quantiphi
Solving What Matters

Qatapult: Modernization and Migration Factories for AWS

Application Modernization Factory

aws PARTNER Premier Tier Services

Application Modernization Roadblocks

Migrating and modernizing legacy applications for cloud fitment is crucial for enterprises aiming to enhance agility, scalability, and long-term growth. Many are accelerating their migration to AWS to unlock innovation, cost efficiency, and operational flexibility. However, the path to modernization is not without its challenges:

Interoperability Gaps

Difference in services, architectures and pricing across cloud platforms - adds complexity

Workload Prioritization

Managing tightly integrated workload migrations in phases is challenging

Cost Management

High data duplication and large-scale migrations add expenses

Resource Constraints

Limited availability of skilled experts across AWS and other cloud platforms

High Efforts

Code conversion, and refactoring demand significant time and resources

The SNAP Methodology: Your Strategic Path to AWS Migration

Qatapult Application Modernization Factory accelerates your application migration and modernization on AWS through an AI-powered, factory-driven approach. Our SNAP (Strategize-Navigate-Automate-Persist) methodology, enhanced with Gen AI capabilities, ensures a seamless, compliant, cost-optimized modernization across frontend, middleware, backend and database to deliver:

~30% Faster Workload Migration

~40% Process Automation Through AI-powered Qatapult and Codeaira

Step Inside: Qatapult Application Modernization Factory

S N A P

Frontend

Automated UI Discovery

UI Component Analyzer:

HTML/CSS
Component Extraction from UI Codes

Tool(s) Used:
codeaira

UI Modernization

Framework Converter:

Angular JS ›› React/Vue JS
Conversion & Refactoring

Legacy Converter:

HTML/CSS
Component to
Angular/React
Component Translation

Tool(s) Used:
codeaira

Automated Test Design

Unit Test Case Generator-
PyTest
Framework,
Python
Based Web App Validation

Tool(s) Used:
Amazon Q Developer

Middleware

Interoperability Analysis

API Calls Detector:

REST, SOAP,
Interactions

Tool(s) Used:
codeaira

Middleware Modernization

Kafka Converter:

kafka ›› MSK
Topic, Cluster Config Migration

Tool Used:
Amazon MSK Replicator

API Script Converter:

Apigee X ›› AWS API Gateway
REST ›› GraphQL

Tool(s) Used:
codeaira

Service Virtualization

mockito Script Generation for Service Level Testing

Tool(s) Used:
Amazon Q Developer

Backend

Code Assessment & Documentation

Code Scanner:

.net code- Duplication, Cyclomatic Complexity, Vulnerability Areas

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Code Commneter:
Type-Scripting & Hint Generation for
Python

Tool(s) Used:
codeaira

Code Conversion, Refactoring & Optimization

Code Translator:
Code Conversion & Refactoring for

.Net ›› Python

Tool(s) Used:
Amazon Q Developer
codeaira

Deployment & Test Automation

CI/CD Script Generator:
AWS CodeDeploy
Code Generation

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docker file Generation & Optimization

Unit Test Case Generator
-JUnit, Unittest
Framework Script Creation

Tool(s) Used:
Amazon Q Developer
codeaira

Database

Data Layer Discovery

DB Analyzer:

Oracle / SQL Server
Schema Discovery, Stored Procedure Usage, Script Complexity

Tool(s) Used:
codeaira

DB Conversion & Optimization

Database Converter:

Oracle/ SQL Server ›› Amazon Aurora
Schema, Stored Procedure, SQL Script Conversion

Auromated data replication from
MongoDB ›› Amazon Dynamo DB

Tool(s) Used:
AWS Schema Converstion Tool
Amazon Q Developer

Automated Data Validation

Test Case Generation for Source to Target

Oracle/ SQL Server ›› Amazon Aurora

MongoDB ›› Dynamo DB

Reconciliation at Cell Level

Tool(s) Used:
codeaira

Debugging Assistant

Code (**.Net, Python, SQL etc.)** Explanation, Commenting, Q&A for Easy Debugging

Tool(s) Used: codeaira

Note: The tech stacks for assembly lines are representative & not an exhaustive representation of our capabilities

Customer Success Story

Application Modernization to AWS Cloud for a Fortune 500 Insurance Company

Challenges

- Scalability limitations of the legacy monolithic architecture
- Prolonged OEM onboarding time (over 2 months)
- High manual intervention in key business workflows, such as policy processing

Solution

- Assessed the client's application landscape &integrations
- Designed solution blueprint with OEM integration, and API management framework
- Migrated apps to AWS, modernized into microservices, and moved Oracle workloads to DynamoDB
- Built microservices mesh architecture using Amazon API Gateway, Lambda, and Active Directory to orchestrate API calls across **10+** OEM partners

Business Impact

- Achieved **95%** Straight-Through Processing (STP) in policy booking
- Reduced OEM onboarding time from **2+** months to **2 weeks**
- Established a highly available, fault-tolerant, and scalable architecture
- Minimized manual intervention and reduced IT operations tickets

Accelerating Your AWS Journey with Confidence

AI-Powered Innovation

- Purpose-built Microsolutions and Reusable Blueprints
- Smart Utilities (Bi-directional Sync, Data Reconciliation, Landing Zone Framework) for Rapid Transformation
- Automated Remediation and Optimization

AWS Mastery

- **14** AWS Competencies
- Global **F2000** customer success
- Well-Architected Framework Alignment
- AWS MAP Funding Expertise

Expert Delivery

- AWS-Certified Professionals
- Talent Combining Tech, Business & Domain Expertise
- Proven SNAP Methodology
- **24/7** Global Support

Reach out to

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Solving What Matters

Quantiphi is an award-winning AI-first digital engineering company driven by the desire to reimagine and realize transformational opportunities at the heart of the business. Since its inception in 2013, Quantiphi has solved the toughest and most complex business problems by combining deep industry experience, disciplined cloud, and data-engineering practices, and cutting-edge artificial intelligence research to achieve accelerated and quantifiable business results. Learn more at www.quantiphi.com.

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