

Agile Application Life-Cycle, Quality and Portfolio Strategies

IDC's *Agile Application Life-Cycle, Quality and Portfolio Strategies* service provides insight into business and IT alignment through end-to-end application life-cycle management (ALM) and DevOps strategies including agile, IT portfolio management, software quality, testing and verification tools, software change and configuration, and continuous releases for digital transformation. This service provides insights on how product, organizational, and process transitions can help address digital innovation (DI), regulatory compliance, security, and licensing issues covering cloud, SaaS, and open source software (OSS). It also analyzes trends related to ALM and software development and deployment including leverage of artificial intelligence (AI), machine learning (ML), and robotic process automation (RPA), mobile and embedded apps, IoT, virtualization, containerization, complex sourcing and collaborative work management (CWM), project and portfolio management (PPM), and agile adoption (e.g., value stream management, Scaled Agile Framework [SAFe]).

MARKETS AND SUBJECTS ANALYZED

- Software life-cycle process, requirements, configuration management and collaboration, and agile development and projects
- Software quality, including mobile, cloud, and embedded strategies
- PPM and CWM software trends and strategies
- Strategic portfolio management (SPM) and IT PPM software
- Developer, business, and operations trends
- Software life-cycle, portfolio management, and testing tools enabling DevOps and governance solutions to align complex deployment, financial management, infrastructure, security, and business priorities
- Trends in software configuration management (SCM), including connecting business to IT via requirements management and web services demands on agile life-cycle management solutions
- Automated software quality (ASQ) tools evolution: hosted testing, web services, API and cloud testing, service virtualization, vulnerability, risk and value-based testing, application security testing (AST), and AI, ML, and other emerging technologies (e.g., mobile, analysis, and metrics)
- The role of ALM, quality, and portfolio management in deployments to on-prem, private cloud, public cloud, and edge environments

CORE RESEARCH

- Application Life-Cycle Management Forecasts and Analyses
- Software Configuration Management Forecasts and Analyses
- IDC MarketScapes: SPM/IT PPM, CWM, VSM/Agile PPM, Enterprise ASQ, Mobile/Digital Quality, Code Analytics/Security, and Cloud Testing
- Automated Software Quality Forecasts and Analyses
- PPM, IT PPM, Agile ALM, Requirements, and Quality Analytics/Security
- Cloud Testing and ALM and PPM SaaS and Cloud Trends

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: [Agile Application Life-Cycle, Quality and Portfolio Strategies](#).

KEY QUESTIONS ANSWERED

1. How should demands for quality and adaptability be addressed across platforms and business needs (mobile, IoT, security, etc.)?
2. What does agile and service emergence mean for businesses, and how do DI and hybrid work impact collaboration, PPM, and CWM?
3. What is the impact on DevOps of complex sourcing, open source, "smarter" products, AI, ML analytics, RPA, social media, SaaS, cloud for ALM, and full life-cycle management?
4. How should companies respond to dynamically changing business demands for IT reinvestment, integrated life-cycle management evolution, volatility, and economic pressures?
5. What are key components and strategies for successful agile ALM with changing deployment, analytics (AI/ML), and quality/security needs for mobile, cloud, hybrid work, and emerging platforms including edge and mixed reality?

COMPANIES ANALYZED

IDC's *Agile Application Life-Cycle, Quality and Portfolio Strategies* service reviews the strategies, market positioning, and future direction of providers in this market, including:

ACCELQ, Actifio, Adobe (Workfront), Aha!, Akamai, AppDynamics, Applause, Applitools, Asana, Atlassian, Autodesk, BigLever, Blueprint, BMC (Compuware), Broadcom, CAST Software, Checkmarx, Cisco, Citrix (Wrike), Clickup, CloudBees, Contrast Security, Dassault, Deltek, Digital.ai (Experitest, Xebialabs), Digite, DXC Technology, Dynatrace, Eggplant, Empirix, Epicor, froglogic, GitLab, Good Software, Gorilla Logic, HCL, Headspin, Keysight, IBM, Infostretch, Infosys, IntelliCorp, Jaczone, Jama, Kovair, Metier, Micro Focus, Microsoft (GitHub), monday.com, New Relic, NTT Application Security, OpenMake, Opscode, Opsera, Oracle, Parasoft, Perforce, Planisware, Planview/Tasktop, Plutora, PTC, Revelation, Revenera, Riverbed, RG5, rPath, SAP, Sauce Labs, Sciforma, Seapine, Security Innovation, SEI, ServiceNow, Siemens, SiteSpect, Skytap, SmartBear, Smartsheet, SoftLab, SonarSource, Synopsys, Tasktop, TCS, Thoughtworks, Tricentis, UiPath, Veracode, VMware, Wipro, Workday, Worksoft, and ZAPTEST.