

# Data Platform Modernization using

## Synapse Success By Design



## Microsoft Sponsored Initiative



Synapse  
Success by Design

# Content

Steps that we go through with you to develop the Data Platform Modernization Strategy and Plan

Success by Design Synapse Migration - Roadmap

Objectives of the Information Gathering workshop

Personas required for information gathering

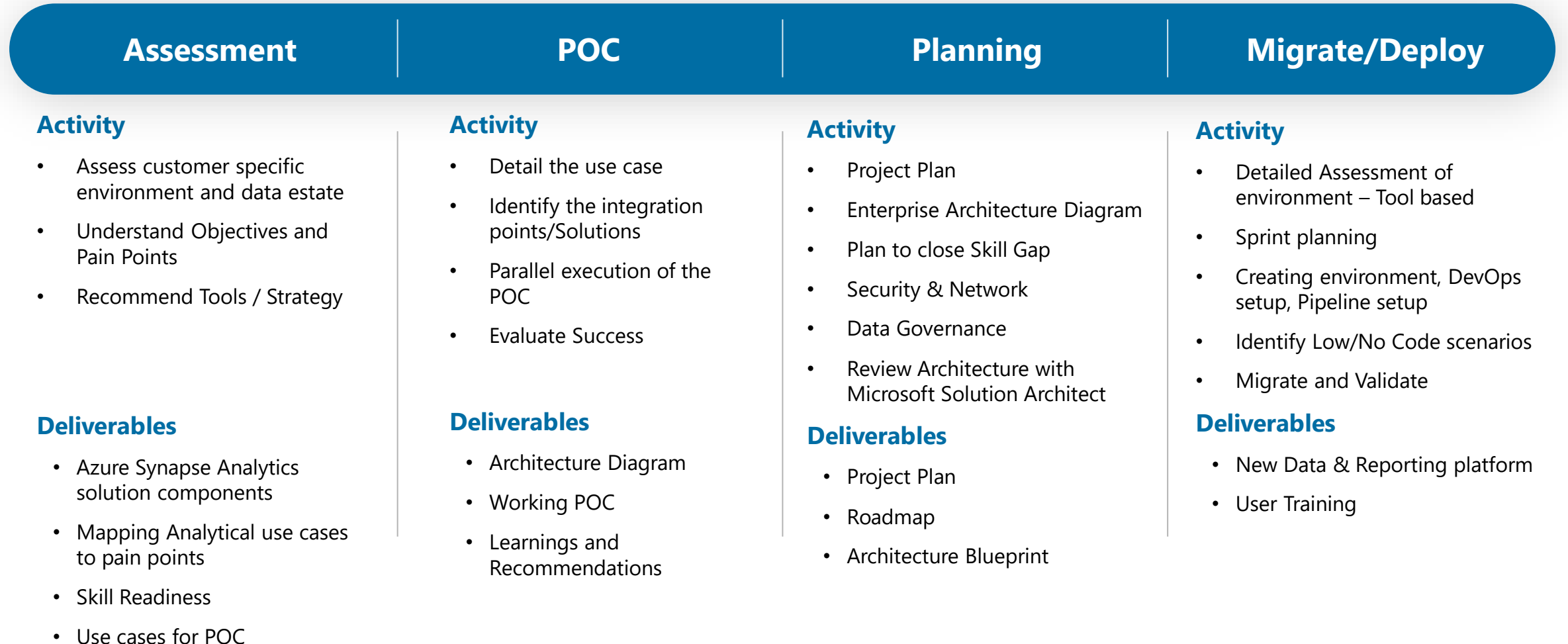
Block calendars with respective audience and go forward plan

# Phases of Virtual Assessment

Phase	Mode	Customer Attendee	Outcome
Engagement Kick-off	30-45 minutes Teams call	PTG-Customer	We will explain the process Block calendars for Information Gathering session
<b>Success by Design</b> Information Gathering	60-120 minutes Teams Call	PTG- Customer IT Director / Architect (TBD)	Gather information on the technical environment, Business needs, etc.
Analysis	Off-line	PTG	High level Project plan Azure Synapse Analytics solution components Skill readiness
Assessment – POV	60 minutes - In- person / Teams Call	PTG – Customer	Present <b>Success by Design</b> which includes <ul style="list-style-type: none"> <li>- Assessment of existing platform</li> <li>- Skill Readiness plan</li> <li>- Azure Synapse Analytics solution components</li> <li>- Jointly agree on POC</li> </ul>

We will have two virtual working sessions with you to gather the information and third session is to present our Strategy and Plan to you

# Success by Design – Data modernization Roadmap



Any Data Platform Modernization will have four phases. We will provide you inputs for all the four phases

# Post Data modernization - Roadmap

## Integrate

### Activity

- Use case identification
- Identify new insights and enable users

## Optimize

### Activity

- Identify opportunities for Automation

## Manage

### Activity

- Manage New data environment, CI/CD pipeline management

## Support & Maintenance

### Activity

- Break-fix
- Cost management support

# Success by Design – Information Gathering

Analyze the current data architecture and data management processes to understand gaps and blockers.

Workload Assessment	Personas	Transformation / Orchestration	Network & Security
<ul style="list-style-type: none"><li>• Environment</li><li>• Architecture</li><li>• Data Flow</li><li>• Data sources</li><li>• Data size, Growth</li><li>• Analytics</li><li>• DevOps</li><li>• SLA</li></ul>	<ul style="list-style-type: none"><li>• Platform owners</li><li>• Collaboration among personas</li><li>• Admin – provisioning, access</li><li>• Access controls</li><li>• Technology/skill level</li></ul>	<ul style="list-style-type: none"><li>• ETL / ELT tools used</li><li>• Batch processes</li><li>• Programming language for transformation</li><li>• Data visualization tools</li></ul>	<ul style="list-style-type: none"><li>• Data protection</li><li>• Access control</li><li>• Authentication</li><li>• Firewall, Virtual Network</li><li>• Threat protection</li></ul>

- Duration: 60-120 minutes
- Mode:
  - Teams Call
  - Q & A format
- Attendees:
  - Architects/Director for Data, Security, Infra, Network, Application

# SynapseMigrate Tool Sets from PeopleTech Group

## SynapseAssess

### DTSX Parser

Lineage information of DTS package, Package, table source, Lineage & Transformation

### DB Inventory

Inventory of DB objects - tables, views, SP, triggers, Functions

### SP-To-Table Parser

Dependency of Table inside SP and Views (DML and DDL statement)

### Schedule Parser

Automatic is the Scheduler. Lists Job Plans and Job dependency ( Built on UI Path)

### Data Lineage from Reports

Data Lineage tracking from reports to DB table mapping

## SynapseMigrator

### Table script migration utility

SQL Server to Synapse  
Distribution Keys

### SQL Incompatibility parser

SQL Server to Synapse

### Data Migration Utility

Migrate Data from on-Prem to ADLS/Synapse Optimizing throughput

### SSIS to SSIS-IR

Migrate SSIS packages to deploy on IR, converting to Synapse

### SSIS Code re-write to SPARK

SSIS/SP rewrite to use Pi Spark/Scale on Spark

### View re-write

Rewrite views to support Synapse Views

## SynapserTQA

### End-to-end automation via Bot for NFR

RPA (compare with on-prem)  
(measure throughput, record count, Order of jobs)

### ETL process and orchestration validation

Sequence of Jobs, Performance comparison

### Data Validation

Data set comparison between source and Synapse DB and Tables