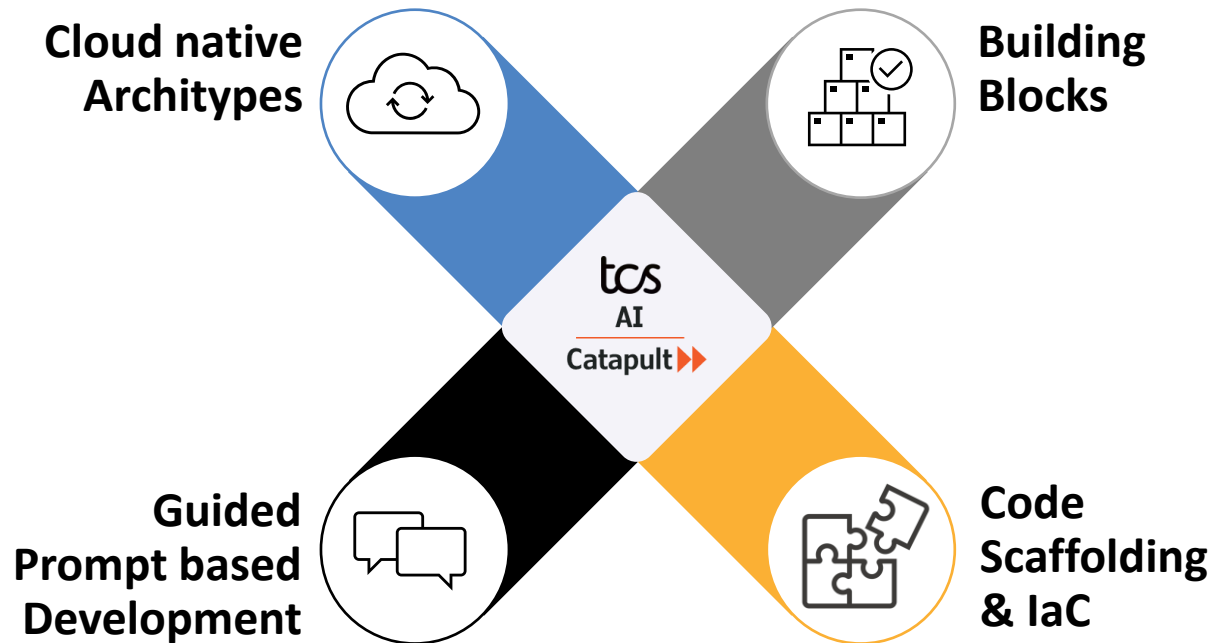# TCS AI-assisted Application Modernization Framework- TCS AI Catapult Forward

TCS' AI-powered application development & modernization framework "TCS AI Catapult Forward" accelerates application development and modernization by leveraging the potential of Azure OpenAI. The framework automates numerous repetitive tasks through context-aware prompts for Azure OpenAI enabling rapid application development by improving developer velocity.

Cloud-Native Development

Cloud native Architypes

Building Blocks

tcs AI Catapult ▶▶

Guided Prompt based Development

Code Scaffolding & IaC

Migrate and Small Enhancement

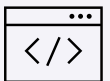**Cloud readiness code scanning for cloud**

Code refactoring and Azure PaaS Enablement

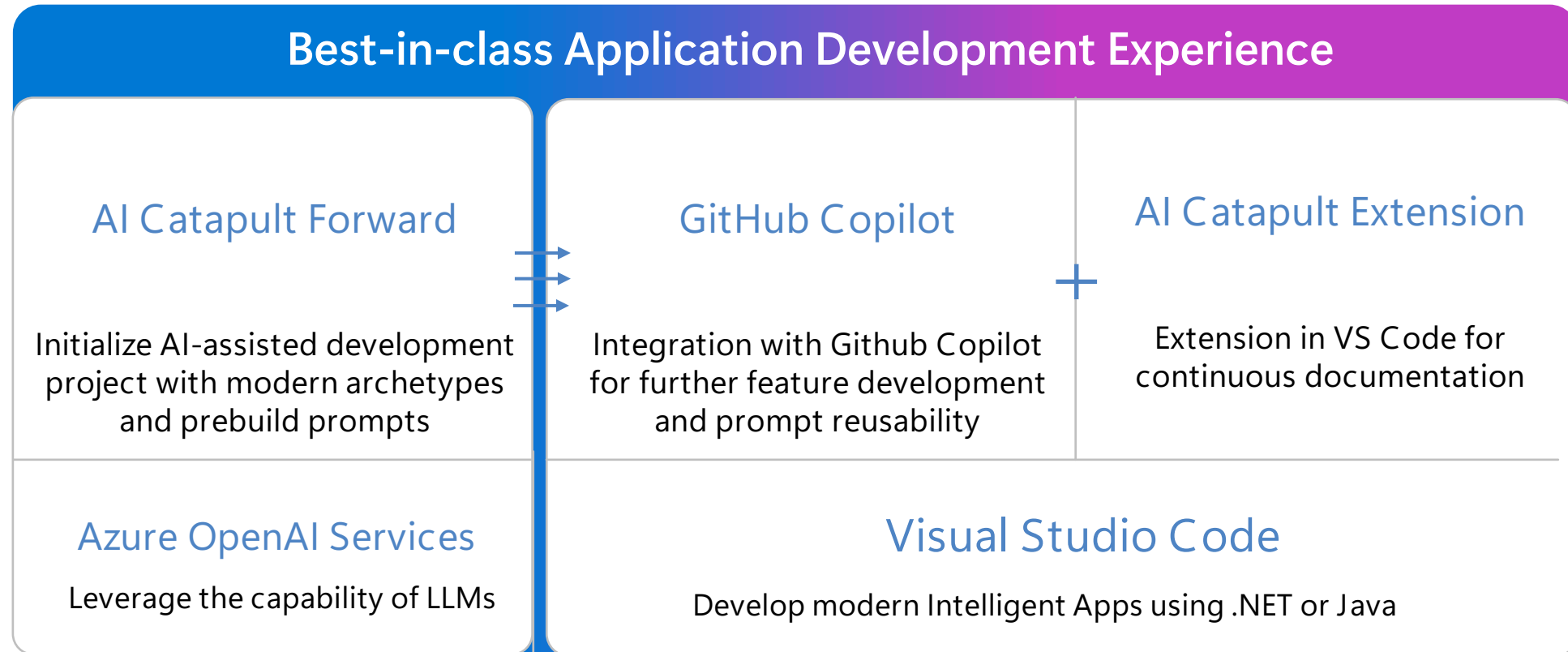**As-Is Code Documentation**

Natural language-based Development

GitHub Copilot Integration

The AI Catapult Forward Ecosystem

AI Catapult Forward along with its Visual Studio Extension brings the power of Azure OpenAI and integrates with GitHub Copilot to application developer's favorite IDE Visual Studio and Visual Studio Code to give a holistic the development experience to the developer.

Best-in-class Application Development Experience

AI Catapult Forward

Initialize AI-assisted development project with modern archetypes and prebuild prompts

GitHub Copilot

Integration with Github Copilot for further feature development and prompt reusability

AI Catapult Extension

Extension in VS Code for continuous documentation

Azure OpenAI Services

Leverage the capability of LLMs

Visual Studio Code

Develop modern Intelligent Apps using .NET or Java

Single Development Platform | Prompt Library and Guidance | Rapid Development

AI-Catapult Forward Extension for Visual Studio Code

Most of the customer's projects are enhancement projects where code changes are required in the existing application. Switching between multiple tools for application development becomes a challenge for developers and that needs to be addressed. AI Catapult Forward Extension for Visual Studio Code bringing the power of AI Catapult Forward to application developer's favorite IDE Visual Studio Code to enhance the development experience further.

Developer's Challenge

① Too many tools impacting productivity

② Outdated documentation

③ Tedious analysis

④ Code disconnected documentation

AI-Catapult Forward Extension

Visual Studio Code

A single pane for developers
Bringing Catapult, Copilot, OpenAI to developers favorite IDE Visual Studio Code

Comprehensive documentation feature
85% developer effort goes in analyzing and documenting existing code

Documentation traceability with code
Automatic Synchronization between project documentation with code