

F5 regional CXO roundtable series

Dallas edition

Architecting the AI-enabled enterprise



Key takeaways | May 29, 2025



Lessons from the Dallas CXO roundtable

An actionable path for scaling AI for business outcomes

Executive summary

AI is no longer a future ambition—it is fast becoming a core enterprise capability. As organizations move from pilots to platform thinking, the focus has shifted from experimentation to responsible, scalable execution. Recognizing this shift, F5 hosted an exclusive CXO roundtable in Dallas titled “Architecting the AI-enabled enterprise,” bringing together 16 senior technology and business leaders from financial services, healthcare, manufacturing, and technology.

The discussion reflected a market evolving at a fast pace: AI agents are moving into production, developer productivity is accelerating, and internal platforms are enabling broader adoption across functions. Leaders emphasized that success lies not in chasing the newest models, but in building the right foundation—governed data, modular architecture, empowered teams, and measurable business impact.

Five strategic pillars emerged to guide enterprises in scaling AI from isolated use cases to organization-wide transformation:

- **Strategic imperatives:** Align AI to enterprise goals and dual-track value creation—efficiency and growth.
- **Critical challenges:** Address fragmentation in data, governance, and talent readiness.
- **Implementation approach:** Build secure, scalable systems designed for modular growth.
- **Success metrics:** Track outcomes across productivity, experience, and innovation.
- **Next steps:** Institutionalize governance, invest in skills, and reinvest early gains to sustain momentum.

1. Strategic imperatives for AI adoption

Scaling AI starts with clarity. Leaders identified six imperatives to move from pilots to production.

1.1 The dual mandate: productivity and growth

Insight: AI adoption is maturing along two axes—operational productivity and future growth. While current investments prioritize automation, leaders are simultaneously positioning AI as a catalyst for new revenue streams and product experiences.

Recommendation: Define the AI North Star that balances immediate value with long-term strategic bets.

Actions

- Fund dual tracks: productivity-enhancing tools and innovation prototypes.
- Align AI metrics to both efficiency (e.g., MTTR, turnaround time) and growth (e.g., CX uplift, time-to-market).
- Reevaluate the AI portfolio annually to align with impact outcomes.

1.2 Foster cross-functional AI ownership across IT and business

Insight: AI success requires cross-functional accountability. Leading organizations embed AI delivery across IT, data, and business lines to create shared ownership and eliminate friction.

Recommendation: Formalize co-ownership models that integrate AI into both IT and line-of-business planning.

Actions

- Appoint AI leads across business functions and central IT.
- Launch joint steering councils with shared KPIs.
- Synchronize AI architecture planning with digital transformation roadmaps.

1.3 Elevate data fidelity as the AI foundation

Insight: Clean, structured, and enriched data is critical for scalable AI, yet many organizations struggle with legacy systems and fragmented repositories.

Recommendation: Treat data like a strategic, version-controlled asset — with strong focus on metadata, standardized definitions, and governance to ensure consistency and trust.

Actions

- Launch AI-specific data cleanup projects (e.g., wiki pruning, telemetry consolidation).
- Invest in scalable data pipelines and modern governance frameworks.
- Align data readiness with regulatory and cloud architecture requirements.

1.4 Build AI confidence through employee enablement

Insight: Organizations that start their AI journey by enabling their internal workforce with context-aware copilots and automation agents achieve faster time to value and greater cultural acceptance. These internal successes become the blueprint for scaling AI enterprise-wide.

Recommendation: Use internal productivity as a proving ground for AI capabilities, and scale through champions, tool familiarity, and clear KPIs.

Actions

- Launch AI agents for high-frequency internal workflows (e.g., dev support, document triage).
- Build feedback loops to improve adoption and refine use cases.
- Track usage and reinvest savings to fund the next wave of use cases.

1.5 Scale AI via modular platforms

Insight: Organizations with centralized AI platforms or LLM sandboxes enable faster, federated adoption across business units.

Recommendation: Balance centralized AI capabilities with team-specific innovation to drive scalability.

Actions

- Democratize access to foundational models through internal AI-as-a-service platforms.
- Encourage experimentation in sanctioned “AI sandboxes” with pre-integrated tools.
- Train developer communities to build tailored AI agents.

1.6 Industrialize AI development with rigor and repeatability

Insight: Scaling AI in the enterprise requires consistency, reliability, and auditability across the AI lifecycle. Custom-built approaches may yield short-term wins, but they introduce complexity and risk when scaled. For mission-critical functions, standardized development, deployment, and monitoring are essential to ensure trust, governance, and repeatable outcomes.

Recommendation: Move towards enterprise-grade, governed AI development practices with built-in repeatability and compliance.

Actions

- Standardize model training and deployment through repeatable pipelines.
- Implement telemetry and governance checkpoints across the AI lifecycle.
- Ensure version control, auditability, and security at each step of development.

2. Critical challenges

Execution isn't easy. As AI scales, organizations run into real barriers—technical, cultural, and structural.

2.1 Enterprise-wide AI literacy is uneven

Mitigation: Build contextual, role-specific AI training for both tech and business users.

Action: Launch enablement tied to real tasks; focus on adoption, not just awareness.

2.2 Lack of consistent value measurement across AI initiatives

Mitigation: Move beyond efficiency metrics to track impact on innovation, CX, and time-to-market.

Action: Introduce dual-layer KPIs across productivity and business value.

2.3 Internal data remain fragmented, outdated, or poorly tagged

Mitigation: Treat data as a living asset with structured version control and context layering.

Action: Prioritize cleanup of wikis, logs, and telemetry; establish retraining triggers.

2.4 Shadow AI use is rising among developers and business units

Mitigation: Provide safe, compliant alternatives with built-in observability and approval pathways.

Action: Centralize tooling strategy and pair it with lightweight governance policies.

2.5 AI tooling proliferation and disconnected pilots slow enterprise scale

Mitigation: Converge on internal AI platforms that balance centralized oversight with federated experimentation.

Action: Invest in modular AI-as-a-service platforms and common orchestration layers.

3. Implementation plan: scalable AI architecture

Overcoming these barriers requires the right foundation. A scalable AI architecture is essential for progress.

3.1 Design principles

- **Modularity:** Use agentic and composable systems to scale AI use cases.
- **Interoperability:** Connect seamlessly with legacy and modern environments.
- **Security:** Integrate compliance, hallucination prevention, and policy guardrails.
- **Observability:** Ensure real-time monitoring and usage tracking.

3.2 Core Stack Components

- **Data layer:** Structured, governed, and metadata-tagged content pipelines.
- **AI Layer:** Internal copilots, domain-specific models, agentic frameworks.
- **Governance Layer:** Audit trails, policy compliance, model risk management.
- **Integration Layer:** API-first architecture to support hybrid deployments.

4. Success metrics

To ensure AI delivers value, leaders are aligning on outcome-driven success metrics—not just activity.

- **Productivity impact:** Gains from internal copilots and support agents reflected in faster turnaround times and reduced manual effort.
- **Operational efficiency:** Significant reduction in response times and service cycle times; AI-enabled workflows resolved issues previously handled over multiple days.
- **Scalability of AI initiatives:** Growth in AI usage across functions, indicating momentum beyond pilots and into enterprise workflows.
- **Strategic value creation:** Shift in ROI thinking—from justification to impact on customer experience, innovation, and time-to-market.
- **Governance and compliance:** Increased focus on AI usage visibility, reduction of shadow tools, and embedding oversight mechanisms into AI deployment environments

5. Next steps

With a clear vision, the group outlined next steps to embed AI across the enterprise.

- **Define the AI North Star:** Establish a long-term vision for AI that aligns with business differentiation, innovation, and strategic growth.
- **Codify playbooks:** Capture success patterns, failure modes, and scaling strategies from internal pilots to build institutional knowledge.
- **Drive intelligent adoption:** Pair enablement with recognition and lightweight governance to accelerate grassroots usage.
- **Prioritize integration:** Evolve from standalone tools to connected, workflow-native AI experiences.
- **Evolve architecture:** Invest in agent orchestration, reusable components, and secure API frameworks to drive scale.
- **Measure what matters:** Embed KPIs at the use-case level, monitor adoption, and calibrate licenses and investments based on business value delivered.

The Dallas roundtable made one thing clear: AI is no longer about chasing the next model—it's about building the enterprise fabric for intelligent operations. From pilots to platforms, from promise to production, the shift is on. For CXOs, this means architecting AI not as an innovation layer, but as a core infrastructure that empowers scale, trust, and strategic reinvention.