# **AppMod Toolkit**

Empowering efficient & rapid application modernization at scale, leveraging Azure GenAl and cloud offerings







# **AppMod Toolkit**

A GenAl-powered solution designed to revolutionize the analysis and modernization of legacy applications and databases, making it seamless to develop greenfield apps or refactor brownfield legacy applications

Customer Challenge

- Unwieldy legacy applications: Complex business logic
- Significant technical debt exists in Enterprise IT
- Refactoring monoliths can be time-consuming and error-prone
- Enterprises seek lower-risk options

Atos Offering

- The Atos AppMod Toolkit utilizes Generative AI, Large Language Models, and embeddings to modernize legacy monolithic applications into cloud-native stacks. It provides secure, compliant, and customizable solutions, empowering teams to analyze, refactor, and upgrade codebases efficiently.
- By reducing reliance on SMEs and minimizing manual effort, the toolkit accelerates the transformation process, ensuring applications are future-ready with improved scalability, maintainability, and performance.

Outcome

- Productivity Gain: 30 70%
- Reduction in cost: 20 50%
- Faster Time to Market: 40 70%
- Minimal Subject Matter Expert involvement



# **Benefits of AppMod Toolkit**

This tool offers significant benefits, allowing architects, POs, developers, testers, and other stakeholders to streamline and accelerate the modernization process.

#### **Benefits**

- Productivity Gains: Our consulting services use the AppMod Toolkit to automate assessments, code analysis, and migrations, cutting timelines by up to 50% and enhancing developer efficiency with automated refactoring and testing tools for a streamlined modernization process.
- Stakeholder-Specific Benefits: We offer tailored solutions with advanced tools for developers, streamlined planning for project managers, costeffective strategies for business leaders, and automated non-compliance reports for compliance teams, ensuring that all stakeholders' needs are effectively met.
- Supported Conversions: Our experts handle framework migrations, architectural transformations, database migrations, and API and frontend upgrades, ensuring a smooth transition with minimal disruption to your operations.
- Quantifiable Results: Our professional services achieve a 30% reduction in assessment time, a 65% reduction in database migration efforts, and up to 50% savings in costs and timelines, showcasing the AppMod Toolkit's efficiency and effectiveness.



# **Microsoft Value of AppMod Toolkit**

AppMod Toolkit, in partnership with Microsoft, delivers an accelerated and seamless modernization journey for legacy applications. By fully leveraging the power of Microsoft Azure, including Al-driven services, this joint solution addresses key customer challenges such as prolonged modernization timelines, high costs, and technical complexities.

#### **Microsoft Value**

- Native Azure Integration: Full compatibility with Azure services, including Azure App Services, Azure SQL, and Azure Storage, ensures secure, scalable, and resilient deployments.
- Al-Driven Modernization: Azure OpenAl is leveraged to enhance automation in code transformation, provide migration recommendations, and deliver real-time insights.
- Core Creation and Value Delivery: Azure's native services enable intelligent automation, resulting in faster development cycles, enhanced scalability, and adherence to compliance.
- Security & Compliance: Azure-native security features safeguard applications during and after modernization.

#### **Key Joint Value Proposition**

- Challenge Resolution: Many organizations struggle with complex legacy systems, high technical debt, and compatibility issues during cloud migrations.
- **Solution Impact**: AppMod Toolkit integrates seamlessly with Azure services to streamline application modernization, code refactoring, and cloud adoption.
- **Proven Results:** Built entirely using Azure, the toolkit enables faster, secure, and scalable cloud transformations by leveraging advanced AI solutions



# **GenAl assisted Application Transformation**

# **AppMod Toolkit**



## Pryzm

Code Analysis and Assessment



### CodeTx

Re-write/Re-architect monolith & legacy apps





30%-70%

**Productivity Gains** 



20%-50%

**Reduction in Cost** 



40%-70%

**Assessment & Migration** 

Faster time to market

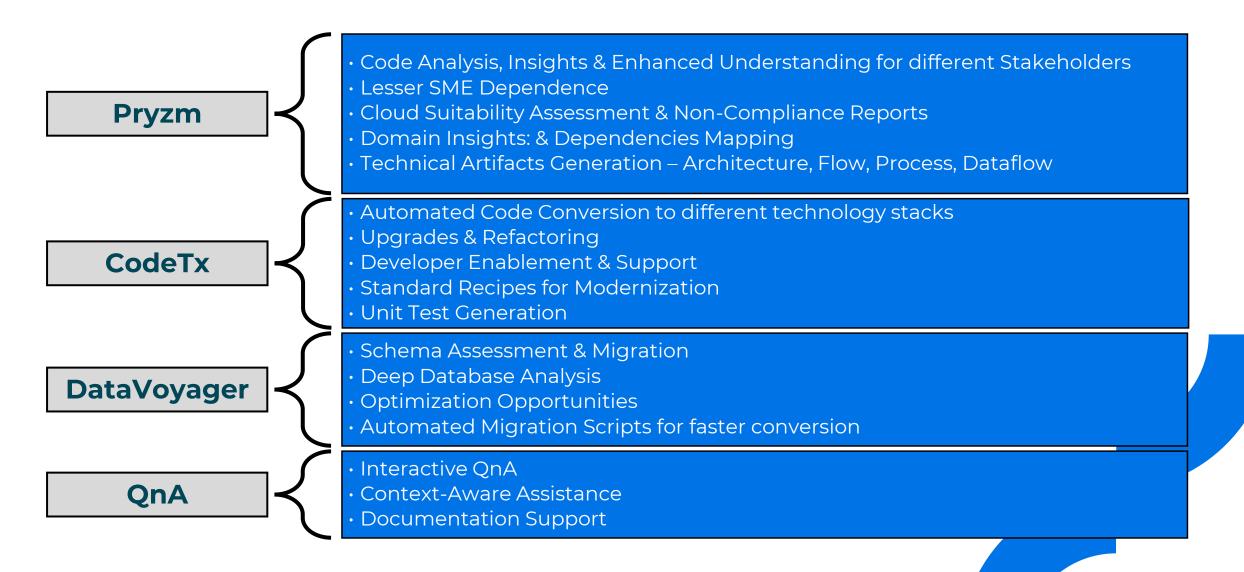
**GenAl services** 







## **Key Modules and Features**



# **Use cases for AppMod Toolkit**



#### **Application Assessment**

AppMod toolkit evaluates applications to determine cloud readiness, dependency analysis, and modernization roadmap.



#### **DB Schema Assessment**

The Database schemas can be assessed to identify migration dependencies and business logic, ensuring a seamless migration to the target DB on the cloud.



#### **Application Modernization**

The Toolkit provides options to rearchitect legacy and monolithic applications, as well as backend services, into microservices and cloud-native architectures. It also modernizes the front end to contemporary UI frameworks like Angular and ReactJS.



#### **DB Schema Migration**

Using the AppMod Toolkit, database schemas can be migrated to Cloud databases with seamless mapping and database transformation.



#### **Application Upgrade**

The AppMod Toolkit accelerates application upgrades, including language version and framework updates, in line with modern technology stacks.



#### **Project Documentation**

Automated documentation generation from code that encompasses the program's business logic, data flows, domain-level information, the business value of the application, and detailed explanations for each file.

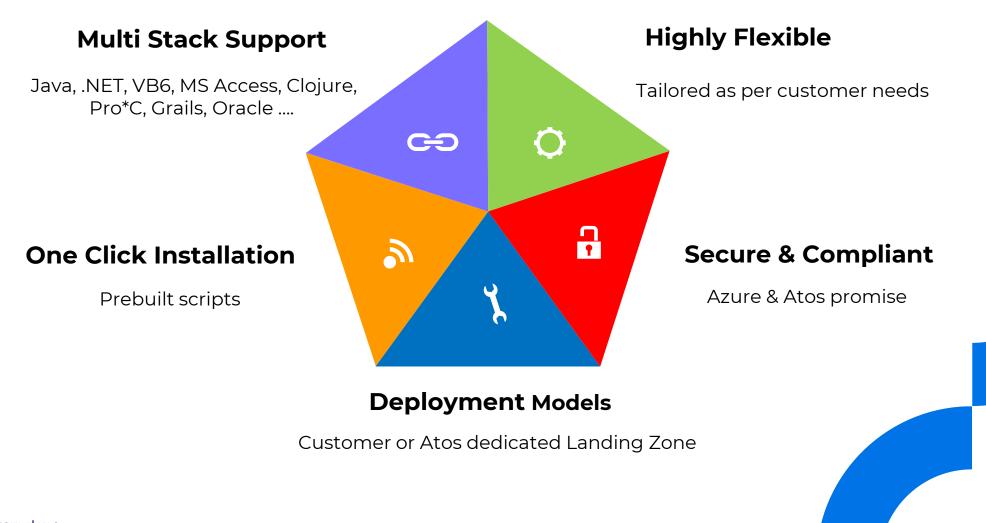


#### **Application Development**

The Toolkit accelerates application development by enabling efficient and rapid modernization at scale, leveraging hyperscaler GenAl and cloud solutions.



### **Differentiators**



**Atos** 

### **European Automotive Financing Company**

#### The Client

A wholly owned subsidiary of an automotive manufacturing group, it is supported by significant financial partners.

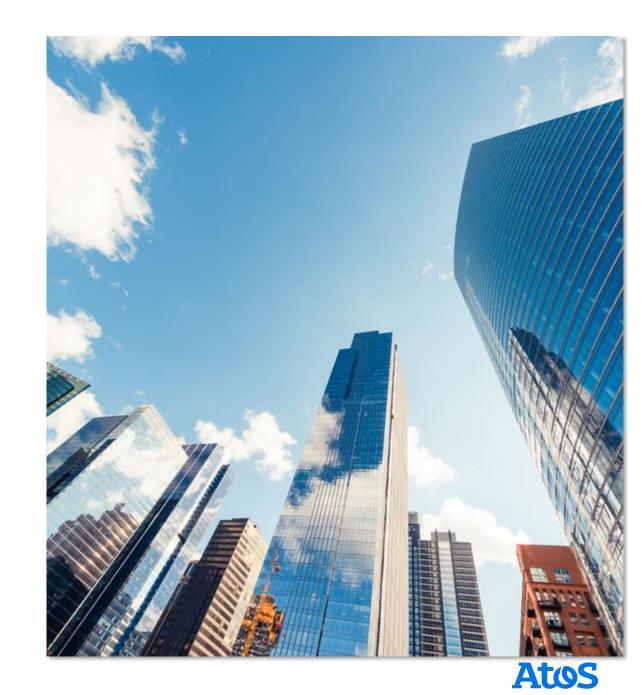
The client has access to the best refinancing conditions, making a wide range of vehicles available to all clients. A comprehensive range of financing, services, and insurance products for commercial networks, individuals, and corporate clients.

#### The Challenge

The client aimed to modernize over 200 applications and prepare them for the cloud as part of their Move to Cloud strategy.

The project required specialized expertise to evaluate these applications for modernization. This involved understanding the current state of the applications, identifying appropriate modernization techniques, and determining the best path for cloud transformation.

A swift assessment was essential to meet project timelines while ensuring the quality of the analysis, accurately identifying risks, and precisely estimating costs.



### **European Automotive Financing Company**

#### The Solution

Atos developed an effective cloud migration strategy using its AppMod Toolkit and Prizm methodology. This involved analyzing current applications and database metadata to create a proposed architecture for the target cloud environment, aligning on-premises components with suitable cloud services.

Future cost estimates were provided based on this strategy, and a scaled delivery model for the remaining applications was recommended.

#### The Impact

By automating the code analysis process with the AppMod Toolkit, the assessment effort was reduced by 40%, allowing for more efficient and accurate identification of areas for improvement and modernization.

The development of a thorough roadmap gave the client a **clear plan to initiate modernization** by specifying the necessary steps, timelines, and resources.

#### Why Atos?

Atos offers a unique value proposition that integrates data, expertise, and automation to facilitate a transformative journey across all major hyperscalers. We handle everything from assessment to migration and beyond, modernizing your infrastructure by transitioning you from legacy systems to advanced cloud-native solutions with speed, ease, and unwavering confidence.

At Atos, we specialize in delivering innovative Cloud Data and AI Solutions that drive growth and foster innovation. By leveraging cloud-based technologies and forming strategic partnerships with industry leaders such as AWS, Google Cloud, Microsoft, Snowflake, and Databricks, we empower organizations to fully realize the potential of their data landscape.



#### The Client

A financial services company offers a diverse array of innovative and flexible financing solutions tailored for individuals, businesses, and dealerships.

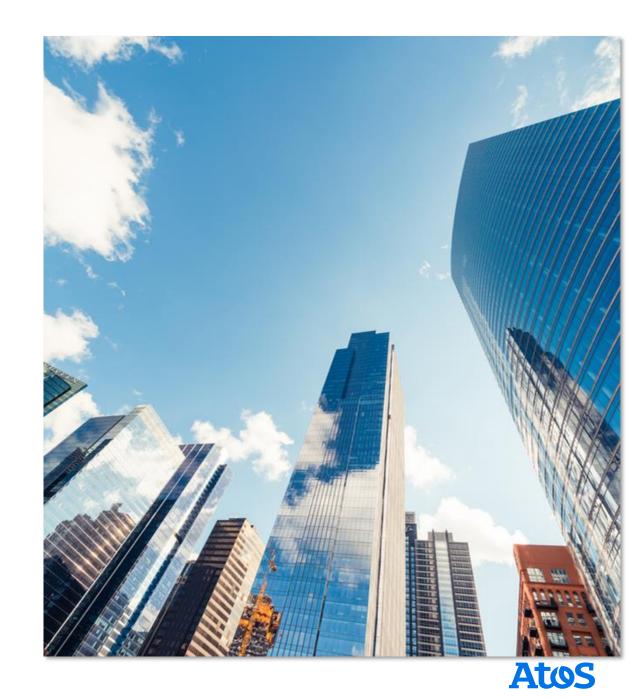
They specialize in automotive insurance, vehicle protection financing, refinancing, and other vehicle-related services. The client is committed to providing a top-tier financing experience by leveraging their expertise in both the automotive and financial sectors to deliver straightforward and adaptable solutions that meet their clients' needs.

#### The Challenge

The client's technology strategy focuses on achieving cloud adoption, which includes the modernization of a complex legacy application to the cloud.

The goal is to modernize a decades-old application within six months. This process involves upgrading legacy proprietary frameworks, updating 24,000 lines of application code, adopting microservices, and converting complicated Oracle objects to PostgreSQL.

Throughout the modernization, it is essential to maintain the application's efficiency and performance in the cloud environment.



#### The Solution

Atos utilized its AppMod Toolkit and CodeTx methodology to assess the application's complexity and develop a code upgrade strategy.

The modernization included migrating from JSP to Angular 17, upgrading Java to version 21, and converting PL/SQL to Java, all of which were accelerated by the AppMod Toolkit.

We worked with the client's architecture team to implement Step Functions and OIDC-PingFederate-based authentication for the first time.

Additionally, we established CICD pipelines for over 70 applications, ensuring seamless deployment across multiple environments.

This approach enabled efficient modernization while ensuring high performance and scalability in the cloud.

#### The Impact

The strategic use of the AppMod Toolkit and the CodeTx methodology greatly streamlined the modernization of the client's application.

This cloud-native architecture enhances agility, allowing for quick adaptation to changing business needs and market conditions.

It also supports automated scaling and monitoring, which reduces operational overhead.

As a result, development and deployment cycles are significantly shortened, leading to a faster time to market.

#### Why Atos?

Atos connects data, expertise, and automation to streamline your transition across major hyperscalers.

We modernize infrastructure, moving you from legacy systems to advanced cloud-native solutions with speed and confidence.

Specializing in innovative Cloud Data and Al Solutions, we partner with industry leaders like AWS, Google Cloud, Microsoft, Snowflake, and Databricks to help organizations unlock the full potential of their data.



#### The Client

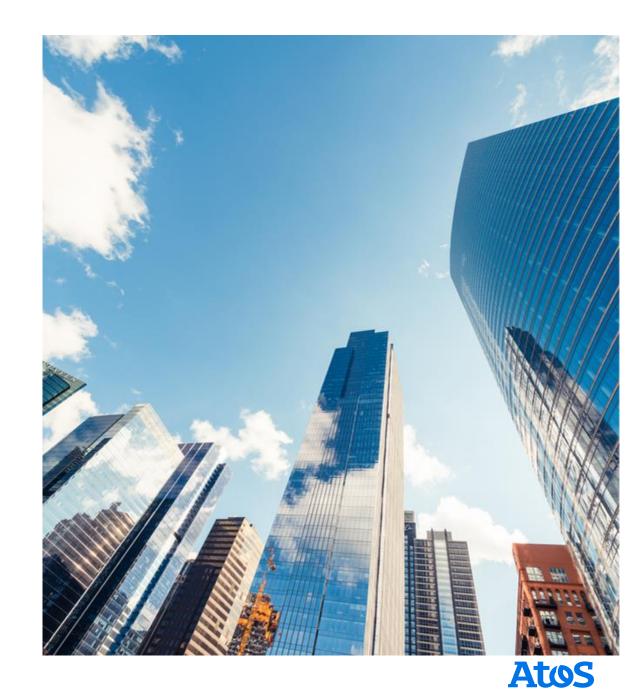
A financial services company offers a diverse range of innovative and flexible financing solutions for individuals, businesses, and dealerships.

They specialize in automotive insurance, vehicle protection finance, refinancing, and various vehicle-related services. The client aims to provide a best-in-class financing experience by leveraging their automotive and financial expertise to deliver simple and tailored solutions that meet their clients' needs.

#### The Challenge

A legacy application crucial for managing legal notifications was experiencing performance issues, scalability challenges, and rising maintenance and licensing costs due to its outdated Oracle technology.

The client sought to upgrade the technology stack and enhance the application's architecture to improve operational efficiency, reduce costs, and mitigate risks associated with legacy systems.



#### The Solution

Our Database Modernization Toolkit, "Data Voyager," provided a comprehensive analysis of the database architecture, including the database schema, dependencies, and potential risks, as well as identifying optimization opportunities and creating a tailored migration strategy.

It reduced the schema migration effort by 65% and enabled a seamless transition from Oracle 19c to PostgreSQL 16, aligning with the client's compliance and architecture requirements.

Data Voyager's insights streamlined decision-making and reduced rework by identifying potential issues early in the process.

#### The Impact

- Use of Data Voyager reduced schema migration effort by 65%
- accelerated schema analysis
- 70+ PLSQL to Java conversion
- 150+ DB objects
- 60+ reduction in upgradation effort

#### Why Atos?

Atos's unique value proposition bridges data, expertise, and automation to enable a transformative journey across all major hyperscalers.

From assessment to migration and beyond, Atos modernizes your infrastructure, enabling you to transition from legacy systems to cutting-edge cloud-native builds with speed, ease, and unwavering confidence.

At Atos, we specialize in delivering cuttingedge Cloud Data and AI Solutions that drive innovation and fuel growth.

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### **Postal Services Company**

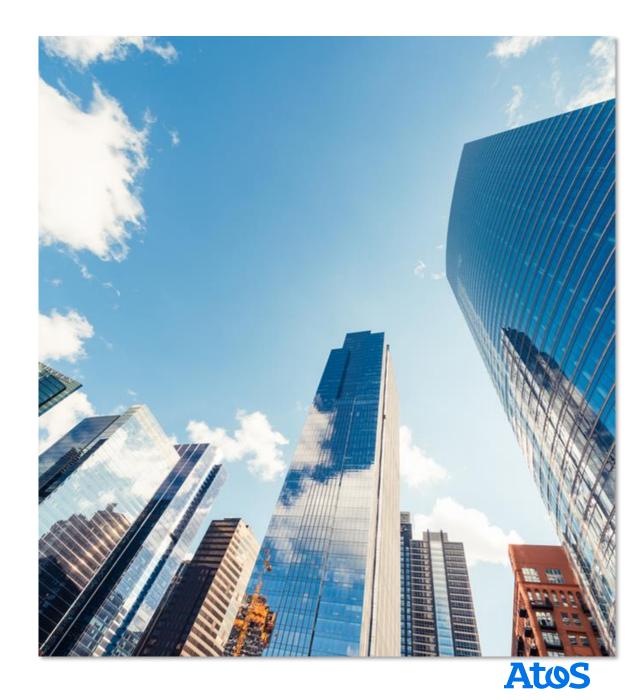
#### The Client

A financial services company offering a wide range of innovative and flexible financing solutions for individuals, businesses, and dealerships, specializing in automotive insurance, vehicle protection finance, refinancing, and other vehicle-related services.

The client aims to deliver a best-in-class financing experience, leveraging their automotive and financial expertise to offer simple and flexible solutions tailored to their client's needs.

#### The Challenge

The client aimed to migrate multiple applications from AWS to Azure but lacked the expertise to conduct a detailed assessment of their applications and databases, necessary for building an Azure migration strategy, target architecture, and estimating operational costs for running the applications on the Azure Cloud.



### **Postal Services Company**

#### The Solution

Leveraged its AppMod Toolkit and Pryzm methodology to determine the optimal migration strategy from AWS to Azure Cloud.

Pryzm provided an overview of the current architectural patterns in use, and the team conducted an impact analysis for cloud migration and application modernization

The team identified project dependencies for the migration. It also identified relevant Azure cloud services through its QnA section.

Atos proposed a scaled delivery model to reduce costs by approximately 30%.

#### The Impact

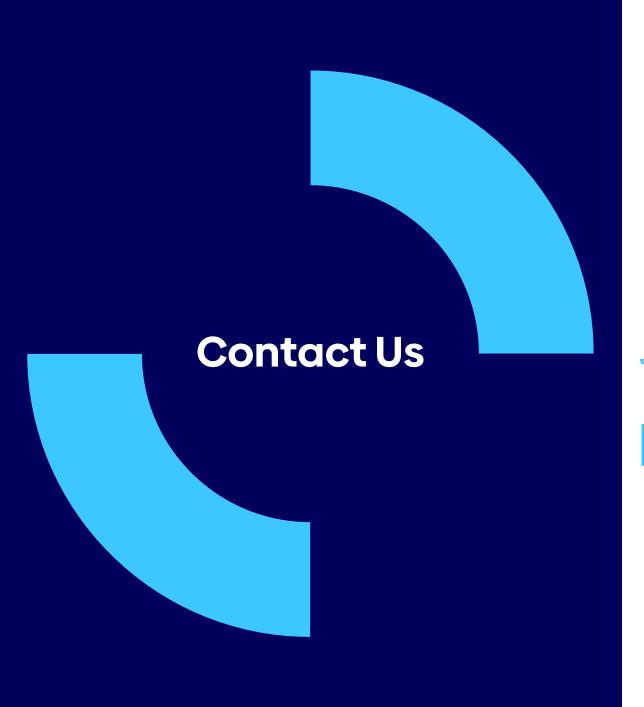
- Streamlined migration strategy with target architecture in the cloud for migration from AWS to Azure.
- Assessment of 65 applications
- Scaled delivery model aimed to reduce assessment effort and costs by approximately 30%

#### Why Atos?

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<u>Digitalbusiness</u>platforms-Microsoft@atos.net



www.atos.net



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# Thank you!

