Azure Data Fundamentals for Non Profits

Course Overview and Learning Objectives

This 10-hour training program is designed to help nonprofit professionals understand how to effectively harness data to drive their missions forward. The course covers key concepts related to developing a comprehensive data strategy, using modern tools like Microsoft Fabric, Azure AI Foundry, and Microsoft Purview. Participants will learn how to align data strategies with organizational missions, democratize data across teams, and leverage AI for innovation.

Key Learning Objectives:

- ✓ Understand the Strategic Role of Data: Recognize how data drives mission success and influences decision-making in nonprofit organizations.
- ✓ Develop a Data-Driven Strategy: Learn how to transition from reactive technology purchasing to a proactive, data-driven approach that aligns with organizational goals.
- Build a Unified Data Ecosystem: Gain insights into creating a cohesive data environment using Microsoft Fabric, Azure AI Foundry, and Microsoft Purview for seamless data integration and management.
- ✓ Align Data Strategy with Mission: Explore methods for aligning data strategies with organizational missions, including the use of OKRs and KPIs to measure success.
- Enhance Data Quality and Governance: Understand the importance of data catalogs and governance frameworks in maintaining data quality and compliance.
- ✓ Democratize Data Access: Learn how to foster a culture of data literacy and collaboration within the nonprofit sector to enhance decision-making and program effectiveness.
- Leverage AI for Innovation: Discover how to utilize Azure AI Foundry for creating AI models, automating processes, and driving innovation in nonprofit operations.
- Implement Digital Feedback Loops: Explore practical use cases for continuous improvement in nonprofit programs through feedback mechanisms and real-time insights.
- Build a Resilient Data Ecosystem: Understand best practices for creating a scalable and flexible data ecosystem that can adapt to future challenges and opportunities in the nonprofit sector.

Table of Contents :

Module 1: Introduction to Nonprofit Data Strategy

- Overview: The Strategic Role of Data in Nonprofits
 - Importance of data for driving mission success.
 - Key trends in nonprofit data use, including digital transformation and AI adoption.
 - Success stories showcasing data-driven nonprofit strategies.
- Case Study: Contoso Nonprofit
 - Overview of Contoso's data challenges and how they adopted a comprehensive data strategy.
 - Introduction to Microsoft Fabric, Azure AI Foundry, and Microsoft Purview as solutions.

Module 2: From Reactive Technology Purchasing to a Data-Driven Strategy

- Challenges of Reactive Technology in Nonprofits
 - Problems with data silos and fragmented tools.
 - The hidden costs of maintaining multiple disconnected systems.
 - Common mistakes in technology acquisition.
- Building a Unified Data Ecosystem
 - Microsoft Fabric:
 - Unified platform for data management, engineering, and Bl.
 - End-to-end analytics with real-time processing.
 - Integrated AI and machine learning capabilities.
 - No-code orchestration for data workflows.
 - Real-time analytics for agile decision-making.

• Azure Al Foundry:

- Al integration within the unified data platform.
- Low-code/no-code AI model building and deployment.
- Real-time insights for predictive analytics (e.g., donor segmentation).
- Streamlined AI model deployment across multiple data sources.
- Microsoft Purview:

- Centralized data governance and compliance management.
- Data classification and lineage tracking.
- Ensures data compliance across cloud and on-premise environments.
- Scalable governance framework for growing nonprofits.

• Unified Ecosystem:

- Seamless integration of Fabric, Azure Al Foundry, and Purview.
- End-to-end data visibility and real-time decision-making.
- Practical example: Using Fabric for data consolidation, AI Foundry for insights, and Purview for compliance.
- Real-Life Example: How a nonprofit reduced costs and improved scalability by consolidating tools.

Module 3: Aligning Data Strategy with Mission and Objectives

- Building a Mission-Driven Data Strategy
 - Steps to align a data strategy with the organization's mission and goals.
 - Setting and using Objectives and Key Results (OKRs) and Key Performance Indicators (KPIs).
 - Examples of OKRs and KPIs for nonprofits (e.g., donor retention, program effectiveness).
- Action Plan for Realizing a Data Strategy
 - How to set up a One Lake using Microsoft Fabric.
 - Implementing a data governance framework with Microsoft Purview.
 - o Building and maintaining Data Products (reports, dashboards, visualizations).
 - How to leverage Azure Open AI/Azure AI Foundry to make the solution intelligent and efficient.

Module 4: Building Data Catalogs and Elevating Data Quality

- The Importance of a Data Catalog
 - \circ $\;$ What a data catalog is and why it is critical for data organization and access.
 - How to establish and manage a data catalog with Microsoft Purview.
 - Best Practices for catalog maintenance: Data classification, tagging, and metadata management.
- Ensuring Data Quality

- Creating and enforcing Data Governance Policies to maintain data security and compliance.
- Real-Life Example: How a nonprofit improved program outcomes by ensuring data quality.

Module 5: Democratizing Data & Leveraging AI for Innovation with Azure AI Foundry

- Fostering a Data-Driven Culture in Nonprofits
 - Promoting Data Literacy: Training and resources for team members.
 - Encouraging data collaboration and sharing across departments.
 - Real-Life Example: What democratized data improved decision-making and program success in a nonprofit.

• Innovating with AI and Azure AI Foundry

- Overview of Azure AI Foundry and its capabilities.
- Low-code/no-code AI model creation for nonprofits.
- Using Azure AI Foundry for donor segmentation, volunteer coordination, and program analysis.
- Automating insights and reporting using AI models.
- Real-Life Example: Leveraging Azure AI Foundry for predictive analysis to improve fundraising efforts.
- Creating Digital Feedback Loops with Azure AI Foundry for continuous improvement.

Module 6: Building a Resilient and Scalable Data Ecosystem

- Creating a Coherent Data Environment
 - How to build a unified data environment using Microsoft Purview, Fabric, and Azure AI Foundry.
 - Best Practices for managing a scalable, flexible data system.
 - Real-Life Example: A nonprofit's success in building a sustainable data ecosystem.
- Ensuring Future Resilience with Digital Feedback Loops
 - Creating feedback loops to refine operations, donor engagement, and program management.
 - Practical Use Cases: Volunteer coordination, pollution monitoring, and donor engagement analysis.