Application Innovation - *Assessing for Readiness*

Modernize and migrate 1-5 simple applications

EPAM's Application Innovation engagement delivers an in-depth analysis of 1-5 simple applications for modernization to Azure complete with architecture design, migration plan <u>and</u> actual migration.

Architecture Design recommendations based on performance data, application dependency mapping, and desired end state for management

Migration Plan delivered and reviewed with the customer prior to starting the modernization effort

Application Modernization and Migration Completed as part of the engagement

Deep expertise from EPAM to train your application and data owners

Dedicated support from EPAM throughout the duration of the engagement to ensure objectives have been met
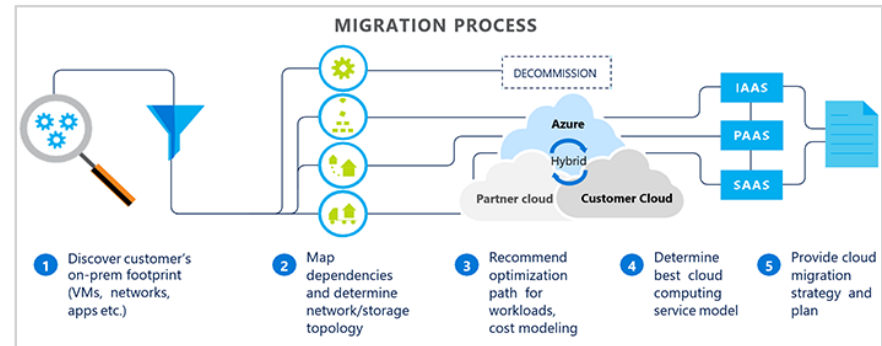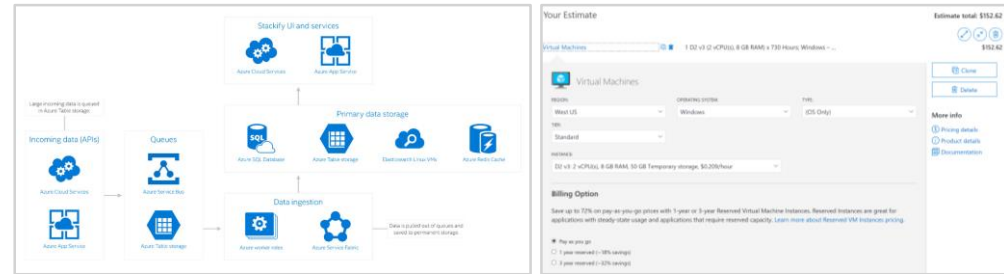
Pillars of Cloud Native Development

Microservices

Orchestration

CLOUD NATIVE

Containers or Serverless

DevOps and CI/CD
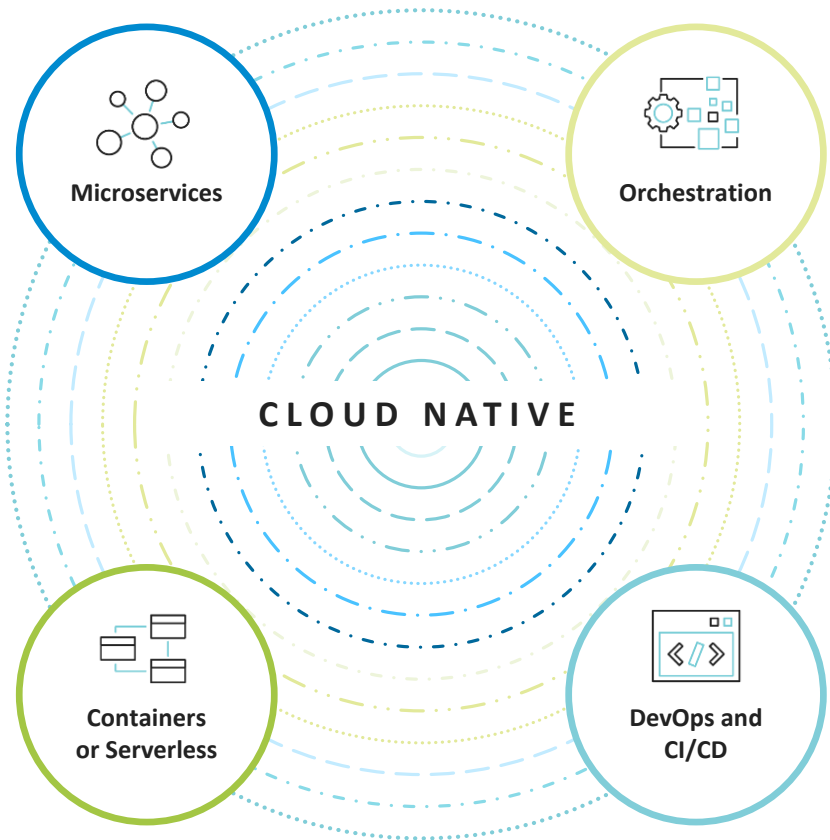
WHY CLOUD NATIVE?

- Faster time-to-market

- Agility & Flexibility

- Resiliency

- Less operational costs

EPAM Delivery Platform (EDP)
Accelerated Microservices Delivery End-to-End
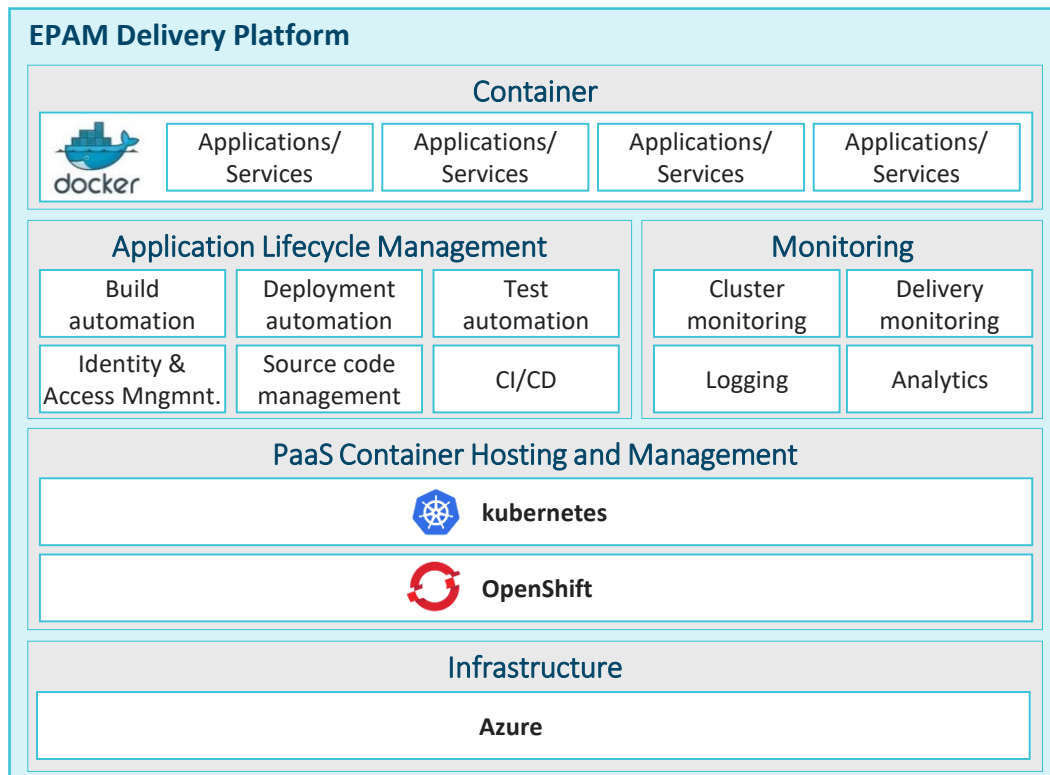
EPAM Delivery Platform

Container

| | Applications/ Services | Applications/ Services | Applications/ Services | Applications/ Services |

Application Lifecycle Management

| Build automation | Deployment automation | Test automation |
| Identity & Access Mngmnt. | Source code management | CI/CD |

Monitoring

| Cluster monitoring | Delivery monitoring |
| Logging | Analytics |

PaaS Container Hosting and Management

kubernetes

OpenShift

Infrastructure

Azure

EDP is EPAM's platform for state of the art microservices delivery

- **Production proven, open-source stack** covering microservices implementation, building, testing, deployment and monitoring

- Deployment-ready solution **saving up to 30 person-months** of integration costs

- **Built-in best practices** for CI/CD, and monitoring of microservices

- **Advanced security model** supporting SSO and hundreds of development teams

- **One-click environment provisioning**

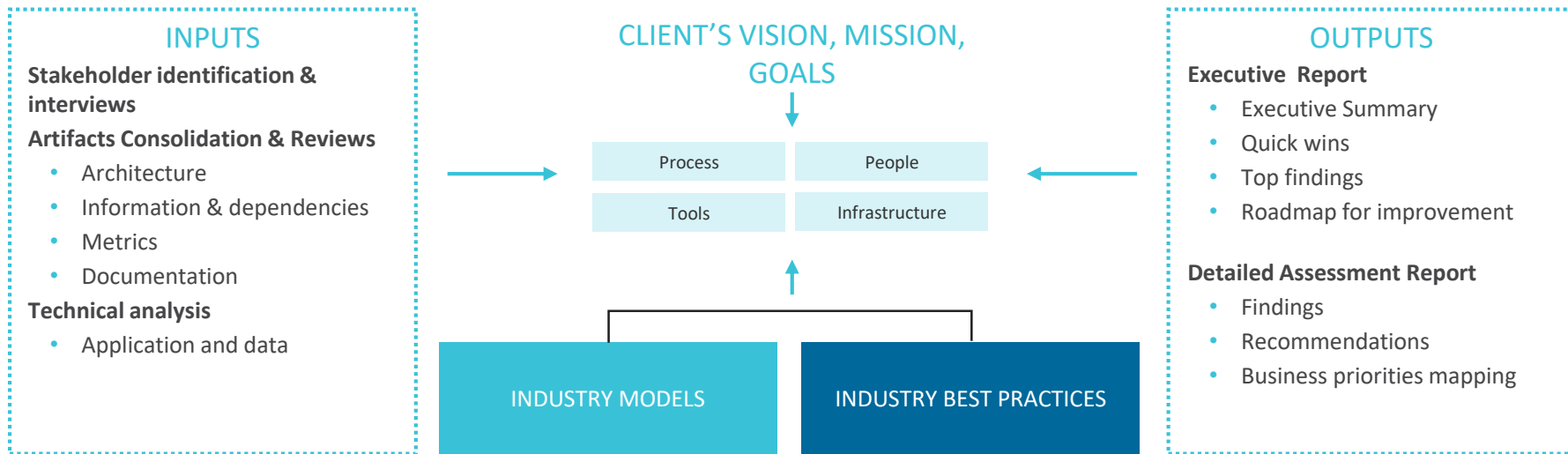# Azure Specific Microservices Architecture

Consumer Layer	Desktop	Web	Mobile	External Client

Delivery Layer — Azure API management | API Gateway | Load Balancer | Discovery | Azure Load Balancer

Aggregation Layer

Server Side Apps	Web App Specific API	Mobile App Specific API	External API

Platform Services

Services Layer

Azure Load Balancer | ASF Naming Service – Discovery Service | ASF Reverse Proxy

Business Microservices

Service A	Service B	Service C
ASF Reliable Services PaaS, Guest	**ASF Reliable Services** PaaS, Guest	**ASF Reliable Services** PaaS, Guest
Service A DB	Service B DB	Service C DB

Azure Storage / Data — BLOB Storage   Azure Tables   SQL Database   Azure Redis Cache   eEtc.

Messaging Channels — Azure Service Bus   RabbitMQ

Azure AD, WIF
Security

Azure Service Fabric, Azure Portal
Management

ElasticSearch, Kibana, LogStash, WAD
Logging

WAD, App Insights, Log Analytics
Monitoring

Service / App Configuration, Azure Storage, Key Vault
Configuration
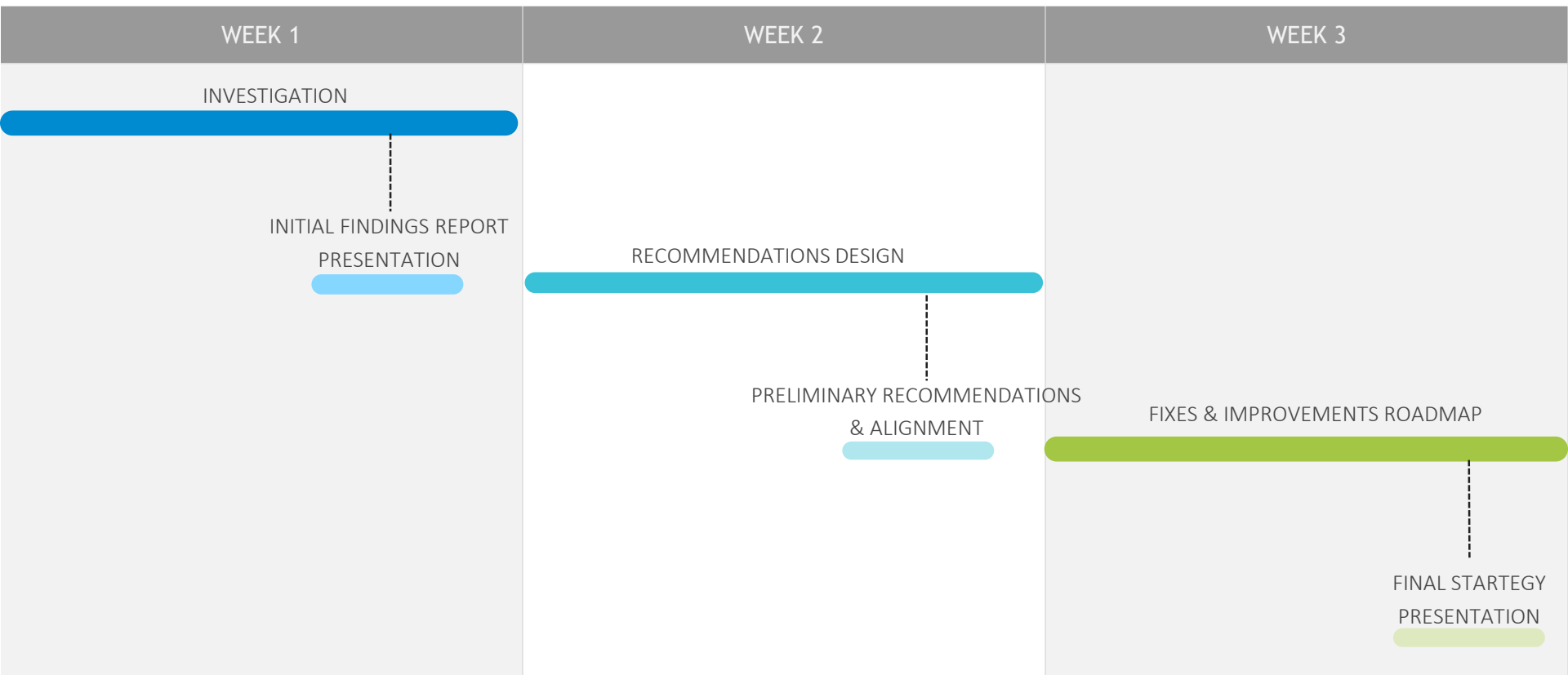
Infrastructure Layer — IaaS

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

CLIENT'S VISION, MISSION, GOALS

Process	People
Tools	Infrastructure

INDUSTRY MODELS	INDUSTRY BEST PRACTICES

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

WEEK 1	WEEK 2	WEEK 3

INVESTIGATION

INITIAL FINDINGS REPORT
PRESENTATION

RECOMMENDATIONS DESIGN

PRELIMINARY RECOMMENDATIONS
& ALIGNMENT

FIXES & IMPROVEMENTS ROADMAP

FINAL STARTEGY
PRESENTATION

The actual timeline will depend on the availability of Dior experts.

Summary of Deliverables

WORK PRODUCTS	WORK PRODUCTS DESCRIPTION	EPAM	CLIENT
High-level Project Plan	A detailed work plan including the interview and workshop schedule as well as a list of stakeholders Format: Microsoft Project	Primary	Assist
Current State Overview	Reflects a summary of the current state in terms of functionality provided, architecture, application size, data usage and integration points based on the information provided Format: PowerPoint	Primary	Assist

SWOT	At the end of assessment phase the team will create a SWOT assessment PowerPoint document that will feed the Analyze and Recommendation phases of work. This document will contain the following four sections:
	    S- Strengths – what "the system" is doing well and should continue to do
	    W- Weaknesses – where "the system" has weaknesses related to technical, functional, and
	        economics criteria
	    O- Opportunities – where "the system" has opportunities to improve related to technical and
	        economic criteria
	    T – Threats – where "the system" has areas of threats or areas that need to change before the
	        system can move forward related to technical and economic criteria
	Format: PowerPoint
		Primary	Assist

Target State Recommendation	Recommendation on what the future state of "the system" Format: PowerPoint	Primary	Assist
Technical Gap Assessment	Technical gap assessment highlighting areas of risk and technical deficiencies of the current state based on the information provided Format: PowerPoint	Primary	Assist
High-Level Roadmap	Recommendation for a prioritized roadmap to get "the system" from the current state to the future state based on the information provided (taking into consideration technical, operational, and business readiness) Format: PowerPoint	Primary	Assist
Business Case	A supporting business case that is aligned to the agreed upon roadmap Format: Excel & PowerPoint	Primary	Assist