and our current range of diesel engines is capable of running on Hydrotreated Vegetable Oil (HVO) as well. For data center customers, we also provide support in designing compliance strategies, whether that involves switching to alternative fuels, tuning engines to minimise NOx formation, or deploying scrubbers, filters, and other aftertreatment systems.

There is no 'one size fits all' approach to the decarbonisation journey and we work closely with our customers understand their unique needs and providing technology options that meet those needs.

How can the industry get past the issues with Lowcarbon energy source use - like gaps on consistency, its intermittent nature, transmission costs and reliability? Any comments on the reverse turn on fossils in the US now?

As industry moves towards a more sustainable future, data centers are looking for ways to reduce emissions in both their scope 1 and scope 2 emissions. While the low-carbon energy sources like solar and wind have their own downsides like intermittent nature and reliability, Cummins offers solutions like BESS that help overcome some of the issues with these power sources. In addition, Cummins is also heavily invested in working on other storage technologies involving H2 with electrolyzer and H2 ICE (Internal combustion engines) /Fuel cell technologies that help in mitigating the intermittent nature of the green sources.



Over time, data centres are becoming more efficient with chips, but as the number of chips per facility increases, they require high power density products.

What's the potential of hydrogen, SMRs (small modular reactors) (especially with concerns like long lead times and nuclear waste) in data centre sustainability?

In theory SMRs are a viable potential source of energy, but the technology continues to be at initial testing phase and will take time for wider adoption as long as safeguards associated with nuclear raw material and waste and regulatory safeguards are adequately managed.

Hydrogen is another area that is being looked at to overcome the intermittent nature of the renewable sources like wind and Solar. BESS is another competing technology that will be used in place of hydrogen. As the cost of the technologies involving hydrogen (Electrolyzers, Fuel cells) reduce over the medium to long term, the viability of these over BESS would depend on the use case for the particular site.

Tell us about the progress and challenges, the goal of net zero emissions by 2050 and carbon reduction projects undertaken by Cummins.

At Cummins we are focused on our Destination Zero strategy, that focuses on providing our customers with solutions that meet their varied needs. Our products are continuously built and improvised to fit market requirements, improving fuel economy and reducing emissions at every possible level through Bridge Technologies. Building on this, our CAQMcompliant products, CPCB IV+ gensets, and the recent BESS offering-delivering zero-emission power-are strong steps forward as we progress on our Destination Zero strategy.

When we think of data centres and carbon: what about LCAs (Life Cycle Assessment) and EPDs(Environmental Product Declaration) - how easy and how important?

As data centres grow in scale, sustainability is becoming a competitive differentiator-and that's where Life Cycle Assessments (LCAs) and Environmental Product Declarations (EPDs) play a critical role. An LCA is a systematic method for

evaluating the total environmental impact of a product, process, or system across its entire life cycle.

For a data centre, this spans both upstream (embodied) impacts-such as construction materials, IT equipment manufacturing, and cooling and power infrastructure including gensets—as well as operational impacts like electricity consumption. The result of an LCA is a detailed Environmental Product Declaration (EPD), which is also applicable to gensets.

EPDs enable apple-to-apples comparisons between products or facilities when selecting greener infrastructure. This makes them a valuable tool in procurement, helping industries choose products that demonstrate a clear commitment to net zero goals while also attracting sustainabilityconscious clients.

In India, compliance with emission regulations is overseen by CPCB and CAQM. Cummins already has product lines that meet these guidelines—ensuring regulatory compliance without compromising on product life cycle performance.

Can companies aspire for balancing Al-first advantage, reliability and affordability with sustainability and large-scale footprints? Why or why not? What's Cummins bringing to this table next?

Over time, data centres are becoming more efficient with chips, but as the number of chips per facility increases, they require high power density products. AI can help companies automate many of their processes and decision-making, and the benefits can be immense if it is deployed across the value chain.

While there may be a first-mover advantage, the sustainability of AI adoption will depend largely on how companies innovate in deploying new tools and technologies, and how effectively they balance their sustainability goals—given that AI-driven workloads can be resource-intensive in terms of power and water. Cummins already offers a wide range of highpower density products that support greater power needs while optimising for smaller footprints.

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SAP's Jan Bungert on how business Al and data cloud are powering India's Techade

Jan Bungert, CRO of SAP Business AI, discusses how SAP is embedding AI into core applications and leveraging SAP Business Data Cloud to help Indian enterprises like Parle and Mahindra unlock trusted insights, efficiency, and measurable outcomes.

By Aanchal Ghatak

I adoption in India is moving from experimentation to measurable impact, transforming operations at a fraction of the cost and effort. In an exclusive interaction with DataQuest, Jan Bungert, Chief Revenue Officer – SAP Business AI, explains how SAP is embedding trustworthy AI into core business applications, enabling enterprises to harmonize data with SAP Business Data Cloud, and helping Indian companies like Parle and Mahindra turn insights into real business outcomes.

Al adoption in India is seeing a breakthrough – how is SAP driving this transformation through its business offerings?

AI is powering India's 'Techade', assisting in achieving a multitude of operations at nearly one-fourth the cost and effort. Organizations today have realized the potential of AI and are accelerating adoption across sectors, driving operational efficiency and transforming societies. At SAP, AI adoption is anchored in setting the global standard for trustworthy business AI.

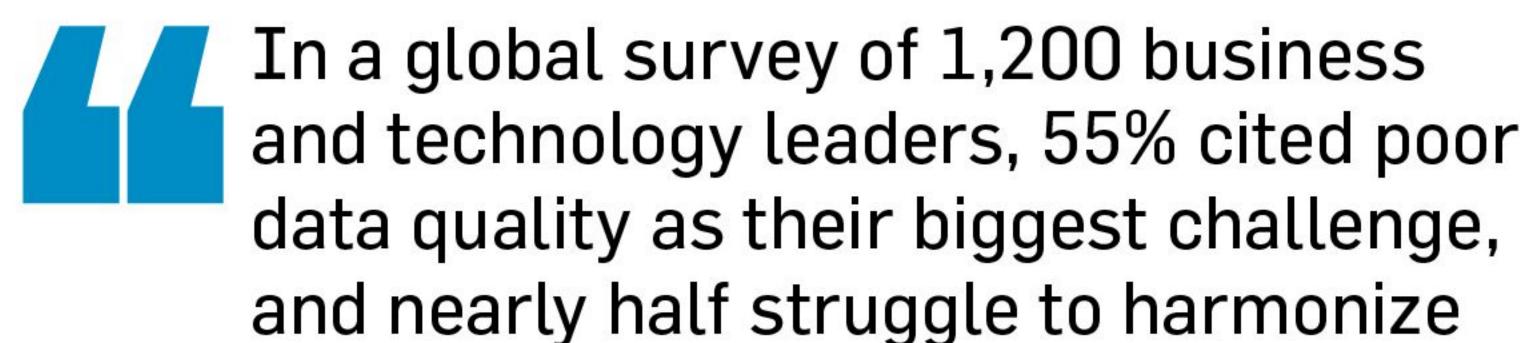
Our mission is to enable scalable, relevant, and responsible AI adoption that delivers real business

Centered around application-embedded AI, intelligence is built directly into SAP's core business applications to provide end-to-end automation and insights for smarter

decision-making.



JAN BUNGERT
Chief Revenue Officer – SAP Business AI



data across multiple ecosystems.

value. Centered around application-embedded AI, intelligence is built directly into SAP's core business applications to provide end-to-end automation and insights for smarter decision-making.

Beyond embedding AI, SAP also provides a trusted data foundation through SAP Business Data Cloud. There's an unprecedented amount of data being generated from every corner of the business, which must be harnessed effectively for AI use cases to create real value. By harmonizing data across ecosystems, we close the trust gap that often limits AI success.

In a global survey of 1,200 business and technology leaders, 55% cited poor data quality as their biggest challenge, and nearly half struggle to harmonize data across multiple ecosystems. SAP aims to close that trust gap with SAP Business Data Cloud, which delivers a harmonized data layer of high-quality data. AI can be built upon that data foundation and made available to customers within the apps they use every day.

Could you unpack what SAP Business Data Cloud (BDC) offers, and how it's enabling organizations in India and Southeast Asia to unlock the full value of their data with AI at the core?

SAP Business Data Cloud (BDC) is a fully managed SaaS solution that unifies and governs all SAP data and seamlessly connects with third-party data. It gives business leaders context to make even more impactful decisions, while keeping the data's business context and data semantics intact.

SAP BDC combines SAP's pre-existing data and analytics solutions, including SAP Analytics Cloud, SAP Datasphere, SAP planning solutions, and SAP Business Warehouse, enriched with innovations like:

• SAP Business Data Cloud Intelligent Applications (formerly named SAP BDC Insight Apps) are a portfolio of applications that help line-of-business leaders solve specific business problems. For example, SAP introduced

People Intelligence at SAP Sapphire. Intelligent applications are adaptive and self-learning. They use enterprise data and usage patterns to automate routine tasks, increasing businesses' efficiency.

- Data products, which are is a curated data set containing information taken from SAP lineof-business applications. These data products are created, delivered, and managed by SAP and are the foundation for SAP BDC intelligent applications.
- SAP Databricks is a product based on the partnership with SAP Databricks. It's available as a natively integrated component within SAP BDC and unifies data from SAP applications with industry-leading AI/ML, data science, and data engineering capabilities. SAP Databricks helps connect all SAP and third-party data and foster more reliable AI.

Together, these offerings help enterprises to transform raw data into trusted intelligence, unlocking agility and competitive advantage.

Can you share a few impactful customer use cases from India or Southeast Asia?

Southeast Asia, with India at its core, is central to our commitment to empowering global ecosystem of intelligent enterprises. Some of our exemplary customers in the region are. Parle Products Pvt. Ltd, a leading packaged food, beverages, and confectionery company, leveraging SAP BDC (primarily via SAP Datasphere) to deliver immeasurable value via business insight across sales data with other data sources. This integrated, unified view enables the leadership to evaluate market nuances and take data-driven decisions quickly. The insight provided by SAP BDC helps Parle Products to stay agile and quickly respond to business conditions.

Another impactful use case is that of Mahindra & Mahindra, one of the most eminent conglomerates in India. The company and its marquee company, Mahindra Auto, utilize SAP BDC components for





Global players are reinforcing this trend with large-scale investments such as AWS's \$12.7B commitment through 2030 to expand AI and cloud infrastructure.



data integration, analytics, and business insights. This has helped Mahindra Auto to drive efficiency in finance, sales, and operations, and led to a top- and bottom-line impact of multi-millions in revenue, cost optimization, and profitability. These examples highlight how SAP BDC is not just about managing data but about turning insights into outcomes.

How is the competitive landscape for enterprise Al solutions evolving globally and in India?

Globally, the competitive AI landscape is driven by hyperscale players like OpenAI, Anthropic, Microsoft, Google, and Meta, who are scaling models, ecosystems, and infrastructure at unprecedented speed. At the same time, smaller but fast-growing challengers like Cohere, Alibaba, and Unitree are carving specialized niches, while industries such as retail are deploying AI agents at scale, and retailers like Walmart are integrating AI agents at scale. The competition is no longer only about model sophistication but also about

infrastructure dominance, ecosystem lock-in, and the speed at which AI can be monetized.

In India, the momentum is equally strong. The country is emerging as a testbed for enterprise AI at scale, balancing adoption speed with measurable business impact. As per a report, GenAI could boost productivity in the IT services sector by up to 45%, fundamentally reshaping traditional outsourcing models. Complementing this, according to a Financial Times report, 86% of enterprises already have a GenAI strategy, and 66% already in active implementation. Global players are reinforcing this trend with large-scale investments such as AWS's \$12.7B commitment through 2030 to expand AI and cloud infrastructure. The same report highlights that India is taking a leadership role in ROI realization, with 23% of Indian firms already seeing measurable AI returns vs 12% global average. 💿

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Legacy is not enough: Why enterprises need Al-native SaaS

Phenom's **Kiran Menon** shares how AI-first SaaS is redefining talent experience, augmenting legacy systems, and delivering measurable outcomes.

By Aanchal Ghatak

nterprise SaaS is now entering a next phase where AI is an explicit starting point instead of just an add-on – where AI is creating real business outcomes. Platforms like Phenom are helping globally-embedded employers to cut their interview scheduling time by up to 70% to unlock hundreds of thousands of underutilized skills of their employees, and enable recruiters to save thousands of hours through automation.

In this exclusive conversation with Dataquest, Kiran Menon, Senior Director of Product and India Business at Phenom speaks about applied AI use cases, intelligent agents and human-centered design, and how these are remaking the talent experience and transforming enterprise SaaS.

Can an AI-first platform like Phenom really supplant traditional HCM workflows, or is it merely an add-on to systems such as SAP or Workday?

The purpose of systems platforms like Phenom's is not to supplant existing systems, but to augment them, with relevant AI and automation to enable productive teams and better, personalized experience for the benefits of candidates and employees.

In today's rapidly changing digital enterprises, agility and innovation are more important than ever. Legacy workflows were once the trusted systems of business transformation, now, the transformations are taking place in the AI-enabled, where the talent experience is the mission critical component, and organizations will need more than mere system.

Organizations will need contemporary systems augmented with advanced AI to deliver the automated and personalized solutions to enhance the entire talent experience lifecycle from the sourcing and hiring, through to their development and retention.

AI-first platforms like Phenom are designed to meet this demand by aligning seamlessly with



KIRAN MENON

Senior Director of Product and India Business, Phenom

candidates, employees, recruiters, and HR teams to create a unified, intelligent experience that works in combination with a traditional system to create future-proof technology.

What are the real business outcomes that justify the premium pricing of platforms like Phenom?

Enterprises trust Phenom to transform talent experience with AI to hire faster, develop better and retain longer. We deliver a purpose-built, AIpowered approach that is begetting a paradigm shift to create measurable impact for global employers.

For instance, a large, internationally known science and technology company in Germany leaned heavily into Phenom's interview scheduling technology, which resulted in a 70% reduction in the average time to get an interview on the calendar. On the talent management side, the German company used our internal mobility tool to boost incredible levels of employee engagement.

Meanwhile, a major pharmaceutical company discovered more than 200,000 employee skills they didn't know were available while a large and growing health care system saved its recruiters more than a thousand hours via one-way interviews.

With AI in the loop, who's accountable when the model makes a wrong hiring recommendation—or reinforces bias?

AI complements and accelerates the talent experience process while people make decisions. At Phenom, we believe that the future of talent experience will place the human element at the center, making it the axis around which AI evolution advances with purpose and precision.

AI platforms are designed not just to automate tasks but to enhance decision making, mitigate & eliminate bias, and bring a layer of personalization that humanizes every conversation.

Phenom's AI is designed to illuminate bias, not reinforce it. We're also providing an objective way to compare candidates or recommend jobs based on requirements. By analyzing patterns across candidate data and recruiter behavior, the platform can flag inconsistencies or blind spots that might otherwise go unnoticed, giving teams a chance to address them proactively. When implemented ethically and thoughtfully, it becomes more than just a tool, it becomes an instrument of transformation in your talent strategy.

Does the surge in Al-powered vertical SaaS platforms signal the beginning of SaaS fragmentation—or are we heading toward another consolidation wave?

It's a misconception that you need to sacrifice an

integrated platform just because you're looking at a verticalized solution. The right technology can still satisfy a broad range of use cases but do it in a specific way for a specific industry. What makes Phenom stand out is our ability to deliver tailored technologies for different industries across a spectrum of applications.

The convergence of AI and SaaS is giving organizations a competitive edge through faster decision-making, deeper personalization, and seamless integration across functions. Enterprises are demanding more purpose-built, agile, contextual and intelligent platforms - areas where horizontal SaaS offerings often fall short. Phenom is strategically positioned to navigate and shapethe crux of the talent experience solutions.

Through our connected ecosystem and innovations like Phenom X+, Phenom integrates core HR functions like recruiting, onboarding, internal mobility, and analytics, into a single, intelligent platform. This isn't just integration but an orchestration, where AI and automation deliver to personalize experiences and eliminate friction without sacrificing industry specificity.

What makes Phenom's AI truly differentiated—and not just an overlay of LLMs like everyone else?

Phenom's purpose is to help a billion people find the right work. Its AI-powered intelligent talent experience platform helps enterprises hire faster, develop better, and retain talent more effectively. What truly differentiates Phenom is its Applied AI architecture, which is built on 14 years of proprietary data, domain-specific ontologies, and X+ Agents that are intelligent collaborators designed for specific industries, job roles, and workflows.

While a number of companies are churning out AI agents and giving people toolboxes to build their own agents, Phenom is being intentional about where agents will fit into workflows and enable organizations to use those agents. We're actually showing enterprises how to get to agent excellence.

These agents don't just suggest; they execute, navigate complex processes, make decisions, and know when to escalate to humans. At Phenom, we are reimagining human-machine collaboration, where AI augments HR with precision, speed, and empathy.

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Why the operating system is no longer just plumbing: Raj Das on the future of RHEL

Many enterprises still think of the operating system as a background utility—something you set up once and forget. In reality, modern OS platforms like RHEL are dynamic, intelligent enablers of innovation.

By Aanchal Ghatak

rganizations often take the operating system for granted and think of it as a static, "invisible" layer doing its job in the background. Raj Das, the Senior Director of Core RHEL Product Management at Red Hat, thinks this concept has long since expired. Speaking with Dataquest, he discusses how RHEL 10 will help shape the future for AI, hybrid cloud, and edge computing, walking the tightrope between trust and innovation, automation and compliance, and enterprise-grade stability and agility.

RHEL has been called the "invisible backbone" of enterprise IT. As AI, cloud-native, and edge workloads diversify, what's the biggest misconception enterprises still have about the role of the OS layer today?

The biggest misconception I encounter is that the operating system is just plumbing—something you set up once and forget about. Many enterprises still think of the operating system as a "static" or background layer that doesn't need active evolution. The reality is that modern operating systems like Red Hat Enterprise Linux (RHEL) are dynamic, intelligent platforms that actively enable and

As enterprises expand into AI, edge, and hybrid cloud, RHEL provides the trusted foundation to scale innovation without compromising on security or reliability.



RAJ DAS
Senior Director of Core RHEL Product Management,
Red Hat



We're changing this completely with Red Hat Enterprise Linux (RHEL) 10. In RHEL 10, we're moving towards a "repave, not patch" methodology — rebuilding secure images and redeploying them, rather than layering patches in place.

optimize everything running on top of them. Whether you're training AI models, deploying cloud-native applications, or managing edge devices, the OS is making thousands of critical decisions every second about resource allocation, security enforcement, and performance optimization.

With Red Hat Enterprise Linux (RHEL), we've continuously evolved the platform to be more than an invisible backbone; it is a strategic enabler that ensures consistency, compliance, and performance across environments. As enterprises expand into AI, edge, and hybrid cloud, RHEL provides the trusted foundation to scale innovation without compromising on security or reliability. It is engineered to empower enterprise IT and developers to not just manage the present, but to architect the future

Many CIOs are debating whether to standardize on fewer consolidated platforms or adopt best-of-breed stacks for AI and cloud. Where does RHEL fit into that debate?

We believe CIOs don't need to choose between consolidation and innovation. Red Hat Enterprise Linux (RHEL) offers both. RHEL is designed to give CIOs the consistency of a unified platform while still supporting best-of-breed technologies. For example, RHEL integrates seamlessly with Red Hat OpenShift AI and the Red Hat AI portfolio, enabling enterprises to run AI workloads across on-prem, public cloud, and edge with the same level of trust and governance. This flexibility helps organizations standardize where it matters-security, compliance, operational dev opswhile still adopting new stacks and accelerators for differentiated innovation.

Al training and inference often run on GPUs and specialized accelerators. How is RHEL evolving to ensure enterprises can integrate these heterogeneous hardware environments without lock-in?

Red Hat Enterprise Linux (RHEL) has always been hardware-agnostic by design. With RHEL 10, we've strengthened that with features like image mode

and broader ecosystem validation – so workloads can run confidently across CPUs, GPUs, FPGAs, and emerging accelerators. RHEL 10 also helps you bridge Linux skills gaps, improve build-time decisions, reduce drift, and defend against emerging threats from quantum computing. More than just an iteration, Red Hat Enterprise Linux 10 provides a strategic and intelligent backbone for enterprise IT to navigate increasing complexity, accelerate innovation and build a more secure computing foundation for the future.

Through our partner validation program, we work closely with hardware and software vendors to ensure interoperability. We've also added new integrations, such as PostgreSQL vector database support and confidential computing, to optimize AI use cases. The result: enterprises can adopt the latest hardware innovations without being locked into one vendor.

Enterprises often say patching and compliance slow down innovation. Can you share how Red Hat is using automation and zero-downtime patching in RHEL to remove this trade-off?

Traditional patching has been a monthly headache schedule downtime, cross your fingers, hope nothing breaks. We're changing this completely with Red Hat Enterprise Linux (RHEL) 10. In RHEL 10, we're moving towards a "repave, not patch" methodology - rebuilding secure images and redeploying them, rather than layering patches in place. Think of it like getting a new phone that's already set up exactly how you want it, rather than updating your old phone and dealing with glitches. Combined with Red Hat Insights automation, compliance becomes continuous and invisible. Your developers keep coding, your applications keep running, and your auditors stay happy-all without scheduled maintenance windows disrupting business operations via the kernel live patching capability in RHEL.

Edge computing use cases—from autonomous vehicles to 5G towers—demand reliability in hostile, resource-



With Red Hat Enterprise Linux (RHEL), we're evolving the platform to address cutting-edge needs like AI and quantumera security, while ensuring the longterm stability enterprises expect.

constrained environments. What hard engineering choices is RHEL making to meet those demands?

At the edge, you can't send someone to fix things when they break. Everything must work perfectly with minimal resources and no human intervention. This reality drives every engineering decision we make.

Red Hat Enterprise Linux (RHEL) for edge is built around three principles: minimal footprint, bulletproof reliability, and complete automation.

With image mode deployments, zero-downtime updates, and optimized container support, RHEL ensures that even resource-constrained environments can maintain enterprise-grade reliability. We've also focused heavily on security—confidential computing, quantum-resistant cryptography, and compliance automation—because edge environments are often exposed to greater risk. These choices allow RHEL to deliver resilience in conditions where compute power, space, and connectivity are limited.

Open source projects often fragment as they scale. What guardrails does Red Hat put in place to ensure upstream innovation translates into a consistent, enterprise-grade experience with RHEL?

Open source innovation happens at startup speed, but enterprises need enterprise stability. As enterprise IT grapples with the proliferation of hybrid environments and the imperative to integrate AI workloads, the need for an intelligent, resilient and durable operating system has never been greater. Red Hat Enterprise Linux 10 rises to this challenge, delivering a platform engineered for agility, flexibility and manageability, all while retaining a strong security posture against the software threats of the future.

We don't just take community code and ship it — we validate, harden, and test everything extensively. Red Hat bridges this gap by being an active contributor upstream while serving as an enterprise-grade curator downstream. Our ecosystem partnerships ensure that when new technologies emerge, they work reliably with RHEL from day one. The new

RHEL extensions repository lets us deliver cuttingedge capabilities faster while keeping the core platform rock-solid.

Essentially, we absorb the complexity and risk of open source innovation so enterprises get the benefits without the headaches. Your teams can leverage the latest open source advances with enterprise-grade confidence.

You've worked at both startups and giants like NetApp and Seagate. If you compare product strategy in those worlds, what's a lesson you're applying at Red Hat to keep RHEL relevant in fast-changing markets?

At startups, you learn agility—how to move fast and adapt quickly. At large enterprises, you learn the discipline of scale and governance. At Red Hat, we bring these two together. With Red Hat Enterprise Linux (RHEL), we're evolving the platform to address cutting-edge needs like AI and quantum-era security, while ensuring the long-term stability enterprises expect. A key lesson I've carried forward is: always design for the future, but never break the trust customers place in you. That balance keeps RHEL relevant in markets that change faster every year.

Do you see the OS becoming more of a "silent enabler" of innovation—or regaining visibility as enterprises demand transparency and sovereignty over their platforms?

I believe the OS will continue to be both: a silent enabler and a visible differentiator. On one hand, the best OS is one that enterprises can rely on without thinking about it—it just works. On the other hand, in an era where data sovereignty, compliance, and AI governance are top priorities, the OS must also provide transparency, visibility, and control. With RHEL 10, we're ensuring the platform is invisible when it needs to be, and highly visible when it matters—helping organizations innovate confidently while retaining sovereignty over their infrastructure.

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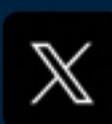


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We allow you to say No!

What's ETA status of real consent, useful personalisation, technology for the everyday commuter and data ethics in the super-busy travel terminal? Anytime now or are we still catching this bus?

By Pratima H

passport to your entire digital life just to sell you a ticket. Is that a technology problem or something else. Let's take a seat besides Reeva Sakaria, Co-Founder at Yatri and know more as she gives a good window-seat view of everything new and challenging that surrounds this industry. She also shares arrival details of ONDC-backed QR ticketing, hyperpersonalisation, GTFS (General Transit Feed Specification), multimodal mobility, localisation, super-apps and the conspicuous absence of user-consent and control in app permissions.

Where- and with what outcomes- has technology been used in various areas of your business so farspecially in hyperpersonalisation, price forecasting and optimisation, CRM, vendor ecosystem, operations and inventory management?

At CDP Yatri Railways, we use technology to make travel simpler and more commuter-friendly. AI helps us personalise routes, alerts, and offers, while also turning complex railway updates into easy messages. With ONDC (Open Network for Digital Commerce)-backed QR ticketing, commuters get quick, paperless access and smooth multimodal connectivity. Behind the scenes, predictive analytics improve demand forecasting, pricing, and operations—reducing delays and costs. Together, these innovations make Yatri a future-ready mobility platform designed around real commuter needs.

Why is Yatri different from other players - and is technology playing a role in that?

Yatri differentiates itself by putting commuters at the center and using technology as its backbone. With GPS on all trains and GTFS feeds, it offers accurate real-time tracking and smarter journey planning. Through its integration with the ONDC, Yatri enables seamless metro ticket booking within the app and connects commuters with last-mile providers for true end-to-



REEVA SAKARIA

Co-Founder, Yatri

end travel. This unique blend of real-time visibility, digital ticketing, and ONDC-enabled multimodal mobility makes Yatri more transparent, connected, and commuter-centric than any other player.

Is the train and road travel app space different from air travel ones?

Yes, the train and road travel app space is very different from air travel. With flights, people usually plan well in advance, take fewer trips, and deal with a limited number of operators. But on the ground, mobility in India is about millions of short, frequent, everyday journeys where commuters switch between trains, metros, buses, and autos—often multiple times a day. The challenge here is not just ticketing or schedules, but orchestrating scale, speed, and smooth connectivity across different modes. Air travel apps are built around convenience for occasional long trips, while our focus is on making daily travel simpler, more reliable, and stress-free for the average commuter.

How do you underline and deliver localisation in a crowded app market today? A bit on the role of innovation-like the recent hackathon-if you can share? For us, localisation means building around real commuter needs-whether it's local languages, low connectivity, or daily travel patterns—so the app truly feels made for India. The Yatri Hackathon 2025 is a great example: by engaging students to solve real mobility challenges like crowding alerts, smarter journey planning, and improving engagement, we're turning innovation into practical, commuter-first solutions. We're also working on a chat feature to enrich the sense of community among users, making Yatri not just a travel app but a shared space for everyday commuters. That's how we stand out in a crowded market—by keeping technology grounded in local realities and designed for everyday life.

Is it still tough to balance convenience with privacy? Any implications of DPDP and customer's concerns on safety and privacy - on what you do and how you do it? Balancing convenience with privacy is always a fine line, but it's non-negotiable for us. Commuters trust Yatri with sensitive travel data, so we design every feature with privacy by default—collecting only what's essential and being transparent about how it's used. With the new Digital Personal Data Protection (DPDP) Act, the bar has been raised even higher, and rightly so. It pushes us to build stronger consent frameworks, clearer data policies, and more secure systems, without compromising on the seamless experience commuters expect. At the end of the day, safety and privacy aren't trade-offs to conveniencethey're part of the value we deliver.

Where are we today on the old-and-still-unresolved problem of apps asking for too many and irrelevant permissions (and without easy opt-out options)?

That's one of the oldest frustrations in tech—and honestly, commuters are right to be wary. Too many apps still behave like they need a passport to your entire digital life just to sell you a ticket. At Yatri, we've taken the opposite route: ask only what we need, explain why we need it, and give you control to say no. Convenience doesn't have to come at the cost of trust. In fact, in today's world, less data is smarter design—because the more focused we are on what truly matters, the more seamless and secure the experience becomes.

What's your reckoning of the idea of Super-apps?

Super-apps are exciting because they mirror what users want—fewer barriers, more convenience, and seamless journeys. The key, however, is not to do everything under one roof, but to excel at what matters most and integrate the rest through strong partnerships. In mobility, that means being the app commuters trust for smooth, reliable travel—whether it's planning multi-route journeys, booking tickets, or accessing payments and last-mile options. With this focus, Yatri is steadily shaping into a pan-India super app for all things mobility.

Would APIs help the business model of travel apps - or raise concerns on data control, user privacy, profit margins, competitive concerns, customer experience etc.

APIs can both strengthen and challenge the business model of travel apps. For Yatri, they open doors to real-time train tracking, multimodal planning via ONDC, and integrated payments—enhancing customer experience and enabling faster partnerships. At the same time, they raise concerns around data control, user privacy, profit margins, and competitive risks. The balance lies in using APIs to expand customer value while enforcing strong guardrails on security, transparency, and fair economics.

What's next on your tech itinerary- specially as you move towards new formats, regions and transit-modes?

Next on our tech itinerary is smarter journey planning—helping commuters navigate complex multi-route travel with ease. As we expand into more cities, our goal is to turn every trip into a simple, reliable experience, making Yatri the most trusted daily travel companion in India.

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'Je ne sais quoi' is now 'Je ne sais quAl': From metrics to experiences at Genesys Xperience 2025

At Genesys Xperience 2025, CEO Tony Bates showed how agentic AI is shifting businesses from metrics to empathy-driven experiences that build trust.

By Thomas George



s Tony Bates, CEO of Genesys, took the stage at Genesys Xperience 2025, I was reminded of the French phrase je ne sais quoi (literally, "I don't know what"), often used to describe that special, hard-to-define quality that makes something stand out. In today's digital world, that elusive magic is increasingly being shaped by artificial intelligence — or as I thought while listening to Bates, je ne sais quAI: the new 'special something' that emerges when AI combines efficiency with empathy. His keynote was not about automation alone, but about augmentation; not just intelligence, but empathy-driven intelligence. Bates painted a picture of agentic AI as a co-worker, ushering in a new era of digital labour with its own realities, challenges, and opportunities. At its heart lay one promise: using technology breakthroughs to deliver experiences that build lasting customer trust.

Bates transported the audience to a scenario that many of us have faced – and on both sides of the table. As a business, it is trying to gain and maintain

customer trust. And as a customer hoping that trust is never broken or tainted with rough experiences.

He made everyone imagine a car insurance situation. "You have a relationship with your insurance provider. It's a stressful moment. It involves many steps on the journey. It starts with that initial claim. Then you have to submit documentation. There are status updates. Eventually, you get an assessor who conducts an assessment and makes a decision: Do I repair the car? Is it a write-off? What kind of payment? How am I going to get it? How is it going to affect my ongoing 'no claims' moments? Sometimes you have an appeals process. It's a major emotional decision. And if any part of this journey gets stuck or feels slow or there's friction or there's tension, it's not just a delay in that process, it's a breakdown in trust that you as business owners have with your customer."

He twisted the knife exactly where it hurts, underlining a key reality and challenge for many businesses. "Customers don't remember the form they filled out. They don't remember even who they

talked to on the phone. They remember how they felt. That's what they remember. And we all know that if that experience fails in any way along this complex journey, the likelihood of the customer moving away from the provider is very high. That's what's at stake. That's where we are today. That's what the experience economy is about. It's no longer about processing the claim. It's about building trust and fostering loyalty. It's about honouring that contract that you, as business owners, have with your customers."

THE EXPERIENCE CHASE CONTINUES **AND GETS TRICKY**

As he gave this example, Bates slid softly but deeply into an unbreakable truth. The irreversible impact of experiences. He added, "The world is literally changing under our feet as we are walking around, trying to absorb all of these different things coming out. Our job at Genesys is to help you through that and create incredible customer experiences. Now the world isn't just changing in terms of the demands that people are looking for when they want unique customer experiences. We also know that the world is changing at a rapid pace due to technology. AI is completely reshaping the way businesses connect with customers, and the conversation is happening in every single boardroom everywhere. It's about how I'm going to keep up? How am I to deal with the pressures to create the best possible customer experiences for my customers and understand all of this technology that's coming at us?"

"When I talk to CEOs and I go around, what I hear over and over again is they're not looking for just a point solution, but they're looking for strategic partners who can help them transform. This is a major transformation to embark on," he said, and he rewinded the talk to the massive transformation of the internet to cloud computing, going from product to delivering services. "But this is the biggest transformation, this is the one that will literally change what we do and how we interact with employees and customers alike. Customers are now measuring you, not just across your industry, but across every industry. In fact, they're now measuring you across the best experience they may ever have, anywhere, anywhere around the world."

He brought in those three simple things, and he opines that's what the customers are now looking for.

First, they want to solve their problem. Second, they don't want their time wasted. And finally, they want to be treated right; they want to be treated with empathy.

"You have to be emotionally intelligent in the way that you work with them in conversations. If you don't do this, we all know that customers will find a better option and leave. The stakes, hence, have never been higher for all of us. That includes Genesys. We have to continue to make sure we have the right capability and the right systems to create customer lifetime value, create that trust, and create that world."

He moved on to the advent of AI here and how it intertwines with this puzzle of experiences. "We all know that this incredible technology with AI has come along, and it started slow, but it's picked up pace in a way that's almost astounding for all of us. We went from perception to prediction to conversation. And then something really magical happened, with generative AI, we got to a moment where you could start to think about creation - creating some of these incredible experiences that you all want to deliver to your customers."

"We're now at agentic AI. Agentic AI is a significant development for our industry. It moves the way we think about business, from automation, which is primarily focused on efficiency, to really start thinking about the fullest relationship with experience. We've been on a deliberate multi-year evolution of Genesys so that we can help you succeed. We have a mission. This mission has been upgraded, and it's here. It's to orchestrate the world's best AI-powered experiences on the strategic platform for the experience economy."

FROM AUTOMATION TO AUGMENTATION

He then encouraged everyone to think about the next pillar post. AI orchestration. "It's really about having a coordinated system of capabilities, and they're happening all at once, all at the same time. Indeed, it's about automation. There's no question. That's where most organisations start. That definitely helps. Utilising AI to enhance productivity and increase efficiency is an absolute prerequisite. But it's not enough, not by a long way. You also need to think about augmentation. Augmentation is tools and capabilities that elevate an employee, making them better at their job and helping improve customer performance. This is how you can scale that human touch. You empower the people where they're strongest.

Now, what's great with AI is that it can start to understand context, begin to understand emotional tone, and understand your preferences, so it's actually giving you the experiences that you're looking for in your context, in the way that you want happening," Bates drilled deeper into how AI is

Tech & Trends / Event

empowering the experience game. "This is where empathy meets intelligence. We've been discussing the power of empathy as a force multiplier for many years, particularly in terms of personalisation and capabilities – this is where you really start to change the game. Now, last but not least, it's also about optimisation. You have to improve your systems continuously, and you need an AI not just to react." At this point, Bates urged CEOs not to look at these in isolation anymore. "You can't just build an automation tool. They're not isolated features. They're compounding capabilities, each reinforcing the next, each working in harmony."

PRESS THAT BUTTON 5 ON THE ELEVATOR

He mirrored that path to the company's own journey. "That's what we think about at Genesys every day. Our evolution has reflected this journey. We moved from manual to prompts to virtual agents. But now the AI can plan and adapt. It can reason through a situation in real time. This is what people want. I'm shocked at how quickly we've got here. This has evolved at light speed. Genesys is here today at level four, but we need to take it to the next level. That's level five. That's where we start to talk about orchestration, being fully autonomous."

He argued that we would soon see the emergence of virtual personal concierges or AI agents that proactively guide customers and can anticipate their needs. They'll deliver value without any human intervention. These systems will start to learn from the outcomes. They won't wait for the humans to retrain models. "Now I know this is bold. This is where the industry is headed."

THE 'AND' MAGIC

Bates also discussed how the experience economy will evolve and become stronger. "It's going to be much more about return on experience than anything else. You're going to have to get to the power of the 'and'. Of optimising efficiency and creating trust and loyalty, doing it together. The next shift we have to make, and this is a big one, is this concept that we think about at Genesys, moving from tools to teammate."

This is really about redefining the relationship between humans and AI itself, Bates explained. "AI is just a tool that's waiting for instruction, and AI has to become your trusted co-worker, working alongside you, working alongside your teams. AI will take advantage, but then humans are there to step in with the empathy that matters. AI is a teammate

that never sleeps. It never loses context. It's always trying to find the best action and be ready for you. It also helps clear all the noise out of the system. So, you, the humans, and the people on your teams, focus on the judgment complexity, handling genuine customer care, and the real, personalised customer experience that everyone wants.

It means, as Bates elucidated, that we can have human and digital labour side by side. You need to have a unified system. You need to onboard your people and your AI in the same system. You need to plan according to the same schedule, measure, and improve your performance using the same framework.

We hence move from point solutions to platforms, he underlined. "AI-powered outcomes don't come from isolated tools. They come from systems that work together. One system that can automate, augment, personalise, and optimise – in real time." At this point, he indicated how recent collaborations and announcements with players like ServiceNow help.

"Think about what that means. This means we're closing the gaps between Genesys's front-office systems and ServiceNow's back-office systems, enabling us to share context, synchronise workflows, and orchestrate seamless customer experiences across these systems. That's level four orchestration happening right before our very eyes. I'm extremely excited about the work the development teams have been doing and the accomplishments they've made together. It's an amazing breakthrough, and I think it speaks wonders to the capabilities of our platform, but also the recognition of working on some of the most important strategic platforms now."

To wrap up our journey, we've built a transformative ecosystem. "You need to have a platform that scales with you. Last year, we shipped over 500 new features. This is a platform built to evolve, and it's open by definition. It's cloud native. It's architected for the speed and innovation you need."

If delivering experience was that 'hard spot to a finger on' for enterprises, AI orchestration and agentic ecosystem could be keys to guiding that finger to the right spot. As Bates emphasised the value and challenges of 'experience economy meeting AI', he left the audience with a strong feeling that they needed to get ready for this. You need to embrace it. The future is right now, but we need to rethink how we approach it.

(The author was invited to attend Genesys Xperience 2025 in Nashville.)

Hitting 'Reset', Risking 'Reboot' – VMware's **Bold Leap from Complexity to Clarity**

VMware, under Broadcom, is redefining cloud with VCF 9.0—simplifying portfolios, reshaping partner strategy, and positioning as a product-led platform.

By Thomas George

s Broadcom's VMware resets the cloud narrative with VCF 9.0 and a new approach for partners, customers, and infrastructure stacks, a lot is being shuffled and redefined in the world of IT infrastructure. Are new labels like 'services not products' and 'full-stack' fitting it well? Prashanth Shenoy, CMO and Vice President, Marketing, VCF Division at Broadcom, weighs in.

"A product and platform company, not a services company"-that's how Shenoy defines the future. In this conversation with Thomas George, Managing Editor, he explains how VM ware Cloud Foundation is simplifying portfolios and redefining product strategy to reshape private cloud for the enterprise. He also addresses many recent shifts-around partners, developers, greenfield versus existing customers, fullstack infrastructure, competitors, and even marketing noise—in this interesting à deux. Excerpts.

VMware has undergone a significant transformation following Broadcom's acquisition (especially with the simplification of its portfolio and Go-To-Market strategy). From a GTM perspective, where does VMware stand today in its journey?

We've completed the foundation phase. The portfolio and GTM have been simplified, allowing customers and partners to experience VMware through a consistent Cloud Foundation platform, regardless of whether they engage with hyperscalers, resellers, or service providers. We rationalised our partner ecosystem to focus on those who are deeply invested in VMware and can deliver real value—which means fewer, but stronger, partnerships. The next phase involves service delivery partners-GSIs, SIs, and software-focused resellers—who possess the customer intimacy and expertise to drive adoption.

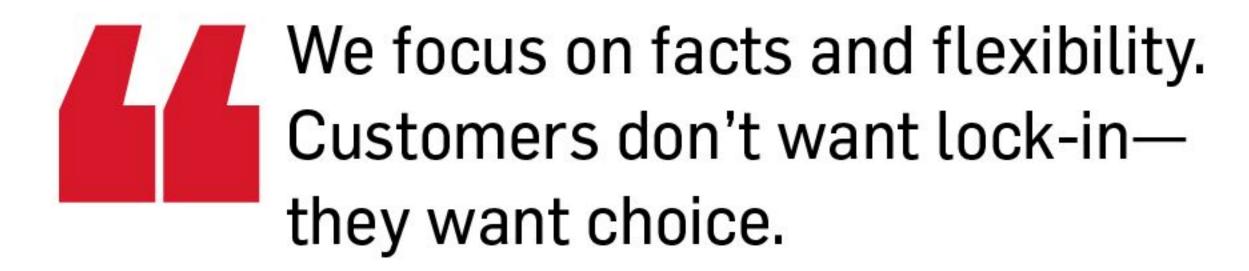
What new tracks are being put in place for these new turns?

To support this, we're investing heavily in training,



PRASHANTH SHENOY CMO and Vice President, Marketing, VCF Division, Broadcom

certification, and re-skilling. The traditional VI admin now needs to evolve into a cloud operator. Our revamped certification tracks encompass architecture, implementation, operations, and advanced domains, including Kubernetes, automation, storage, and networking. This is how we scale customer adoption while staying true to our role as a product and platform company, not a services company.



You spoke about adoption motions. How are customers engaging with VMware Cloud Foundation today?

We identify three main adoption segments. The first is Greenfield Deployments, where enterprises build new data centres and set up VCF as their private cloud platform from day one. The second is where component consolidation is taking place, for customers who already use vSphere, vSAN, or NSX and want to transition into a complete private cloud operating model. Lastly, there is the upgrade motion, where existing VCF customers modernise from older versions (like VCF 5) to VCF 9.

In all cases, our approach is to start with VCF Operations. By automating lifecycle management—patching, upgrades, certificate management, and security checks—we remove the mundane yet risky tasks that teams dread. It improves IT productivity and builds confidence in the platform. From there, customers often consolidate storage or migrate workloads onto software-defined infrastructure, delivering immediate cost savings. For example, Broadcom itself consolidated 26 divisions on VSAN and achieved a 70% cost reduction within eight months.

The next step is enabling developers. With self-service access to Kubernetes, databases, and registries—on demand and under IT guardrails—VCF mirrors the cloud experience while maintaining control. And now, with Private AI built into VCF, AI becomes just another workload the enterprise can run securely and efficiently.

VMware has narrowed its partner landscape to focus on high-value, skilled partners. How do you balance this rationalisation with long-standing, smaller partners who have been part of the ecosystem?

We took a data-driven approach. First, we examined the percentage of a partner's revenue that comes from VMware—do they genuinely have a vested interest in us? Second, how much of VMware's revenue flows through them? That analysis helped us consolidate to about 1,000 strategic resellers who now drive 90% of our business.

On the services side, we selected partners with deep VMware expertise and broader IT integration skills. Large GSIs, such as HCL or Wipro, for instance, often have a deeper understanding of customer environments than we do, and that's critical when deploying a complex cloud platform. It's not a one-time process. We continue to evaluate partners regionally—Japan differs from India, which in turn differs from Korea. The idea is fewer, stronger, and more skilled partners who are equally invested in customer success.

With a simplified and consolidated portfolio, who do you consider VMware's closest competitors, and how do you differentiate?

We are a full-stack infrastructure platform, so our competitors are other infrastructure providers. However, what makes us unique is our flexibility. VCF can be deployed on-premises, in co-location, at the edge, or as a managed service with CSPs and hyperscale providers. For many competitors, cloud infrastructure is just one of several offerings in a broad portfolio. For us, it begins and ends with VCF. That clarity allows us to double down on innovation, deliver faster, and maintain higher product quality.

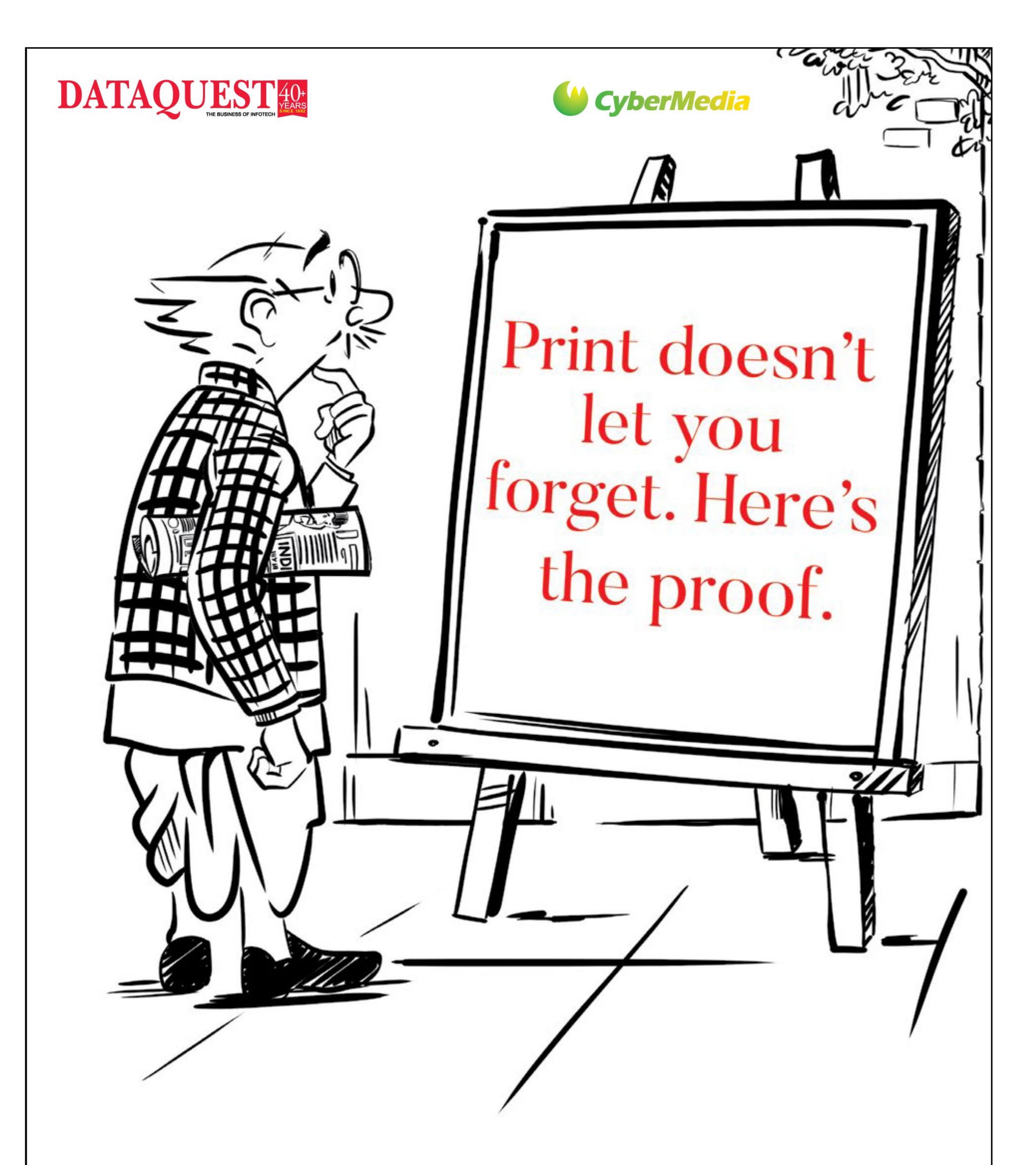
What is your marketing strategy under Broadcom's "reset cloud narrative"?

We are very product-led in our marketing. You won't see us spending on billboards or airport branding. Our priority is to articulate product value, use cases, and business outcomes. Marketing here is about customer insights, enablement, and advocacy. We invest in educating customers, partners, and sellers. We create champions who experience the product and become advocates in their communities. The product becomes the marketing engine.

Your competitors often use aggressive campaigns during transition periods. How do you counter this?

We focus on facts and flexibility. Customers don't want lock-in—they want choice. VCF gives them workload portability through tools like HCX. If a workload needs to sit closer to Google Gemini or Azure OpenAI, it can. But for most workloads, from a cost, resiliency, and security perspective, running on VCF is the more intelligent choice. So our approach is simple: may the best platform win. We let TCO analysis, operational outcomes, and customer experience speak louder than marketing noise.

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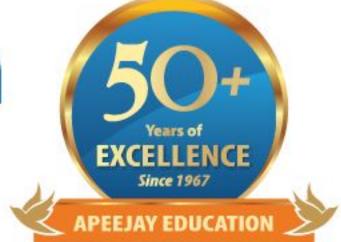


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