# Accionlabs



# Accion Labs Innovation Summit 2025

#### THEMES

Overview of themes and topics covered in the summit



The 11th Accion Labs Innovation Summit was held in Goa from the 13th through the 15th of March 2025 at the scenic venue of the Grand Hyatt Hotel. This year, we had over 275 attendees from across all the global locations of Accion Labs as well as representatives from over 50 different client and partner organizations.



<u>Ramesh Narasimhan</u>, Chief Delivery Officer, Accion Labs opened the summit with a welcome speech followed by an insightful presentation by Chief Executive Officer <u>Kinesh Doshi</u> providing an overview of the various innovations done through the year by partnership between Accion Labs and their clients.

Frederik Härén, renowned author and speaker provided a thought provoking keynote speech on creativity and its increased importance with the emergence of AI.

#### **The Semantic Engineer**

Re-inventing the role of the software engineer in the age of agentic AI

#### The Rise of Intelligent Agents

Al Agents evolve to create new paradigm of technology solutions

#### Securing our Al Driven Future

Leveraging technologies like Blockchain and Quantum Computing

#### Enterprise Platforms and Agentic Al

Agents drive Transformation of Enterprise Platforms

# Business Transformation & AI First Data Strategy

Data Strategy, ROI and Data Mesh Frameworks

#### Al Driven Software Development Lifecycle

Introducing Breeze.Al for high productivity software engineering



<u>Ashutosh Bijoor</u>, Chief Technology Officer, Accion Labs opened the main sessions with a presentation that examined the role of the software engineer that is being challenged by the emergence of generative AI and large language models.

For decades, software engineers have been the crucial connectors between technology, businesses, and end users. They have translated technology capabilities into solutions that deliver value. But that traditional role is now facing a serious shake-up.



Generative AI and Large Language Models (LLMs) now create direct pathways between tech and consumers.

If that wasn't challenging enough, we're now seeing autonomous AI agents that don't just respond to commands but actively work toward goals, learn from experience, and collaborate with other agents.

These systems don't need constant human direction – they adapt to changing conditions on their own.

	Web Era 1990s - early 2000s	Mobile & Cloud 2000s - early 2010s	Platform Economies 2010s - early 2020s	Early Al 2020s - 2023	Agentic Al 2024 - 2030
Digital Technologies	Static Information HTML, CSS, JS; document-based web	Interactive Applications APIs, web services, responsive interfaces	Intelligent Systems Big data analytics, recommendation engines, open-source ML	AI / ML / NLP / GenAI NLP interfaces, content & code generation, multimodal understanding	Autonomous Agents Multi-agent orchestration, reasoning systems, self-improvement
Enterprise Ecosystems	Digital Publishing Content focused websites, digital brochures, information repositories	Digital Channels Omnichannel experiences, integrated customer journeys	Platform Businesses API ecosystems, data marketplaces, digital partnerships	Predictive Enterprises Al-driven workflows, automated decision systems	Autonomous Organizations Self-optimizing value chains, emergent strategies
Consumer Adoption	Content Readers Passive information consumers, limited interaction	Digital Consumers Intuitive mobile-first customers	Always-Connected Users Digitally dependent, seamless interactions	Al Enhanced Users Personalized experiences, voice assistants	Task Delegators Proactive systems anticipating needs without explicit commands
Software Engineers	Monolithic Systems Waterfall process, manual coding, limited reuse	Component-Based Systems Agile methods, service-oriented architectures	Distributed Architectures DevOps, microservices, automated pipelines	Al-Augmented Systems MLOps, model-driven engineering, intelligent testing	Semantic Engineering Intent-to-code, ontology-driven development
Substance Complexity (feature count)	Low Few features, simple relationships, limited scope	<b>Medium</b> More features & interactions, broader scope	High Many features, complex relationships, extensive scope	Very High Vast feature sets, intricate interdependencies	Extreme Unbounded features, emergent capabilities
Dynamic Complexity (rate of change)	Minimal Static behavior, predictable patterns	Low Limited variability, controlled change	Medium Significant variability, regular adaptation	High Rapid evolution, contextual responses	Very High Continuous transformation, unexpected adaptations

Software engineers have evolved processes and architectural models to address increasing complexities:



## From Software Engineers to Semantic Engineers



Rather than just adapting their skills, software engineers need to completely reimagine their role.

The future belongs to what can be referred to as "semantic engineers" - professionals who work at a higher level to orchestrate, govern, and innovate within AI and agent ecosystems.

Software engineers will become custodians of converting ideas into agentic solutions, by creatively translating increasingly complex real world problems into agentic solutions that dynamically respond to changing requirements

These new capabilities will allow semantic engineers to transform enterprise ecosystems:

### For companies that use technology:

- Break down application silos to support interconnected agent ecosystems
- Redesign processes for human-agent collaboration rather than just human execution
- Expand beyond application security to comprehensive AI ethics oversight
- Shift investments from applications toward data quality and agent orchestration

## For technology providers:

- Move from feature development to agent capability development
- Transform platforms to support agent customization rather than just configuration
- Pivot from implementation services to orchestration guidance
- Base your competitive advantage on agent ecosystem effectiveness, not feature lists

The summit themes in the following sections illustrate how these transformations of both engineers and enterprises are already taking shape across different domains and technologies.



# Themes and Topics

The various themes and topics presented during the two days of the summit covered this transformation of digital technologies, enterprise ecosystems and software engineering from various perspectives.

The Rise of Intelligent Agents: From Business Rules to Business Reasoning		Jaywant Deshpande
	Reinventing Legacy Modernization with Al	Shrijeet Polke, Aditya Kaole
	Agentification of Software Products	Bharadwaj Satbhai, Sujit Jagtap
	Will AI Agents Replace all Software?	Panel Discussion (Reema Poddar)

Emerging Technologies and Innovations: New technologies and solutions that extend the boundaries of innovation		
	Blockchain and Multi Agent Ecosystems	Sandro Tarchini, Shahid Shaikh
	Quantum Computing in Practice – impact on algorithms and security	Bhushan Bonde
	From Crash Tests to Smart Devices – Human Centric Safety Methodologies	Pradeep Mohan
	Cognitive Therapeutics Innovation – Transforming Brain Health	Bill Wade

The Enterprise Platforms' Agentic AI Revolution Navigating the Opportunities & Risks		Nitin Agarwal, Shikhar Singh
	Platform Agents v/s DIY Agents	Tarun Agarwal, Pranav Mehta, Sanket Shah
	Transforming Customer Support with AI & Low Code Platforms	Jeff Piper, Rajeev Kumar, Jignesh Upadhyay
	The Emergence of Enterprise Agentic Platforms	Panel Discussion (Rajeev Kumar)

Al First Data Transformation – Enterprise Strategies A Strategic Roadmap for Enterprise Transformation		Mandar Garge
	Measuring and Maximizing the ROI of Data Products	Andrew Psaltis
	Thinking Data Domains – Designing Data Mesh Strategies	Mukesh Gawhade
	AI Powered Financial Analytics Modernization	Dwaipayan Chowdhury, Sandeep Narayanan
	Optimizing Business Strategies & AI Adoption	Panel Discussion (Mandar Garge)

Reinventing SDLC for the AI Age When Code meets Cognition		Nischal Doshi
	The Impact of AI on SDLC Productivity	Mahalakshmi Raman
	Architecture & Design as Code (ADaC) - laying the foundations of AI-driven SDLC	Bikramjeet Nath, Anirudha Gohokar
	Security in the AI Era – Enterprise Challenges and SDLC Adaptations	Ashish Gupta, Mahesh Ghule
	Breaking the Silos – the future of integrated development in an AI-first world	Panel Discussion (Sameer Kanwar)



Jaywant Deshpande presented a comprehensive view of the evolution from GenAI and RAG systems to full Agentic AI. AI agents are transforming business rules into business reasoning, illustrating the shift from software engineers as coders to orchestrators of intelligent systems. The engineer's value shifts from implementation to effective orchestration of agent ecosystems.



#### Types of Agents:

- Autonomous Agents: Goal-driven systems with strong reasoning capabilities
- Collaboration Agents: Systems that review outputs and orchestrate communication
- Task Agents: Focused systems that understand context and execute specific actions

"Twenty years ago, all of this was science fiction. Ten years ago, it was a dream. Today, we are living it" Deshpande quoted from Jensen Huang, highlighting the rapid acceleration of these capabilities.

### Reinventing Legacy Modernization with AI

Shrijeet Polke and Aditya Kaole showed a fascinating case study of legacy modernization, where they migrated a credit card management module from COBOL to Java+Spring Boot using AI agents for analysis, transformation, and verification.



Rather than manually rewriting code, engineers define the target architecture and orchestrate transformation agents. Their case study demonstrated a legacy credit card management module migration from COBOL to Java+Spring Boot, showing how engineers focused on defining the transformation patterns while AI handled the implementation details.



# "Agentification" of Software Products

Bharadwaj Satbhai and Sujit Jagtap presented something they called "agentification" - converting traditional software products into agent-driven platforms. Organizations that have adopted this approach have seen 60% faster time-to-value and 80% reduction in alert fatigue.

Traditional Product Architecture	User Interface	Business Logic	Data / Analytics	Workflow	Integration / APIs
Agentic Al Layer	Conversational Assistive Agents	Adaptive Onboarding Agents	Intelligent Insights Agents	Autonomous Cognitive Agents	Process Orchestration Agents
Primary Role	Real-time guidance and interactive assistance for complex processes	Auto-configure product based on customer needs and business rules	Generate insights through natural language queries without rigid dashboards	Smart alert management with context-aware prioritization	Seamless cross-system integration and automated workflows
Example	Guided purchase order creation in SCM through conversational assistance	Auto-configurati on of vendor management and compliance workflows	Answer queries like "Explain logistics cost increase last quarter"	Detect supply disruptions and trigger alternative sourcing automatically	Integrate orders, inventory, and finance workflows without manual effort
Problem Solved	Steep learning curves	Error-prone configurations	Rigid reporting	Alert fatigue	Fragmented integrations

They demonstrated how organizations can experience up to 60% faster time-to-value and 80% reduction in alert fatigue through this approach. The engineer's role evolves to designing the agent ecosystem rather than implementing specific features.

### Panel Discussion: Will AI Agents Replace All Software?

The panel discussion led by Reema Poddar explored the provocative question: "Will Al Agents Replace all Software?" The consensus was that while agents will transform software development and delivery, human orchestration and governance will remain essential though in fundamentally different ways than today.





In an insightful presentation, Sandro Tarchini and Shahid Shaikh explained how blockchain technology is becoming essential infrastructure for multi-agent systems. Blockchain solves critical problems in agent collaboration like identity verification, credential validation, and accountable decision recording.

Multi Agent System	Problem Area	Blockchain Solution	Solution Approach
Identification	How can an agent prove its identity?	Decentralized Identifiers (DID)	Secure, verifiable, and trustless identity management
Credentials	How can an agent prove its capabilities?	Verifiable Credentials (VC)	Immutable, verifiable records of skills and permissions
Discovery	How can an agent find other agents?	Decentralized Registry	Secure, verifiable directory of agents
Accountability	How can an agent be held accountable?	Decision Logging	Tamper proof record of agent decisions and actions
Monetization	How can agents be monetized?	Smart Contracts	Agent SLAs, proof of utility, subscription models, automatic swaps between competitive agents
Transactions	How can agents transact with each other?	Crypto Currencies	Self-custodial wallets, permissionless interactions, programmable memory

## Quantum Computing - implications for Security and Scalability

Bhushan Bonde presented on quantum computing's impact on algorithms and security, emphasizing how quantum technologies will both challenge and enhance our security models for agent systems.

His three-phase enterprise quantum roadmap provided concrete steps for organizations to prepare for quantum-safe cryptography an essential safeguard for future agent ecosystems







One of the most compelling real-world examples came from <u>Nitin Agarwal</u> and Shikhar Singh, who shared how Choice Financial Group grew from 70,000 to 4 million customers in just three years by adopting agentic AI.

They proposed an Agentic Al Adoption Framework that helped the bank reorganize itself around agent domains rather than traditional departments

"Our fundamental approach hasn't changed," noted Shikhar Singh. "We still focus on sound architecture, risk-based approaches, business value, and customer centricity. What's changed is how we implement these principles — through agent orchestration rather than application development."

#### Agentic AI Adoption Framework

Al Experience	USER EXPERIENCE & INTERACTION Microsoft Teams, Copilot Agents, Salesforce Agents, Slack, Virtual Agents
Al Gateway	SECURITY & STANDARDIZATION Secure AI Access, API Management, Routing, Load Balancing, Access Monitoring
Al Agent Hub	ORCHESTRATION Multi-agent Collaboration, Workflow Automation, Agent Registry, Agent Monitoring
Al Services	API SERVICES & INTEGRATION AI APIs, LLMs, RAG Systems, ML Models, Model Deployment & MLOps
Al Data & Knowledge	DATA & KNOWLEDGE Enterprise Data Lake / Mesh, Knowledge Graphs, Vector Databases, Al Search
Al Security & Compliance	RISK, COMPLIANCE & ETHICS Policy Enforcement, Auditing, Risk Assessment, Monitoring & Reporting

Their presentation revealed how the enterprise itself had to transform alongside its technology strategy.

For Choice Bank, this wasn't just a technology shift but an organizational transformation:

- Resources were distributed across the US and India with agent coordination
- Technical enablers moved beyond traditional cloud and data approaches to include agentic AI as a core capability
- The bank's competitive advantage shifted from feature richness to orchestration effectiveness

#### Platform Based Agents or DIY Agents - a Decision Framework

Tarun Agarwal, Pranav Mehta,

and Sanket Shah offered practical guidance with their decision framework for choosing between platform solutions and DIY approaches to agentic AI.

Their research found that 72% of enterprises are taking a platform-first approach - a significant shift in how organizations are thinking about technology strategy.



Strategic importance of Control

# Transforming Customer Service with AI and Low Code / No Code Platforms

Jeff Piper, Rajeev Kumar, and Jignesh Upadhyay demonstrated how customer service is being transformed from a cost center to a strategic asset through agent-mediated experiences. As they quoted from Fei-Fei Li, "The future of artificial intelligence is not about man versus machine, but rather man with machine."



Their presentation revealed how service-focused enterprises must transform:

- Service organizations structured around channels (phone, email, chat) must reorganize around customer journey stages
- Training programs focused on product knowledge must evolve to emphasize human-agent collaboration skills
- Performance metrics based on resolution time must shift to experience quality and value creation

#### Panel Discussion: Platform Agentic AI Revolution - Navigating the Opportunities and Risks

The panel discussion led by Rajeev Kumar examined the emergence of enterprise agentic platforms, exploring how these will reshape competitive dynamics by enabling more personalized, adaptive experiences.

The panel emphasized that successful enterprise transformation requires alignment of technology strategy, organizational design, and business model innovation.





# Driving Business Transformation with AI-First Data Strategies

Al is fundamentally changing data strategies, highlighting how enterprises must transform their approach to data as an organizational asset in the agentic Al era. Mandar Garge presented the five pillars of data transformation: Model, Quality, Process, Integration, and Analytics. He demonstrated how aligning data strategy with business domains creates a foundation for Al-driven innovation.



"Data strategy isn't just about analytics and warehouses - it's the semantic foundation that enables both autonomous agents and enterprises to innovate across and within business domains."



# Data ROI: Measuring and Maximizing ROI of Data Products

Andrew Psaltis provided a framework for measuring data ROI across financial, operational, and risk categories. "Data is an asset - but only if measured and used effectively," he stated, emphasizing that unmeasured data investments become expensive liabilities. This perspective requires enterprises to implement new ROI tracking processes that connect data investments directly to business outcomes.



This framework creates a virtuous cycle of continuous improvement, ensuring data products deliver measurable ROI.

### Thinking Data Domains - Designing Data Mesh Strategies



His examples included how data mesh adoption affects organizational structure, incentive models, and investment patterns. For technology providers, he highlighted the need to evolve from selling data platforms to enabling domain-oriented data products.



# Al Powered Financial Analytics Modernization

Dwaipayan Chowdhury, Sandeep Narayanan and Anupama A. demonstrated with an example, how they addressed the challenges that most enterprises face in ML implementation by using a combination of:

- Pre-canned models tested in various scenarios
- ML Ops Blueprint that dynamically deploys models
- Gen Al driven ETL pipelines



The results demonstrated how their solution helped address these challenges:

- Operational Efficiency: Processing Time Reduction: From hours to minutes.
- Model Deployment Time: Reduced by 30% using ML-Ops.
- Financial Impact: 50%+ cost savings in manual effort and resource optimization.
- Increased ROI: Through automated financial insights.
- Scalability & Performance: Handling Capacity Up to 10M records/day with parallel execution.
- **Response Time**: Near real-time predictions and report generation.

### Panel Discussion: Driving AI Led Business Transformation Strategies

The panel discussion moderated by Mandar Garge explored optimizing business strategies and Al adoption.

They emphasized that successful Al implementation requires enterprises to fundamentally rethink their data operating models - not just their technologies.



Al is transforming software development processes, illustrating the evolution from platform expertise to Al orchestration capabilities that characterize the semantic engineer.

Nischal Doshi introduced a concept that resonated with everyone: the "Manual Translation Tax" - those inefficiencies caused by ambiguous specifications and manual hand-offs that lead to 30-90% budget overruns in traditional development.

He presented Breeze.Al, a revolutionary Software Development Process that utilizes AI to overcome the Manual Translation Tax.



These three core principles of Breeze.AI would be implemented through multiple AI agents that will work collaboratively with human engineers in a new AI augmented SDLC.

Doshi's solution emphasized how engineers are transitioning from being experts in specific development platforms to orchestrators of Al-driven automation across the entire SDLC. This shift represents a fundamental change in how technical expertise is applied—from implementing within platforms to orchestrating AI that spans multiple technologies.

### The Impact of AI on SDLC Productivity

Unambiguous Specifications Survey Statistics Impact of Manual Translation Tax in SDLC Mahalakshmi Raman put **Clearly Articulated** numbers to this problem, based Spend additional effort in understanding artifacts from other Requirements & Design 60% teams on the survey conducted by the Program Value Board of Accion **Efficient Translations** 58% Labs that Raman heads. other across teams Smooth Progression through SDLC Stages She revealed that teams spend Average productive Hours per person spent on unplanned 30% approximately 30% of their time on unplanned collaboration, with 90% 60% struggling to maintain Verifying Implementation meets Specifications documentation consistency.

Raman's presentation emphasized that while previous metrics focused on platform-specific productivity (like code quality or test coverage), the new metrics that the Program Value Board focused on measured cross-platform orchestration efficiency. This shift aligns perfectly with the evolution from platform expertise to AI orchestration capabilities.



Agree they struggle to maintain documentation consistency with Agree they can leverage GenAl to reduce Manual Translation Tax



# Breeze.AI - Architecture & Design as Code (ADaC)

Bikramjeet Nath and Anirudha Gohokar demonstrated the capabilities of Breeze.AI that implements Architecture & Design as Code (ADaC), bridging business, UX, and engineering with AI-driven Breeze Blueprint. Their live demonstration showed how ADaC can generate architectural blueprints from natural language requirements, with engineers serving as orchestrators of the AI-driven design process rather than manual implementers.



"We've been using Breeze Blueprint since 2019," Nath explained, "but the challenge was in the manual workshops and diagram creation. With Breeze.AI, engineers focus on validating and refining AI-generated architectures rather than creating them from scratch."

<u>Ashish Gupta</u> and Mahesh Ghule addressed AI-specific security challenges. Their key message: security is no longer about implementing controls but orchestrating dynamic security frameworks that adapt to evolving AI capabilities.

### Panel Discussion: The Future of Integrated Development in an AI-First World

The panel discussion led by Sameer Kanwar explored breaking silos in an Al-first world, examining how integrated development approaches can reduce cross-team friction and accelerate innovation.

The panel emphasized that the future software engineer will be less a platform expert and more an AI orchestrator who can coordinate autonomous development processes across traditional boundaries.



The summit made one thing clear: we're at a fundamental turning point for both software engineering and enterprise technology.

The AI revolution isn't just another tool in our toolkit - it's reshaping the entire landscape of how technology is created and delivered. For organizations, this means:

- Moving from application-focused to agent-centric architectures
- Shifting investments from features to data quality and agent orchestration
- Reorganizing around domains rather than traditional functions
- Developing governance for agent ecosystems instead of centralized controls

For software engineering teams, success requires:

- Evolving from writing code to orchestrating agents
- Designing experiences rather than applications
- Establishing ethical frameworks instead of security features
- Governing agent ecosystems rather than maintaining systems

The Accion Labs Innovation Summit 2025 serves as our springboard into a new orbit of software engineering.

Through Breeze.AI, we're pioneering a development methodology where experienced semantic engineers orchestrate AI agents to solve problems previously too complex or resource-intensive to address.



This isn't just about new tools it's a fundamental reimagining of how we create software.

We invite our partners and clients to join us in this journey to develop innovations that tackle today's challenges while anticipating tomorrow's possibilities.



Group photograph of the 275+ Accion Labs team members and client partners who attended the Accion Labs Innovation Summit 2025 at Grand Hyatt Hotel, Goa.



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