DevOps Service Portfolio

CLOUD SERVICES

- Cloud Enablement
- Cloud Migration
- · Cloud Engineering
- Hybrid platform development

DEVTESTSECOPS

- Continuous Integration
- Continuous Delivery
- Test automation
- Security automation
- Test Data management / Service Virtualization
- DevTestSecOps Transformation

CYBER SECURITY

- Secure SDLC
- Application, infrastructure and cloud security
- Security testing

AMS & IMS

- Clouds & Private infrastructure Support
- Custom and COTS Applications Support
- Application and Infrastructure modernization
- Operational Excellence transformation
- Functional testing

AIOPS

- Application and Infrastructure monitoring and performance management
- Operational Analytics
- ITSM automation
- Robotic Operations

TESTING SERVICES

- QA Consulting
- Test Automation & Test Data Management
- Functional Testing
- Specialized Testing

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Understanding the Scope

EPAM to provide recommendations for improvements of its approach to the Continuous Delivery and Continuous Integration process.

The client would like to carry out a detailed assessment of its CI/CD processes.

As an outcome of this engagement, we will provide recommendations and a roadmap for the future improvements based on the Discovery findings.

PROPOSAL HIGHLIGHTS:



3-week phased discovery delivered by a team of seasoned experts in CI/CD and Test Automation.



Combination of onsite and offshore presence to ensure effective collaboration within reasonable costs



Proven Assessment methodology and tools to capture and analyze the current state and define the future roadmap.

Our Proposal

Our goal is to conduct a detailed analysis of the existing development, testing and deployment practices and provide the best possible recommendation to implement a robust and efficient DevOps processes.

TIMELINE: The DevOps Discovery will take 3 weeks, and is comprised of three phases:

- Weeks 1: Assessment Phase, focused on obtaining holistic information regarding the current state
- Weeks 2: **Recommendations Design** based on the Assessment Phase findings
- Weeks 3: Implementation Strategy and Roadmap Design, including long term and short term improvements and quick wins.

TEAM: A team of onsite and offshore experts experienced in conducting DevOps audits:

- CI/CD Architect
- Azure Architect
- Test Automation Expert

METHODOLOGY: The audit will be conducted following a time-proven <u>assessment framework</u>, designed to provide maximum results with minimal disruption to the client's operations.

COMMERCIALS: Fixed Cost engagement, with total estimated cost of \$

Our Assessment Framework

THE EPAM ASSESSMENT FRAMEWORK USES A COMBINATION OF VARIOUS INDUSTRY BEST PRACTICES AND MODELS TO UNDERSTAND CURRENT STATE, BUSINESS OBJECTIVES AND FUTURE STATE

INPUTS

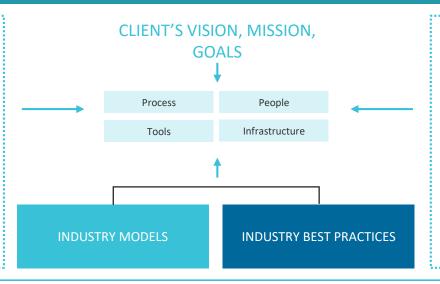
Stakeholder identification & interviews

Artifacts Consolidation & Reviews

- Architecture
- Information & dependencies
- Metrics
- Documentation

Technical analysis

Application and data



OUTPUTS

Executive Report

- Executive Summary
- Quick wins
- Top findings
- Roadmap for improvement

Detailed Assessment Report

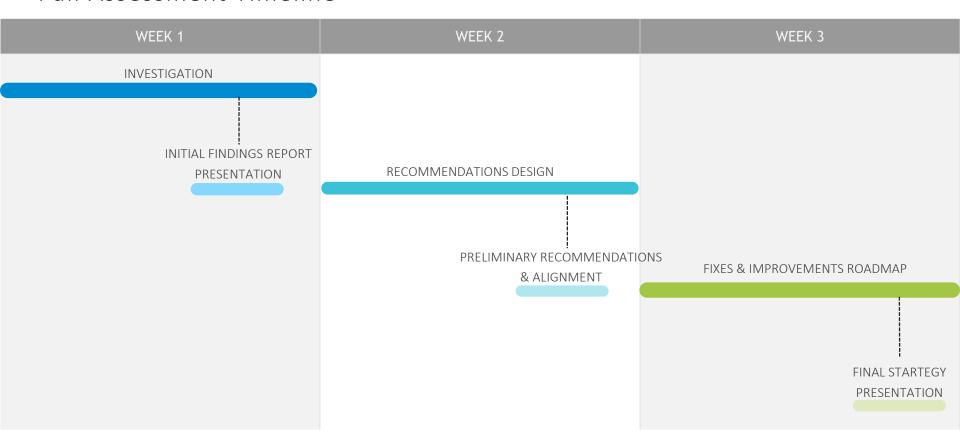
- Findings
- Recommendations
- Business priorities mapping

Focus on desired business outcomes

Actionable report with transformation roadmap

Mastering collaboration art

Full Assessment Timeline



Phase 1: Assessment

ACTIVITIES

- Identify key Customer stakeholders for interviews and schedule assessment interview meetings
- Define business objectivities, key drivers, product roadmap
- Assets inventory tools, infrastructure, dependencies
- Architecture review application, infrastructure, monitoring
- People dynamics teams and their ways of working
- SDLC review development, testing, operations
- Current CI/CD process review
- Test strategy review (current manual and automated tests)
- Review configuration management and deployment automation

DELIVERABLES

- Assessment Report (DRAFT), including:
 - Current State Overview
 - Findings report
- Weekly status reports

Phase 2: Recommendations Design

ACTIVITIES

- Workshop session(s) with key stakeholders
 - Define strategical goals and DevOps roadmap
 - o Prioritize the gaps, objectives and deliverables
 - Analyze technical debt and define improvements
 - Initial design of the new capabilities (CI/CD, Monitoring, Test Automation, Metrics, SDLC flow)
 - Identify skills and training required
- Document the solution and recommendations
- Scope and document implementation strategy (Projects, Resources/Costs, Timeline)
- Conduct Playback sessions with key stakeholders on observations and key findings

DELIVERABLES

- Implementation Plan (DRAFT)
 - Timeline & milestones
 - Resource/skillsets/locations
 - Implementation cost estimate
- Assessment Report (DRAFT)
 - High-Level Architecture Design
 - DevOps Technology Roadmap
 - Technical Debt Analysis

Phase 3: Implementation Strategy & Roadmap

ACTIVITIES

- Identify recommendations and prioritized implementation roadmap CI/CD Enablement, technical debt reduction and better alignment with industry best practices
- Create implementation project plan
- Estimate the effort required to execute the proposed roadmap
- Potential efficiency gains

DELIVERABLES

- Executive Summary Presentation
- Assessment Report (FINAL)
 - Architecture Design Document
 - DevOps Technology Roadmap
 - Technical Debt Analysis
- Implementation Plan (FINAL)
 - Timeline & milestones
 - Resource/skillsets/locations
 - o Implementation cost estimate

Proposed Assessment Catalogue

ASSESSMENT	ASSESSMENT AREA	ROLE				TIME	COST	DELIVERABLES	
CATEGORY		Delivery Manager	DevOps Architect	DevOps Engineer	QA Engineer	(days)	ESTIMATES		
SDLC Process	Way of Working: teams' collaboration, structure and processes	+	Allemesee	Enginee.	Ligitot	5	ė	RACI matrix Team organization roles and responsibilities Governance model overview including organizational flow inside the teams and collaboration with other teams	
SDLC Process	GitFlow/GitHub flows and code review		+			3	\$	Source code organization with code review process and its promotion through different environments	
	Software stages and dependencies (technology)		+	+		5	c	List of technical risks and bottlenecks Software stage readiness (definition of Done and technical debts)	
	CI/CD stages and flows		+	+		5		Unified and centralized CI/CD approach Continuous integration elements and automated execution CI/CD workflow which includes full automation of those processes	
	Non-functional (Load, Performance, Security, Web Vulnarabilities) requirements		+		+	2		Security and performance quality gates Analytics metrics Risks of non-functional coverage absence	
	CI/CD Strategy and Toolset		+	+		4		CI/CD strategy overview Toolset mapping to CI/CD processes Automation coverage of CI/CD execution process	
	Automated provisioning coverage		+	+		4	\$	Environment automation provisioning and configuration management level	
	Scalability and Risks		+	+		2	\$	Scalability and software adoption readiness Risks mitigation plan	
Environment Support	Stress Resistance (immutable infrastructure)		+	+		2	\$	Infrastructure stress test report Disaster Recovery readiness Fault tolerance	
	Reporting and Monitoring		+	+		2		Overview of reporting, monitoring and alerting systems with defined layers and approaches Identified gaps of monitoring and reporting processes	
Quality Assurance	Quality Gates and Test coverage		+		+	3		Types of quality gates and automated coverage CI/CD implementation readiness	
and Test	Regression and integration test coverage		+		+	2	\$	Percentage of regression and integration testing automation coverage	
Readiness	Overall coverage and implementation in CI/CD pipeline		+		+	2	\$	Quality gate as continuous improvement feedback report	
Managed Services	Managed Services Team readiness	+	+			5	\$	SLA and quality metrics Support team composition and scalability assessment	
and Global Roll-out	Global Roll-out readiness	+	+			5		List of activities of "industrialized" roll-out Roll-out Team readiness "Local"/individual market's needs	

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Defined Transformation Journey Based on Your DevOps Maturity

4	CULTURE	PROCESS	PEOPLE	TECHNOLOGIES
	• Articulated business strategy • Clear business requirements • Rapid feedback • Ownership mindset	 Distributed orchestration Performance management Continuous deliveries Six Sigma Continuous testing Predictive reporting 	 Interdisciplinary teams KPI-centric teams Continuous education Common knowledge transfer 	Tooling as a productToolset optimizationSelf services
	Articulated business vision Clear product requirement Frequent collaborative communication Strategic innovation	 Complex orchestration Frequent deliveries Lean development Qualitative testing Strategic reporting 	 Maintain orchestration Product-centric teams In-level tech skills Common knowledge 	Analytics and intelligenceSelf-healingContinuous deployment
EFFORT	• Articulated business goals • Clear project requirements • Rapid Inter-team communication • Innovation by design	 Clear project requirements Rapid Inter-team communication Automated testing Innovation by design 		 Knowledge management Toolset integration Build/Test automation Integrated monitoring Continuous delivery Automated env. creating
	• Clear delivery requirements • Rapid intra-team communication • Innovation on demand	 PM Scheduled deliveries Agile Simple Scripting Requirements based testing Reporting on demand 	Maintaining scriptsDelivery-centric teamsIn-level tech skillsKnowledge base	 Project planning tools Core monitoring Build automation Functional tooling testing Standardized environment build
	• Uncommunicated vision • Restricted communication • Sub-innovating	Manual processInconsistent deliveriesAd-Hoc testingInconsistent reporting	Working on ticketsSilosExclusive knowledge	No collaboration toolsNo AutomationManual environment buildManual testing