

Bridging Legacy Systems to Intelligent Cloud-Native Operations

Peloton Consulting Group unveils our Next Generation AI Framework for Oracle Cloud, an evolved approach that combines our proven AI methodology with deep Oracle Cloud Infrastructure (OCI) expertise to deliver comprehensive digital transformation. This enhanced framework addresses the complete journey from on-premises legacy systems to intelligent cloud-native operations, leveraging Oracle's full technology stack including OCI, Oracle Database, Oracle Analytics Cloud, and Oracle AI Agent Studio.

Our Next Generation Framework transforms how organizations approach AI implementation by addressing the foundational infrastructure, data modernization, and intelligent automation challenges that prevent successful AI adoption. We bridge the gap between legacy systems and cloud-native AI capabilities while ensuring enterprise-grade security, performance, and scalability throughout the transformation journey.



Challenges

Modern organizations face a complex landscape of interconnected challenges that traditional AI implementations fail to comprehensively address. These challenges span infrastructure limitations, data fragmentation, and the complexity of transforming legacy operations into intelligent, cloud-native systems.

Infrastructure and Migration Barriers:

- Legacy on-premises systems lacking the scalability and performance required for AI workloads
- Complex data migrations from traditional databases to cloud-native Oracle solutions
- Disconnected analytics environments preventing comprehensive business intelligence

Data Foundation Limitations:

- Fragmented data across multiple on-premises systems without unified governance
- Poor data quality and integrity issues that undermine AI model effectiveness
- Inability to leverage real-time analytics for intelligent decision-making

Al Implementation Complexity:

- Siloed AI initiatives that fail to leverage Oracle's comprehensive AI capabilities, including AI Agent Studio and Oracle's OCI AI services
- Lack of expertise in orchestrating multiple AI agents across Oracle Fusion and third-party systems and data stores
- Missing connections between infrastructure optimization and Al performance outcomes

Organizations need a comprehensive approach that addresses infrastructure modernization, data transformation, and AI implementation as interconnected elements of a unified digital transformation strategy.

Solution

Comprehensive AI Transformation Across the Oracle Stack

Oracle Cloud Infrastructure Foundation:

- OCI Migration & Optimization: Complete assessment and migration of on-premises infrastructure to OCI, including application migration, database modernization, network optimization, and security framework implementation
- **Performance Optimization:** OCI-native architecture design leveraging Autonomous Database, compute optimization, and storage solutions for AI workload performance
- **Hybrid Cloud Integration:** Seamless connectivity between remaining on-premises systems and OCI environments during phased migration approaches

Data Modernization & Analytics Transformation:

- Oracle Autonomous Data Warehouse (ADW) Implementation: Migration from legacy data warehouses to modern Oracle Autonomous Data Warehouse with Al-ready data structures
- Oracle Analytics Cloud Migration: Transformation of on-premises analytics to Oracle Analytics Cloud with embedded machine learning and AI Assistant capabilities
- FDI Transition: Strategic migration to Oracle Fusion Data Intelligence (FDI), unlocking the full potential of your data in a cloud-native analytics environment and blending it effortlessly for actionable insights

Advanced AI Agent Development:

- Custom Oracle Al Agent Studio Solutions: Design and development of industry-specific Al agents and Al services leveraging Oracle's pre-built foundation with custom business logic in addition to Oracle's OCI services
- Multi-Agent Orchestration: Complex workflows connecting Oracle Fusion applications with third-party systems through intelligent agent coordination
- Real-Time Decision Intelligence: All agents powered by real-time OCI data streams and Oracle Analytics Cloud insights

Enterprise Integration & Governance:

- Oracle Database Expertise: Deep expertise with Oracle Database 23ai features, including vector databases supporting RAG models for AI applications and autonomous capabilities
- **Security & Compliance Framework:** OCI-native security implementation with AI governance, data privacy, and regulatory compliance across all Oracle services
- **Performance Monitoring & Optimization:** Comprehensive monitoring across OCI infrastructure, Oracle applications, and AI agent performance

Oracle Cloud Infrastructure Foundation





Advanced Al Agent Development

Data Modernization & Analytics Transformation





Enterprise Integration & Governance

Approach

Infrastructure-First Al Strategy

Our Next Generation Framework begins with OCI foundation optimization, ensuring that AI initiatives are built on robust, scalable, and secure cloud infrastructure. We assess current on-premises environments, design optimal OCI architectures, and execute phased migrations that maintain business continuity while unlocking cloud-native AI capabilities.

Data-Driven Transformation Methodology

Every AI implementation starts with comprehensive data modernization, including migration to Oracle Autonomous Database, implementation of Oracle Analytics Cloud, and establishment of unified data governance frameworks that support both current analytics needs and future AI requirements.

Oracle-Native AI Development

All AI solutions are architected to leverage Oracle's complete technology stack, from OCI infrastructure through Oracle Database 23ai capabilities to Oracle AI Agent Studio, ensuring optimal performance, security, and integration with existing Oracle investments.

Phased Implementation with Measurable Outcomes

Our seven-phase methodology now includes infrastructure assessment, data migration planning, and OCI optimization as foundational elements, followed by AI agent development and deployment that leverages the modernized technology foundation.

Value Delivered

Infrastructure-First Al Strategy

- Modernized OCI infrastructure optimized for AI workloads with improved performance and reduced operational overhead
- Seamless migration paths from on-premises Oracle databases to cloud-native autonomous solutions
- Comprehensive monitoring and management capabilities across the entire Oracle technology stack

For Data and Analytics Teams

- Modern Oracle Analytics Cloud environment with embedded AI and machine learning capabilities
- Unified data governance across Oracle Autonomous Data Warehouse and Oracle Analytics Cloud
- Real-time analytics capabilities supporting both business intelligence and AI agent decision-making

For Business Users

- Intelligent automation through custom Oracle AI agents that understand business context and integrate with existing workflows
- Enhanced decision-making capabilities powered by real-time OCI services and Oracle Analytics Cloud insights
- Seamless user experiences that combine familiar Oracle Fusion interfaces with advanced AI capabilities

For IT Leadership:

- Comprehensive digital transformation approach that addresses infrastructure, data, and AI as interconnected strategic initiatives
- Reduced risk through Oracle-native solutions and Peloton's proven implementation methodology
- Confidence of using a secure, governed and auditable platform built for enterprise scale
- Clear ROI demonstration through measurable improvements in infrastructure efficiency, data quality, and business process automation

Next Generation Differentiators

Oracle Cloud Infrastructure Mastery:

- Deep expertise in OCI architecture design, migration planning, security, and performance optimization for AI workloads
- Proven experience in large-scale database migrations from on-premises Oracle to OCI Autonomous

 Database
- Advanced knowledge of OCI networking, security, and integration capabilities

Comprehensive Oracle Stack Integration:

- End-to-end expertise spanning OCI infrastructure, Oracle Database 23ai, Oracle Analytics Cloud, and Oracle AI Agent Studio
- Proven methodologies for FDI migrations and on-premises analytics modernization
- Custom development capabilities for Oracle AI services and agents with deep Oracle Fusion integration

Data Modernization Excellence:

- Specialized expertise in Oracle Data Warehouse modernization and Oracle Analytics Cloud implementation
- Advanced data governance frameworks designed for Al-ready data architecture
- Proven approaches for maintaining data integrity during complex cloud migrations

Ready to Transform Your Oracle Environment with Next Generation AI?

Contact Us: www.pelotongroup.com

About Us: Peloton Consulting Group has the vision and connected global capabilities to help organizations envision, implement, and realize the benefits of digital transformation. Our team has the best practices, knowledge, industry expertise, and know-how. We make digital transformation a reality by leveraging Enterprise Performance Management (EPM), Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Human Capital Management (HCM), Customer Experience (CX), Analytics, and Data Management for the cloud. Through connected capabilities, we bring people, processes, and technology together. We help organizations go further faster. That is the Peloton way!