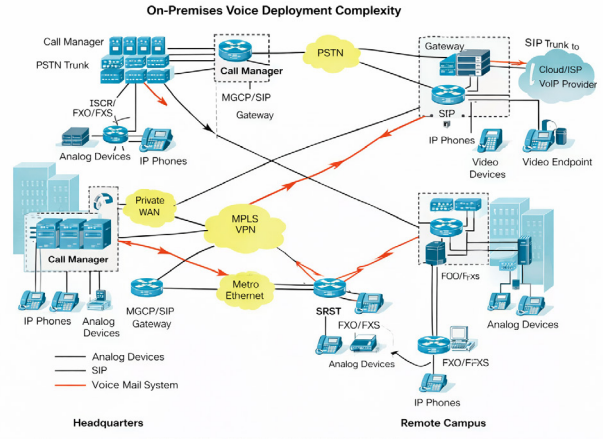
VIEW POINT

VERTICAL AI FOR COMMUNICATION PLATFORMS AND COLLABORATION SERVICES - THE NEXT FRONTIER IN ENTERPRISE PRODUCTIVITY

Infosys
Navigate your next

The Convergence of Collaboration - From Complexity to Unified Platforms

Less than a decade ago, enterprise communication environments were highly fragmented. Organizations relied on multiple on-premise systems for voice, video, messaging, content sharing, etc. —each with its own infrastructure, integration challenges, and operational overhead. This led to high capital expenditure, complex maintenance cycles and a disjointed user experience. IT teams spent significant effort simply keeping these systems operational rather than innovating or improving user outcomes.



The rapid adoption of cloud computing fundamentally changed this landscape. Enterprises moved away from on-premise deployments to unified, cloud-based collaboration platforms delivered as Software-as-a-Service (SaaS). These platforms consolidated chat, meetings, calling, events, and collaboration into a single experience, accessible from anywhere and scalable on demand. The result was simplified architecture, reduced cost of ownership, faster rollout of new capabilities, and consistent user experiences for an increasingly distributed workforce.

However, while cloud convergence simplified collaboration, the next major transformation lies not in where these platforms run but in how intelligent they are.

The Rise of Vertical AI

Artificial Intelligence is now embedded across most collaboration platforms, but the true leap in value comes from Vertical AI. Unlike general purpose AI models, Vertical AI is deeply trained on the specific workflows, data patterns, and operational realities of enterprise collaboration services. It understands the nuances of voice, video, messaging, platform development, support operations, and service delivery.

This domain-specific intelligence elevates collaboration platforms from functional communication tools into strategic enterprise assets. Vertical AI enables platforms to proactively optimize operations, assist engineers and support teams in real time, and automate complex workflows with higher accuracy and contextual awareness.

Vertical AI in Action - Enhancing the Collaborative Experience

Vertical AI is already reshaping how collaboration platforms are built, operated, and consumed across enterprises.

- **Accelerated platform development:** AI-driven architecture and development assistants streamline solution design, recommend optimal integration patterns, and automate code generation. Tasks that once required extensive manual coordination such as provisioning voice users, validating role based access, or ensuring regression stability, can now be orchestrated by intelligent assistants. This significantly reduces development cycles, improves consistency, and accelerates time-to-value for new features and services.
- **Intelligent and autonomous testing:** Traditional voice and video quality testing relied on complex lab setups and manual measurement. Vertical AI introduces autonomous voice agents that can generate test calls, capture quality metrics, detect anomalies, and produce realtime reports on a scale. This enables continuous validation without dedicated environments and improves overall service quality through proactive detection.
- **Predictive and self-healing support operations:** AI-enabled observability platforms continuously monitor voice and video services across regions and environments. By correlating telemetry, logs, and events, Vertical AI can predict outages, identify root causes, recommend corrective actions, and even perform autoremediation for recurring issues. This transition from reactive troubleshooting to predictive assurance significantly reduces mean time to resolution and improves platform reliability.
- **AI-powered knowledge and support assistants:** Embedded copilots assist support engineers by interpreting multi-system telemetry, summarizing logs, and generating actionable insights during live incidents. These assistants can produce root cause analyses, recommend configuration changes, and automatically generate documentation required for change and incident management, dramatically improving support efficiency and consistency.
- **Smarter program management and governance:** In large-scale collaboration platform deployments, AI automates operational governance tasks such as status Quality of Service (QoS) monitoring (latency, jitter, etc.), reporting, risk forecasting, dependency mapping, and resource optimization. Functions that traditionally required highly experienced personnel become datadriven and repeatable, leading to predictable delivery outcomes and stronger control across the collaboration service lifecycle.

- **Unified collaboration and workflow orchestration:** Vertical AI integrates seamlessly across collaboration ecosystems such as Microsoft Teams, Webex, and Google. It orchestrates cross platform workflows, ranging from device refresh programs to project artifact management, ensuring standardized execution and consistent engagement across distributed engineering and operations teams.

Collectively, these capabilities represent a new generation of collaborative intelligence—moving beyond task automation toward continuous, contextual assistance embedded directly into enterprise workflows.

The Broader Horizon - Integrating Collaboration, Broadcasting, and the Digital Future

As collaboration platforms mature, they are evolving into a central enterprise communication fabric rather than standalone applications. The next phase includes deeper integration with technologies such as digital signage and enterprise broadcasting systems, enabling true omnichannel communication across physical and digital workplaces.

For example, instead of static content looping on digital displays, enterprises can leverage realtime, AI-driven broadcasting. Important announcements, product launches, live town halls, or operational alerts can be instantly pushed across meeting platforms, mobile devices, and physical displays, ensuring consistent and timely communication. In critical situations, systems can automatically trigger enterprise-wide broadcasts, bridging the gap between remote and onsite employees.

This convergence of collaboration, broadcasting, and physical touch points not only creates a more connected and responsive organization but also introduces new complexity.

The Need for New Skills

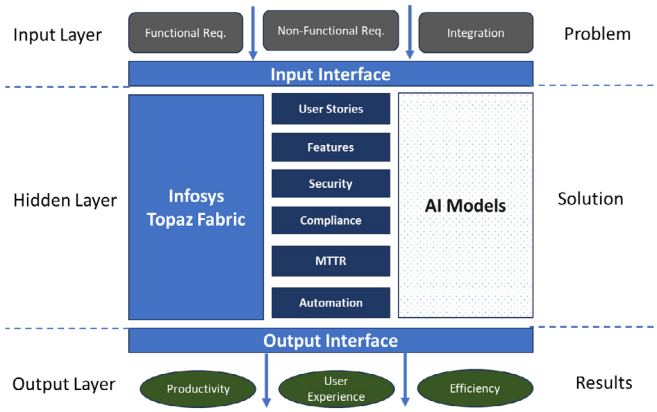
The expansion of AIdriven collaboration ecosystems demands a fundamental shift in workforce capabilities.

- **AI and Data Fluency:** Collaboration platforms generate massive volumes of usage, quality, and operational data. Teams must be capable of interpreting insights, optimizing workflows, and making data driven decisions rather than reacting only when issues arise.
- **Security and Compliance Expertise:** As voice and video services integrate with broader ecosystems, ensuring data privacy, regulatory compliance, and secure identity management becomes critical. Skills around governance, policy enforcement, and risk management are essential.
- **Content and Experience Design:** Continuous collaboration platform feature releases and evolving user expectations require teams beyond marketing to design effective, multichannel collaboration experiences. Clear, optimized communication becomes a shared responsibility across service owners and engineering teams.
- **Mastery of Cost-Effective Tools:** With an abundance of low cost automation and AI tools available, teams must be adept at selecting and deploying collaboration solutions that drive innovation without inflating operational costs.

Enabling Responsible AI at Scale

At Infosys, the end-to-end lifecycle of Unified Communications and Collaboration platforms from development and operations to consulting and support, will be powered by Infosys Topaz Fabric. This framework ensures responsible AI adoption, strong governance, and enterprise grade security across all collaboration services, enabling customers to innovate with confidence.

Infosys Vertical AI for UCC Services Framework



Conclusion

The future of collaboration services is defined by intelligent, seamless communication across voice, video, and messaging channels. Vertical AI is the catalyst that transforms collaboration platforms into proactive, resilient, and user-centric systems, capable of accelerating innovation, reducing operational costs, and enhancing employee productivity.

As AI becomes foundational to how organizations work and communicate, success will depend not only on technology adoption but also on strategic upskilling and governance. Together, Vertical AI and a future-ready workforce will transform collaboration from a set of tools into an intelligent enterprise fabric that reshapes productivity and engagement.

About the Author

Vrijlal Sukumaran
Sr. Technology Architect, Infosys

Vrijal is a seasoned Senior Technology Architect with over 20+ years of extensive experience in the Telecom and Unified Communications (UC) landscape. His expertise lies in the end-to-end lifecycle of unified collaboration services, encompassing strategic consulting, complex solution design, and successful managed service delivery. Vrijlal possesses deep technical proficiency across leading platforms, including Microsoft Teams, Cisco Webex, and Google Workspace. He is dedicated to architecting robust and scalable communication solutions that drive organizational efficiency and modern collaboration.

For more information, contact askus@infosys.com

Infosys®
Navigate your next