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Introduction:

Currently pursuing a Master's in Business Analytics at The University of Texas at Dallas, equipping with advanced analytical skills and business acumen. Brings over 6 years of experience as a business analyst at leading global firms, specializing in data-driven decision-making and process optimization. Passionate about leveraging data analytics to drive strategic initiatives and enhance operational efficiency, contributing to organizational growth and success.

Projects:

- **Churn Prediction for Subscription-Based Services using Business Analytics techniques**

In today's hyper-competitive subscription market, escalating customer churn poses a significant threat, eroding profit margins and stunting growth across industries. With churn rates exceeding 5% monthly for many companies, businesses risk losing over half their customer base within a year, leading to a financial impact that can be catastrophic. Research indicates that reducing churn by just 5% can increase profits by 25% to 95%, yet many businesses struggle to predict or prevent customer departures. This project focuses on developing an advanced churn prediction model to address this critical issue. By accurately identifying customers at risk of churning and uncovering the key factors driving these departures, the project aims not only to reduce churn but also to improve customer loyalty and lifetime value. In doing so, the project supports sustainable growth and increased market share, positioning the company for long-term success in the subscription economy.

Methodology:

1. **Data Collection and Preprocessing**:
   - Customer data including subscription duration, usage patterns, service interactions, and payment history will be cleaned and preprocessed for analysis.

2. **Exploratory Data Analysis (EDA)**:
   - Using statistical tools and data visualization techniques, identify trends and correlations within the data.

3. **Modeling**:
   - Apply advanced analytics techniques such as classification process, clustering techniques, logistic regression, random forests, and impact analysis to build churn prediction models.
   - Evaluate model performance using metrics like accuracy, precision, recall, and ROC-AUC.

4. **Feature Importance**:
   - Analyze the most significant factors driving churn, helping businesses understand where to focus retention efforts

5. **Scenario Analysis**:
   - Test different churn reduction scenarios and assess the financial impact of churn prevention strategies.

- **Integrated Financial Management and Subscription Tracking: A Centralized Approach to Streamlining Personal Finance and Expense Monitoring**

This project aims to enhance Subscription and Financial Management Systems utilized by companies to optimize their financial tracking and reporting processes. By focusing on the design of a comprehensive system, the initiative seeks to provide companies with a consolidated framework for monitoring recurring expenses, including subscriptions, credit card payments, insurance policies, and bank accounts.

Through advanced data analysis and modeling, the project will generate valuable insights and financial summaries that enable organizations to identify opportunities for cost reduction and improved financial efficiency. The use of sophisticated analytics and visualization techniques will facilitate the development of a seamless interface that supports effective management of financial data from a centralized perspective.

The project also recommends the incorporation of predictive analytics to forecast future expenses, enabling companies to proactively adjust their financial strategies. By improving financial visibility and fostering informed decision-making, this project aspires to assist companies in refining their financial management strategies and aligning operational practices with data-driven insights. Ultimately, the goal is to create a robust framework that enhances the overall effectiveness of Subscription and Financial Management Systems, leading to better financial outcomes and operational excellence for organizations.

Methodology:

1. **Data Preprocessing and Normalization**: Cleaned and transformed raw data.
   - Removed missing values and duplicates.
   - Normalize financial metrics for consistency and comparability.

2. **Data Modeling**: Established a relational database schema.
   - Defined relationships between variables.
   - Created and modified necessary tables using SQL.

3. **Dashboard Creation**: Built an interactive dashboard.
   - Connected the cleaned data to Power BI.
   - Developed various visualizations to display key metrics.

4. **Analysis and Interpretation**: Analyzed dashboard metrics.
   - Reviewed trends and statistical methods to identify cost reduction opportunities and forecast future expenses.

5. **Iteration and Improvement**: Continuously improved the dashboard.
   - Incorporated testing results for usability enhancements.
   - Updated data to reflect new insights.

Certifications:

While I possess strong skills in business analytics concepts gained through my professional experience and coursework, I am currently pursuing the following certifications to deepen my expertise and stay updated with the latest industry practices.

- **Graduate Certificate in Business Decision Analytics (**April 2025)

Through the Graduate Certificate in Business Decision Analytics, I will gain comprehensive knowledge and practical skills in statistical methods tailored for data modeling and engineering needs. This program will deepen my understanding of predictive and prescriptive analytics, equipping me to analyze complex datasets effectively.

Key learnings will include:

• Mastering **advanced statistical techniques** to analyze data from both observational studies and experimental designs, enhancing my ability to communicate insights clearly to business stakeholders.
• Developing analytical models and tools that enable the identification of opportunities and challenges within business operations, allowing for informed decision-making that can enhance competitive advantage.
• Gaining expertise in **econometrics and time series analysis**, which will enable me to analyze cross-sectional and panel data effectively, thereby improving my capability to predict and prescribe business outcomes.

This certification will not only enrich my analytical skill set but also prepare me to apply these concepts in real-world enterprise settings, ultimately contributing to more strategic business decision-making.

- **Graduate Certificate in Analytics for Managers (**December 2025)

The Graduate Certificate in Analytics for Managers will provide me with a robust foundation in data analytics applications specifically designed for business contexts. This program will emphasize the importance of data modeling, visualization, and the effective communication of insights.

Key learnings will include:

• Acquiring statistical methods to analyze data, which will strengthen my capability to derive actionable insights from both observational studies and experimental designs.
• Understanding the key business drivers and platforms for business analytics, which will help me align data analytics initiatives with organizational goals and strategies.
• Gaining proficiency in technologies and techniques for effective data visualization, including data wrangling and insight modeling, allowing me to present complex information clearly and persuasively.

This certification will empower me to leverage data analytics effectively, enabling me to make informed decisions and contribute to data-driven strategies within an organization.