Proof-of-concept for Microsoft Fabric

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Agenda

1. Recap of current team, key activities and resources
2. PoC scopes and objectives
3. Integration roadmap and technical approach
4. Project execution and stakeholder mapping
5. Evaluation plan and success metrics
6. Risk management and mitigation strategies
7. End-to-end analytics solutions on Fabric ecosystem
8. Summary and recommendations

Team Environment, Opportunities and Challenges

Understanding the current team setup and activities to identify key opportunities and challenges

Opportunities

1. Unified existing database platform
2. Integrated technological ecosystem
3. Effective expectation management through proof-of-concept (PoC) approach
4. Existing collaboration with stakeholders

Challenges

1. Diverse stakeholder objectives and expectations
2. User adoption
3. Limited human capital resources
4. Change management for smooth transition

Team Environment

Key Stakeholder Groups

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Stakeholder Engagement Activities

1. Monthly prioritization meeting
2. Bi-weekly spirit meeting
3. New user on-boarding meeting
4. ETL meeting with SMEs
5. Analytics training for users
6. Agile tactical meeting

Technical and Operational Activities

1. Weekly team check-ins
2. Operational tasks
3. Dashboard development
4. PoC for new initiatives
5. Data governance

Human Capital

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Technological Enablers

- SQL Server
- SSIS for data integration with applications and data sources
- Azure Data Connector for data ingestion to Power BI / Fabric
- SQL Server / Power BI / Fabric

Project Scopes, Objectives and Deliverables

Designing a scalable system architecture to enhance analytics capabilities by integrating Fabric features with existing data artifacts

Scopes

1. Utilize **Fabric features as the analytics platform** to meet the project needs.
2. Leverage **existing data artifacts** to provide advanced analytics capabilities.
3. Provision Power BI as a client tool to **facilitate collaboration between IT and users** for data visualization and analysis.

Objectives

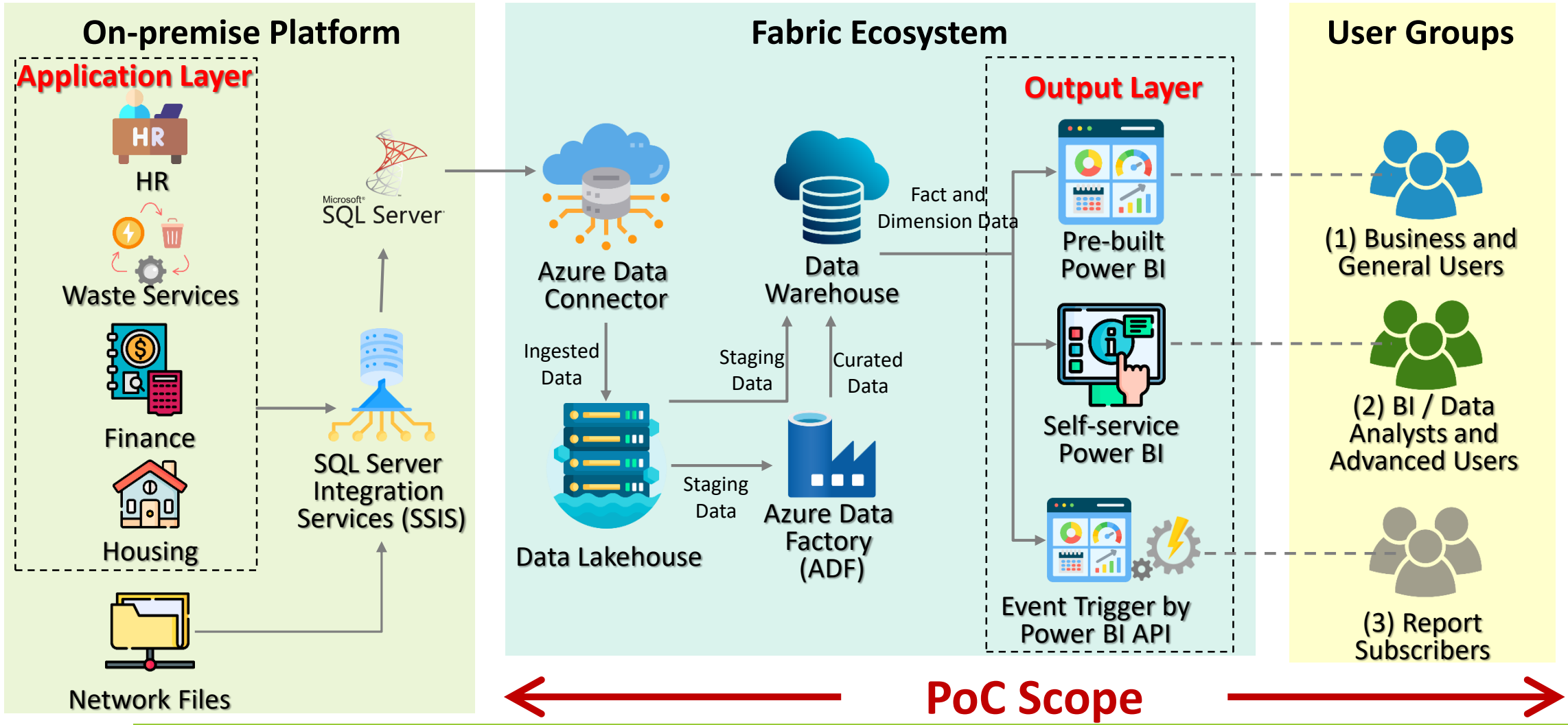
1. Design a system architecture that **integrates with on-premise architecture** and supports informed decision-making through Fabric.
2. **Mirror and transform existing data artifacts** to meet business requirements.
3. Share **data artifacts across departments** using Power BI**,** advancing **information sharing.**
4. Enable **self-service analytics** with Power BI, fostering a **data-driven culture.**

Deliverables

1. **Integration Roadmap**: System overview for integrating on-premise data artifacts with Fabric.
2. **Project Blueprint**: Detailed project plan outlining phases, timelines and stakeholder responsibilities.
3. **Team Formation and Stakeholders**: Core team members and optional members.
4. **Evaluation Plan and Success Metrics**: An evaluation plan defining success criteria and assessment criteria for full deployment.
5. **Risk Management and Mitigation Plan**: Identification of potential risks and development of respective mitigation strategies.

Integration Roadmap – SQL Server and Fabric

An integration roadmap to provision an unified analytics platform, which leverages existing data artifacts, to support end-to-end data visualization for diverse stakeholders



Project Blueprint – Timeline, Resources, Activities and Roles

Utilizing the PACE (Plan, Analyze, Construct, and Execute) framework to structure project activities, and the RACI (Responsible, Accountable, Consulted, and Informed) matrix to define stakeholder roles and responsibilities throughout the project lifecycle

PACE Framework	Key Activities	Milestones	Accountability and Responsibility in RACI Matrix *
Plan (Week 1 - 4)	Define use case, use requirements, stakeholder mapping, timeline, budget, and governance structure	1. Use case 2. Project plan and timeline 3. Budget and resource allocation plan 4. Project governance structure 5. Kick-off meeting	1. Business Analyst and Data Professionals support the Project Manager in defining the use case. 2. Project Manager obtains buy-in from users and proposes the project timeline, budget, and governance for approval by IT/Business Leaders.
Analyze (Week 5 - 8)	Identify technical gaps in architecture, data transformation needs, integration requirements, and reuse of data artifacts	1. Data architecture and integration plan 2. Data mapping and transformation 3. Technical gap analysis between Fabric and user requirements	1. Data Professionals lead the analysis, consulting with users as needed. 2. Project Manager integrates individual analyses and proposes a holistic solution, and engages users with ad-hoc issues for resolution.
Construct (Week 9 - 11)	Focus on technical implementation, including platform configuration, data pipeline, data transformation, and Power BI development	1. Platform provision 2. Data ingestion and pipeline development 3. Power BI report and dashboard creation	1. Data Professionals accountable for technical implementation. 2. Project manager ensures team collaboration and end-to-end integration, and engages users with prototypes for early feedback and expectation management.
Execute (Week 12 - 16)	Test and validate the PoC solution, provide training and support to users, and evaluate project outcome and success metrics	1. UAT plan and test results 2. User training and documentation 3. Project evaluation, post-launch monitoring and feedback collection 4. Project recap meeting	1. Data Professionals provide training and dedicated support during the test and post-launch period. 2. Project Manager evaluates project outcomes and success metrics, collects user feedback, and makes recommendations for review by IT/Business Leaders.

** The complete RACI Matrix analysis for each RACE phase is located in the Appendix.*

Collaboration and Stakeholders

The project team consists of core members, including the Implementation Team, Project Sponsors and Users, with optional support from the External Advisory Team and Governance and Oversight Team

Implementation Team

Responsible for designing, building, and deploying the data solution

Members:
- Project manager
- Business analyst
- Data engineer / architect
- BI developer
- BI security

Project Sponsors and Users

Provide strategic guidance, business requirements, and feedback to ensure the solution meets organizational needs

Members:
- End users
- IT leaders
- Business leaders

External Advisory Team (Optional)

Offer expertise and guidance to support the Implementation Team in delivering scalable platform setup and up-skilling the Implementation Team

Members:
- Microsoft vendor
- Implementation consultants

Governance and Oversight Team (Subject to Governance Framework)

Ensure the project compliances with organizational policies, procedures, risk management frameworks and strategic alignment

Members:
- Enterprise Risk Management
- Change Management
- Strategic Planning

Evaluation Plan and Success Metrics

Measuring the success of the PoC using technical, business, and user success criteria to inform the decision for full deployment

Project Success Criteria

Success Criteria	Criteria Details	Key Performance Indicators (KPIs)
Technical	1. System and data integration 2. Data structuring 3. System performance 4. Scalable system architecture	1. Data ingestion rate 2. ETL processing rate 3. Latency and throughput 4. System uptime 5. Power BI rendering time
Business	1. Cost saving 2. Decision-making capability 3. Innovation and data-driven culture 4. Sharing of data artifacts	1. Potential decommissioning of legacy and duplicated reports 2. Adoption of new data points and visuals in corporate meetings 3. User feedback survey results
User	1. User adoption 2. Self-service analytics capability	1. User logon rate 2. No. of data query requests to IT 3. User feedback survey results

Assessment for Full Deployment

Project criteria

- Technical
- Business
- User

Other criteria

- Finance
- Risk and Compliance Requirement

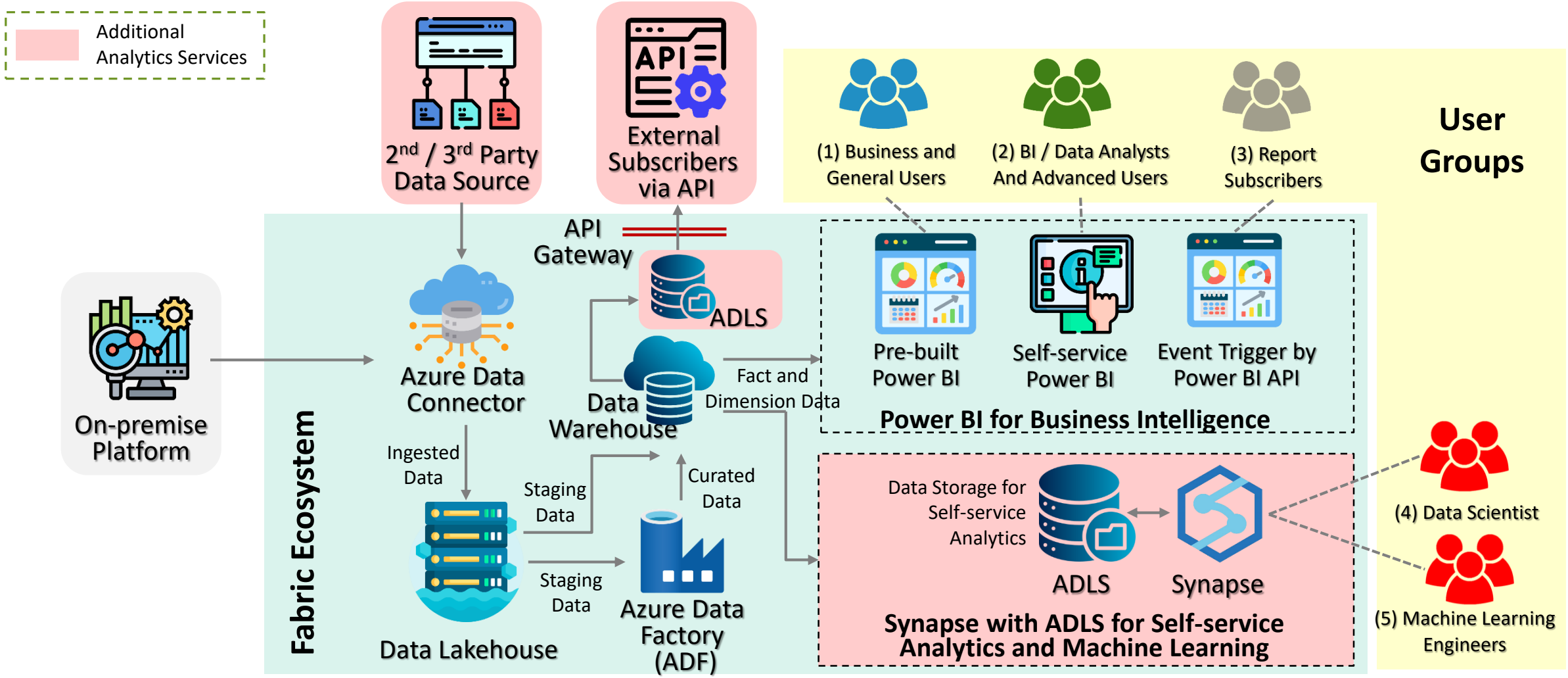
Risk Management and Mitigation Plan

Effective risk management and mitigation plan to ensure a smooth project execution and minimize potential disruptions

Risk Category	Risk Description	Likelihood	Impact	Mitigation Plan
Technology	Data security and protection	Medium	High	Implement robust security measures to protect sensitive data, including IP whitelisting, firewalls, authentication, data masking, and more
	Platform setup and configuration	Medium	Medium	Define a clear scope for the use case and ensure the initial platform provision meets business requirements
	System integration and compatibility	Medium	Medium	Conduct pre-launch system integration and connectivity test between on-premise and cloud platforms
People	Stakeholder engagement and buy-in	High	High	Develop a stakeholder mapping and establish project governance to define roles and responsibilities
	Lack of internal staff with required skills (e.g. Power BI, Fabric)	Medium	Medium	Hire external consultants or contractors to collaborate with internal staff, ensuring proper skill transfer during the consultation
	Insufficient training and support for users	Medium	Medium	Develop prototypes to manage user expectations and communicate training plan schedules in advance
Financial	Cost overruns and funding uncertainty	Medium	Low	Set up budget alerts in the platform for “pay-as-you-go” cost monitoring
Data	Data accuracy and completeness in data transformation processes	Low	Low	Establish data validation and verification for data transformation
External	Compliance risks	Medium	High	Ensure compliance with all relevant laws and regulations and organizational governance framework

End-to-end Analytics Framework on Fabric for Future Use

Designing a scalable end-to-end analytics framework on Fabric, integrating data ingestion, transformation, visualization, science, as well as collaborative data integration mechanic with external parties, to support future demands for data analytics



Summary and Recommendations

Summary

- The PoC project aims to design and implement a unified analytics platform on Fabric, integrating existing data artifacts on SQL server to support business decision-making through data visualization in Power BI.
- A comprehensive project plan has been developed, including clear activities, timeline and milestones using PACE framework, as well as roles and responsibilities in RACI matrix, and a risk management plan with mitigation approaches.
- An end-to-end analytics framework within Fabric ecosystem has been proposed to extend the solution to data science and collaborative data integration mechanic with external parties.

Recommendations

- Review the current IT project pipeline to identify a suitable use case for PoC implementation.
- Implement proper knowledge management to retain learnings from the project, including Infrastructure as Code (IaC), “pay-as-you-go” cost consumption, and resource provisioning, for future reference and application.
- Regularly review and update the project plan with stakeholders to ensure the project remains on track, and make necessary adjustment when needed to achieve its objectives.
- Consider applying the best practices and innovations identified in this PoC to future cloud initiatives to drive continuous improvement and optimization of the organization's analytics capabilities.

Appendix

1. PACE Framework and RACI Matrix for Microsoft Fabric Proof-of-concept Initiative


PACE and RACI