



AWS re:Invent 2025 Recap

AI, Data and Analytics Perspective

December 17th, 2025





Tim Kreytak
CEO and Founder



Keith McAulliffe
*CTO & Head of
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Sr. Data Scientist



Katherine Bzdel
Shared Services Lead

- Ironside Introduction
- re:Invent 2025 Key Messages
- Amazon Quick Business User Enablement
- AI and Agentic Service Announcements
- Data Engineering Service Announcements
- Next Steps



26

years helping clients
leverage data for their
business

900+

happy clients



- AI Services Competency
- Data & Analytics Services Competency

7

years Advanced Tier



FORGING OUR CLIENTS PATH TO ELEVATED DATA, ANALYTICS AND AI WITH 5 KEY PRACTICE AREAS



Data Estate
Strategy



Migrate BI tools
Embedded analytics
Generative BI



De-risk AI journey
Generative AI



Move, integrate &
transform data
Serverless Data Engr.



Manage AWS
analytics solutions



- New class of autonomous Frontier agents
- BedRock AgentCore enhancements
- AWS Transform agentic AI autonomous upgrades
- Amazon Nova Act
- Kiro Autonomous Agents
- Sagemaker Enhancements

"Agents will have as much impact on your business as the internet or the cloud. We are moving from a world where you use software to a world where software works for you."

~ Matt Garman, AWS CEO

re:Invent Key Messages Related to Data, Analytics and AI



- Amazon Nova 2 Model Family
- Amazon Nova Forge
- AWS AI Factories
- Amazon Quick enhancements
- Amazon Database Enhancements

Amazon Quick Business User Enablement

Katherine Bzdel
Ironside, Shared Services Lead

AI That Helps Business Users Understand Their Business Faster

Natural Language
Answers From
Trusted Data

AI-Generated
Summaries And
“What Changed”
Insights

Research Support
Through AI
Teammates

Access In The Tools
Business Users
Already Use

IRONSIDE PERSPECTIVE & IMPACT

- Business users gain on-demand insight, reducing reliance on analyst cycles for routine questions
- AI-powered summaries accelerate understanding and increase the usefulness of existing BI investments
- Organizations must focus on governed data foundations so AI answers are consistent, accurate, and trusted

**AI That Helps Business Users
Understand Their Business
Faster**

**Natural Language
Answers
From Trusted Data**

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**AI-Generated Summaries
And “What Changed”
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Helping Business Users Move From Insight To Action

Reusable AI-Driven
Reporting
Workflows*

AI-Assisted Business
Workflows*

Integrated
Collaboration &
Sharing

Scalable
Enablement
Patterns

IRONSIDE PERSPECTIVE & IMPACT

- Amazon Quick enables business users to move beyond dashboards to action-oriented insights
- Automation of common analytical tasks frees teams to focus on decisions, not reporting
- Organizations should plan for enablement, training, and use-case prioritization to fully realize value

**Beyond chatbots: Discover conversational AI in Amazon Quick (BIZ319) – recorded session not yet available on YouTube*

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From Insight To Action**

**Reusable AI-Driven
Reporting Workflows**

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From Insight To Action**

**AI-Assisted Business
Workflows**

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**Helping Business Users Move
From Insight To Action**

**Integrated Collaboration
& Sharing**

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**Scalable Enablement
Patterns**

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AI & Agentic AWS Service Announcements

Josh Angelchik
Ironside, Senior Data Scientist

Simplifying And Accelerating Model Customization And Training

Serverless Model
Customization

Serverless MLflow
Integration

SageMaker
HyperPod

SageMaker
JumpStart

IRONSIDE PERSPECTIVE & IMPACT

- Fine-tune models without managing infrastructure → faster iteration and deployment
- Zero-infrastructure experimentation that scales automatically and integrates with SageMaker pipelines
- Checkpointless and elastic training
- One-click fine-tuning

**Simplifying And Accelerating
Model Customization And
Training**

**Serverless Model
Customization**

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Model Customization And
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**Serverless MLflow
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**SageMaker
HyperPod**

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Significant Upgrades Emphasizing Trust, Governance, And Scalability

Policy Controls

Quality Evaluations

Enhanced Memory Capabilities

Improved Observability And Monitoring

IRONSIDE PERSPECTIVE & IMPACT

- Real-time, deterministic boundaries on agent actions
- Fully managed continuous monitoring, custom options for assessing agent performance in production
- Agents to remember user preferences and learn from experiences for more natural, context-aware conversations
- Deeper insights into agent behavior, performance metrics, and tracing

**Significant Upgrades Emphasizing
Trust, Governance, and Scalability**

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**Improved
Observability And
Monitoring**

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Data Engineering AWS Services Announcements

Geoff Speare
Ironside, Director of Data Engineering and BI

Leverage A Common Open Format For Analytic Data

[S3 Tables: Iceberg](#)

[Glue: Materialized Views w/Iceberg](#)

[Athena: use Iceberg metadata for performance](#)

[Redshift: Iceberg Write](#)

IRONSIDE PERSPECTIVE & IMPACT

- Significant expansion of AWS commitment to Iceberg
- Provides a common, open source format for structured data
- Industry trend of Iceberg support continues

**Leverage A Common Open
Format For Analytic Data**

S3 Tables: Iceberg

IRONSIDE **PERSPECTIVE & IMPACT**

- Manages Iceberg format
- Intelligent Tier Support (compaction, etc.)
- Read replicas
- One click to SageMaker Unified Studio

**Leverage A Common Open
Format For Analytic Data**

**Glue: Materialized Views
With Iceberg**

IRONSIDE **PERSPECTIVE & IMPACT**

- Define using Spark SQL
- Automatic or manual refresh
- Queries will use MVs automatically (if data is current)
- No code or maintenance required

**Leverage A Common Open
Format For Analytic Data**

**Athena: Use Iceberg
Metadata For
Performance**

IRONSIDE **PERSPECTIVE & IMPACT**

- Collected via Glue
- 1.5x faster queries
- Smart query planning
- Athena performance improvements also reduce cost

**Leverage A Common Open
Format For Analytic Data**

Redshift: Iceberg Write

IRONSIDE **PERSPECTIVE & IMPACT**

- Leverage Redshift compute with Iceberg storage
- Create and insert directly inside Redshift

Leverage A Common Open Format For Analytic Data

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Performance And Scalability For Analytic And AI Workloads

[S3: Vector Database](#)

[Redshift: MDDL
\(Multi-Dimensional
Data Layouts\)](#)

[S3 Tables Metadata
\(Live Inventory\)](#)

[Redshift:
Materialized View
Improvements](#)

IRONSIDE PERSPECTIVE & IMPACT

- Performance (and cost) continues to improve
- Easier to find the right service for your use case
- Integration between AWS services better than ever

**Performance And Scalability
For Analytic And AI Workloads**

S3: Vector Database

IRONSIDE **PERSPECTIVE & IMPACT**

- Search/Storage for LLM vector embeddings
- 100ms to sub-second response times
- Integrated with Bedrock Knowledge Bases and OpenSearch
- S3 cost, availability, durability

**Performance And Scalability
For Analytic And AI Workloads**

**Redshift: MDDL
(Multi-Dimensional
Data Layouts)**

IRONSIDE **PERSPECTIVE & IMPACT**

- Query-aware sorting
- Up to 10x better price performance
- Automatically applies table layout

**Performance And Scalability
For Analytic And AI Workloads**

**S3 Tables Metadata
(Live Inventory)**

IRONSIDE PERSPECTIVE & IMPACT

- Record changes to S3 bucket into a S3 table
- Live view of bucket inventory (with point in time snapshots)
- Manage bucket by queries
- One of many, many S3 improvements!

**Performance And Scalability
For Analytic And AI workloads**

**Redshift: Materialized
View Improvements**

IRONSIDE **PERSPECTIVE & IMPACT**

- Incremental auto-refresh
- Cascading refreshes in nested MVs
- Shared dataset support

Performance And Scalability For Analytic And AI Workloads

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DevOps AWS Services Announcements

Keith McAuliffe
Ironside, CTO and Head of Artificial Intelligence

Bring Agentic Advancements To Superpower Your Engineering Teams

[Kiro Autonomous Agent](#)

[Amazon Nova Act](#)

[AWS Security Agent \(Preview\)](#)

[AWS DevOps Agent \(Preview\)](#)

IRONSIDE PERSPECTIVE & IMPACT

- Unlock your team's capacity to do more with less toil
- Automate security response posture
- Stronger collaboration between DevSecOps Engineers

**Bring Agentic Advancements To
Superpower Your Engineering Teams**

Kiro Autonomous Agent

IRONSIDE PERSPECTIVE & IMPACT

- Unlock your team's capacity to do more with less toil
- Your developers stay in 'flow state' on hard problems
- Introduces asynchronous development

**Bring Agentic Advancements To
Superpower Your Engineering Teams**

[Amazon Nova Act](#)

IRONSIDE PERSPECTIVE & IMPACT

- Eliminate enterprise 'grunt work' that happens in web browsers
- Model trained specifically to take action in browsers with over 90% reliability

**Bring Agentic Advancements To
Superpower Your Engineering Teams**

AWS Security Agent
(Preview)

IRONSIDE PERSPECTIVE & IMPACT

- Automate security response posture
- Eliminates that bottleneck by embedding security from day one
- Performs contextual penetration testing

**Bring Agentic Advancements To
Superpower Your Engineering Teams**

AWS DevOps Agent
(Preview)

IRONSIDE **PERSPECTIVE & IMPACT**

- Autonomous on-call engineer
- Preventative scan your past incidents to find patterns
- Suggests architectural changes to prevent future outages

Bring Agentic Advancements To Superpower Your Engineering Teams

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Thank You!

See how far data, analytics, and AI can take you.

Email us to request these slides or a meeting

AWSPartner@IronsideGroup.com

