DataNOW Inc.
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DataNOW Masterclass: Business Intelligence with Microsoft Power BI

Course Title: DataNOW Masterclass: Business Intelligence with Microsoft Power BI
Duration: 7 sessions (3 hours per each)
Target Audience: Professionals and businesses seeking to harness the power of data through Microsoft Power BI

Mission Alignment: This course aims to empower participants by providing comprehensive, affordable, and customized training that meets the evolving needs of today's data-driven market.
Vision Alignment: Through this masterclass, we aspire to create a community of data-literate professionals capable of making informed decisions that drive innovation and success.
Core Values Integration:
- **Dedication**: Each session is meticulously crafted to ensure participants gain maximum value and practical skills.
- **Accessibility**: The masterclass is designed to be affordable and accessible to a diverse audience.
- **Transparency**: Clear and honest communication is maintained throughout the course.
- **Adaptability**: The syllabus is flexible to accommodate the latest trends and technologies.
- **Nurturing**: A supportive learning environment is fostered, encouraging collaboration and growth.
- **Optimization**: The curriculum is continually refined for optimal learning outcomes.
- **Workmanship**: Insights and best practices are shared, leveraging collective knowledge for better learning experiences.

Week 0: Course Introduction

Duration: 45 minutes

- Welcome and Introduction
- Overview of the Course Structure and Objectives
- Participant Introductions

Week 1: Introduction to Microsoft Data Analytics and Business Intelligence

Session 1: **Welcome and Course Overview**

- Objectives
- Agenda for the session

Session 2: **Introduction to Data Analytics**

- Definition and importance
- Data Analytics lifecycle

Session 3: **Business Intelligence Overview**

- What is Business Intelligence (BI)?
- Importance of BI in organizations
- Key components of BI

Session 4: Getting Started with Power BI

- Installing and setting up Power BI
- Navigating the Power BI interface

Session 5: Microsoft's Role in Data Analytics

- Overview of Microsoft's data analytics tools
- Integration with other Microsoft services

Session 6: Hands-On Activity

- Basic operations in Power BI

Week 2: Data Preparation and Business Intelligence Tools

Session 1: Data Preparation in Power BI

- Connecting to various data sources
- Importing data into Power BI

Session 2: Cleaning, Transforming, and Loading Data

- Shaping the data
- Data profiling techniques
- Enhancing the data structure

Session 3: Optimizing Performance and Resolving Data Errors

- Data quality best practices
- Troubleshooting common data issues

Session 4: Introduction to BI Tools

- Overview of popular BI tools (Tableau, QlikView, etc.)
- Comparison with Power BI

Session 5: Hands-On Activity

- Data preparation exercise in Power BI

Week 3: Data Modeling and Advanced Data Preparation

Session 1: **Designing a Data Model in Power BI**

- Introduction to data modeling
- Working with tables, dimensions, and hierarchies

Session 2: **Creating Model Calculations using DAX**

- Introduction to Data Analysis Expressions (DAX)
- Basic and advanced DAX functions

Session 3: **Optimizing Model Performance**

- Strategies for optimizing data models
- DirectQuery model optimization

Session 4: **Hands-On Activity**

- Data modeling and DAX exercises

Week 4: Data Visualization and Storytelling

Session 1: **Creating Reports in Power BI**

- Designing and enhancing reports
- Best practices for report design

Session 2: **Introduction to Data Storytelling**

- Importance of data storytelling
- Key elements of effective storytelling

Session 3: **Using Gestalt Principles in Data Storytelling**

- Overview of Gestalt principles
- Applying these principles to data visualization

Session 4: **Hands-On Activity**

- Creating a report and applying storytelling techniques

Week 5: Advanced Data Analysis and Visualization Tools

Session 1: **Advanced Analytics in Power BI**

- Advanced analytics techniques
- Gaining insights with AI visuals

Session 2: **Creating and Managing Workspaces**

- Setting up workspaces
- Sharing and managing assets

Session 3: **Exploring Different BI Tools**

- Deep dive into tools like Tableau, QlikView, etc.
- Comparative analysis

Session 4: **Hands-On Activity**

- Advanced analytics exercise in Power BI

Week 6: Security, Final Project, and Presentation

Session 1: **Implementing Row-level Security in Power BI**

- Understanding security features
- Best practices for data security

Session 2: **Final Project Introduction**

- Real-world scenario application
- Project requirements and expectations

Session 3: **Project Work**

- Applying learned concepts to the final project
- Creating dashboards, reports, and data models

Week 7: Security, Final Project, and Presentation

Session 1: Presentation and Feedback

- Presenting findings and insights
- Panel discussion and feedback

Session 2: Data Analysts' hour