AI & the Future of IBM i

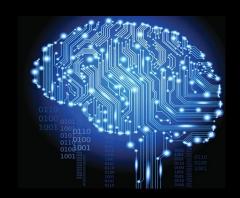
Steve Will – IBM i CTO & Chief Architect

September 2024





IBM i











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IBM i Strategy



Power Solutions

- Enable clients to exploit latest Power technology
- Enable transformation of customer solutions with new value
 - · Mobile, Internet of Things, Cognitive, Machine Learning and Al
- Enable Solutions to modernize around services, hybrid cloud and DevOps

Open Platform for Choice

- Grow IBM i solutions options including
 - Modern RPG & Open source technologies
- Flexible options
 - On-prem and/or Hybrid Cloud inside or outside Data Center
- Entice new talent with popular open languages and tools

The Integrated Promise of IBM i

- Deliver a simple, high value platform for business applications
- Provide exceptional security and resiliency for critical business data
- Leverage IBM systems, storage and software technologies

https://www.ibm.com/it-infrastructure/us-en/resources/power/i-strategy-roadmap/



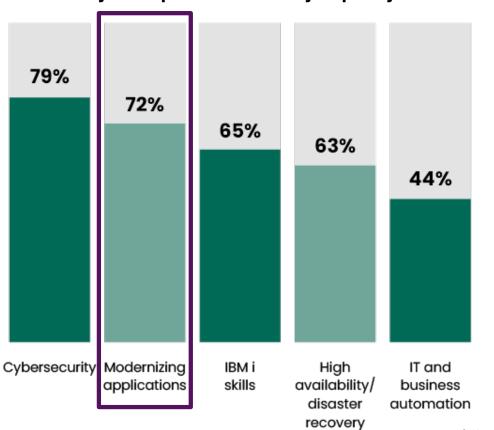


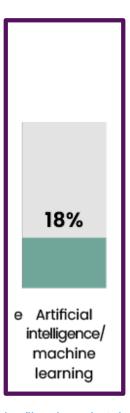


FORTRA

Top IT Concerns

What are your top 5 concerns as you plan your IT environment?





https://www.fortra.com/resources/guides/ibm-i-marketplace-survey-results



Db2 Data Analytics

- Trend analysis
- Anomaly detection

Operations

- Active monitoring / alerting
- Self-healing

Developer Experience

- Help developer write code
- Understand code



Db2 Data Analytics

- Trend analysis
- Anomaly detection

IBM i and AI – Experience so far centers on transactions & data



- ~2016+ Customers use IBM i Open Source to implement AI on IBM i
 - Credit Score validation and risk assessment
 - Training for Agricultural Business ERP
 - Tracking/Predicting food safety
 - Guiding/Predicting customer preferences pre-manufacturing
 - Chat-bots for operations and customer Q&A
- 2021+
 - Power10 Announce demo IBM i workload integrating P10 MMA Linux
 - Various client engagements to nurture and PoC AI enablement technology
- Watson Geospatial integrated into Db2 for i
 - Immediately picked up by several clients in logistics, agriculture, etc.

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Al Workloads



Al Analytics / Fraud Detection

- 1. AnswerRocket
- 2. Cognos / IBM Watson Analytics
- 3. Power BI
- 4. Oracle Analytics Cloud
- 5. The Analytics OS (Pyramid v2020)
- 6. Qlik
- 7. Einstein Analytics Platform
- 8. SAP Analytics Cloud
- 9. SAS Visual Analytics
- 10. Sisense

Ref: https://solutionsreview.com/business- intelligence/the-best-ai-analytics-software-tools/

Al Ops

- 1. AppDynamics
- 2. DataDog
- 3. BigPanda
- 4. New Relic
- 5. Instana
- 6. Moogsoft
- 7. LogicMonitor
- 8. Splunk Enterprise
- 9. PagerDuty
- 10.BMC

Ref: https://www.unite.ai/top-aiops-platforms-tools/

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IBM i Strategy

Continuous innovation continuous integration

Power Solutions

Al that works with **their** solutions & data Al that helps their developers write and modernize solutions

Open Platform for Choice

Al options

The Integrated Promise of IBM i

Al that's easy to deploy & manage







RPG Code Assist Base Features



An IBM i Code assist tool should help programmers work with existing RPG

- Examine and Explain existing code
- Generate modern free-format ILE RPG based on a description
- Write test programs for RPG
- ... and, if possible, transform older RPG into modern, ILE-based free-format

Tentative Timeline for "RPG Code Assistant"



- Summer 2024
 - Gather training material
 - IBM manuals, redbooks, presentations, test cases
 - RPG Champion material, such as books
 - Community-provided code
 - Learn enough about model training to select the right development path
- Fall 2024
 - Initial training
 - Includes baseline measurements of selected LLM
 - "Pre-train" with large unstructured (un-paired) material
 - Enter a "measure, fine-tune" cycle
 - Talking to advisors in the community ("Sponsor Users")
 - Technical & Offering
- Early 2025
 - "Alpha" with Technical Sponsor Users
- Later 2025
 - "Beta" then GA an offering
 - Hope to make the trained LLM available outside the offering



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