

# AI Code Generation Tools (AICGT): Value Drivers and Industry Impact

## Introduction

### What Are AICGTs?

AI-powered tools that generate, validate, and optimize code, improving productivity and quality.

### Impact

- ✓ Automates repetitive coding tasks
- ✓ Allows developers to focus on high-value work



## Why AICGTs Matter



### RISING POPULARITY

- Boosts business value & efficiency
- Reduces time to market

### CHALLENGES

- Inconsistent usage
- Underutilization without proper deployment

## Key Value Drivers



### PRODUCTIVITY

Faster development and reduced coding time



### COST SAVINGS

Increases throughput and lowers defect resolution costs



### TIME-TO-MARKET

Accelerates software release cycles



### IMPROVED DOCUMENTATION

Better maintainability and knowledge sharing



### QUALITY & RELIABILITY

Fewer defects and improved code standards



### SECURE CODING PRACTICES

Enforces cybersecurity best practices



### TALENT ENGAGEMENT

Enhances workflows, job satisfaction, and retention



### MAINTAINABILITY

Reduces technical debt and optimizes code



### STANDARDIZATION

Enforces best programming practices

## Industry Impact



### BUSINESS AGILITY (TIME TO MARKET)

Reduces test execution and increases deployment frequency

### QUALITY

Reduces vulnerabilities and ensures compliance

### PRODUCTIVITY

Measures code adoption, feature delivery speed, and costs

### TALENT MANAGEMENT

Tracks job satisfaction, upskilling, and tool adoption

## Benchmarks & Insights



### ADOPTION

Strongest in mainframe vs. newer tech

### LANGUAGES

Used in Java, .NET, etc.

### TRAINING

Importance of prompt engineering

### BEYOND CODE

Also aids in architectural diagrams, workflows, etc.

### Access the full whitepaper:

[AI Code Generation Tools — Value Drivers](#) to learn more.