

# **CLUSTER REPLY**

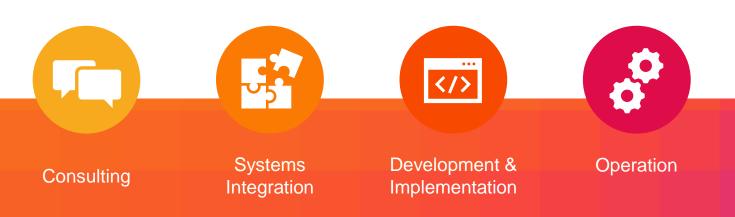
GitHub Copilot Workshop





### **OUR MISSION**

The mission of Cluster Reply is to advise companies on an national and international level on Microsoft technologies, to develop and to support them in system integration. Cluster Reply creates individual benefits for its customers and guides them through the digital age with our professional, as well as technical know-how and the wide network of the Reply group.





## OUR CLOUD JOURNEY CLUSTER REPLY DE



### **Cloud Applications**

- > Application Development
- > Azure Integration
- › Agile Transformation
- > DevOps
- > Industry Cloud
- > Cloud IoT

#### **Cloud Infrastructure**

- > Cloud Transition
- > Cloud & Hybrid Network
- > Data Security and privacy
- > Cloud Governance
- Modern Workplace
- Adoption and Change Management

### **Business Applications**

- > Sales
- > Customer Service
- Marketing
- > Field Service
- > Project Service Automation
- > Intelligence
- > Sales CoPilot

### **Artificial Intelligence**

- > Image Processing
- Machine Learning Modeling
- Smart Apps using cognitive services
- > Bots

#### Data

- > Business Intelligence
- > Modern Datawarehouse
- › Big Data & Analytics
- > Internet of Things
- > Modern Reporting
- > Data Governance

### **Security**

- > Defender Endpoint Protection
- Defender for Cloud
- > Sentinel XDR
- > Defender for IoT
- Application Security





# ENVISIONING WORKSHOP UNLOCK THE POTENTIAL

Unlock the potential of GitHub Copilot for your development team and catalyze your digital transformation.

#### **Envisioning Workshop: Harnessing GitHub Copilot for Digital Excellence**

In this focused session, we align your business goals with the transformative capabilities of GitHub Copilot. By examining your objectives, we'll craft a strategic, actionable blueprint to integrate Copilot's Al-assisted coding into your development processes, enhancing efficiency and innovation.

#### **Workshop Highlights:**

- Interactive Review: Aligning Copilot's capabilities with your business and technological ambitions
- Strategic Planning: Crafting a tailored plan to leverage GitHub Copilot for cloud-native development acceleration
- Outcome-Driven Discussions: Identifying opportunities to overcome challenges, enhance strategic initiatives, and maximize value through digital transformation with GitHub Copilot
- Azure Integration: Explore opportunities to integrate GitHub CoPilot capabilities with Azure DevOps and Azure Data Studio

#### **Outcomes:**

- Unified Vision: A clear, shared understanding of how GitHub Copilot can revolutionize your development practices
- Strategic Action Plan: Prioritized insights and strategies for Copilot integration, focused on achieving measurable business outcomes
- Guidelines for Action: A roadmap combining desirability, viability, and feasibility to guide your Copilot adoption journey





# ENVISIONING WORKSHOP UNLOCK THE POTENTIAL

Following the workshop, we extend our partnership to implement the strategic roadmap defined during our session. Our comprehensive post-workshop services ensure that the actionable insights and plans from the Envisioning Workshop are executed to perfection, transforming your cloud-native development landscape with GitHub Copilot.

#### **Post-Workshop Implementation Services:**

- **Roadmap Realization:** We provide hands-on support to bring the envisioned GitHub Copilot integration and optimization strategy to life, ensuring seamless execution according to the defined milestones and objectives
- **Business Case Development:** Crafting a compelling business case to secure stakeholder buy-in and investment for the GitHub Copilot initiative, detailing benefits, expected ROI, and impact on development processes
- **Technology Integration:** Guiding the technical deployment of GitHub Copilot within your existing cloud-native development environment, ensuring compatibility and maximum utility. Learn about integration value when combined with Azure DevOps and Azure Data Studio
- Change Management and Training: Offering tailored change management strategies and training programs to accelerate adoption among your development teams, maximizing the benefits of GitHub Copilot's AI-assisted capabilities

Our aim is to ensure that the transition to a more efficient, innovative development workflow is smooth, and that you quickly realize the value and competitive advantage it brings to your organization.



# ACCELERATE WORKFLOWS / COPILOT BUSINESS

WRITING CODE WITH A GENERAL KNOWLEDGE OF SOFTWARE DEVELOPMENT. 55%

faster coding

46%

of code written by Al

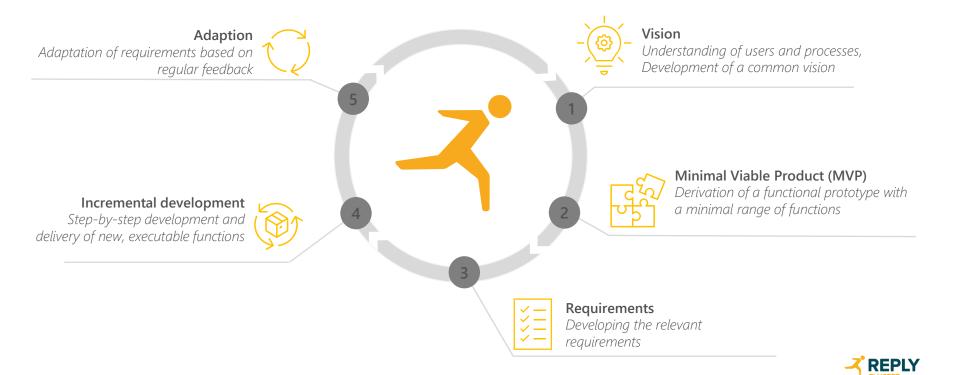
15%

higher code quality





## AGILE DEVELOPMENT BY CLUSTER REPLY





# GITHUB COPILOT OFFERING STRATEGY & ADOPTION

### Role-based Access and Setup Guidance:

 Detailed setup of roles and permissions for Azure Copilot to ensure secure and compliant operation within the development of (cloud-native) projects

### Feedback and Performance Data Analysis:

 Systematic collection and evaluation of usage data to understand the benefits of GitHub Copilot on cloud-native development, emphasizing scalability and reliability metrics.

## Custom Integration and Productivity Enhancement Plan:

 Customized recommendations for embedding GitHub Copilot within cloudnative development workflows, aimed at boosting developer efficiency and accelerating project timelines

## In-depth Training and Copilot Utilization Support:

 Comprehensive training programs on GitHub Copilot's application in development environments and commandline interfaces to maximize cloud application development efficiency

## Efficiency Measurement and Improvement Framework:

 Establishing a system to measure and enhance the impact of GitHub Copilot on the cloud-native development process, focusing on deployment speed and code integration efficiency





# GITHUB COPILOT OFFERING ORGANIZATIONAL ENABLEMENT & SCALING

### Structured Implementation Roadmap:

 Strategy for staged GitHub Copilot adoption across cloud-native teams, aligned with broader cloud strategy goals

### **Expert-Led Training and Peer Support:**

 Leveraging the expertise of GitHub Copilot Champions to provide targeted training and support, enhancing team proficiency in cloud-native development tools and practices.

## Development of a Peer Support Network:

 Launching a network of GitHub Copilot experts within the organization to champion the tool's adoption and facilitate the exchange of best practices

### Security and Feature Utilization Policies:

 Creating specific guidelines for secure and effective use of GitHub Copilot features in cloud-native projects

### Impact Assessment and Scaling Model:

 A framework for assessing and scaling the positive effects of GitHub Copilot on cloud-native development cycles, focusing on code quality and market delivery speed

## Comprehensive Usage and Impact Study:

 Broad analysis of GitHub Copilot's deployment to gauge its influence on cloud-native development practices, highlighting innovation and efficiency





## **EXAMPLE WORKSHOP AGENDA**

Day 1 -Envisioning

- Demonstration
- Understanding Customer needs
- Defining Vision & Goal
- Defining Target KPIs

Day 2 – Roadmap

- Stakeholder Definition
- Evaluating Integration Options
- Adoption Plan
- Developing step-by-step deployment plan

Optional & Post-Workshop

- Proof-Of-Concept
- Implementation Services
- User Training





# GITHUB COPILOT AZURE INTEGRATION SCENARIOS

# Infrastructure as Code (IaC)

Automate the creation of Azure Resource Manager (ARM) templates, Terraform or Bicep configurations, reducing manual errors and speeding up the setup of cloud environments

### Automation Scripts

Generate scripts for Azure CLI or PowerShell to automate deployment, configuration, and management tasks of Azure resources

### Azure Code Migration Support

Customized guidance on addressing issues identified during migration assessment. Select specific Azure target environments, enhancing the relevance of issue identification and recommendations

### CI/CD Pipelines

Suggest configurations for Azure Pipelines (YAML files) to automate build, test, and deployment processes, ensuring faster release cycles

# Configuration Files

Help in creating and optimizing Dockerfiles and Kubernetes deployment files, facilitating containerized application deployment on Azure





# GITHUB COPILOT AZURE INTEGRATION SCENARIOS

# Security and Compliance

Propose code and configuration changes to enhance security and compliance, including Azure policies and rolebased access control (RBAC) setups.

# Monitoring & Logging

Suggest setups for Azure Monitor and Application Insights to improve logging, monitoring, and alerting capabilities for applications and infrastructure.

### Database Management

Generate scripts for managing Azure databases (e.g., Azure SQL, Cosmos DB) including schema migrations, backups, and performance tuning queries.

# Cost Optimization

Provide recommendations for optimizing Azure resource usage to reduce costs, such as identifying underutilized resources or suggesting more cost-effective configurations.

## Integration with Azure Services

Assist in integrating with various Azure services, such as Azure Functions for serverless computing, Azure Logic Apps for workflow automation, and Azure Event Grid for event routing.

