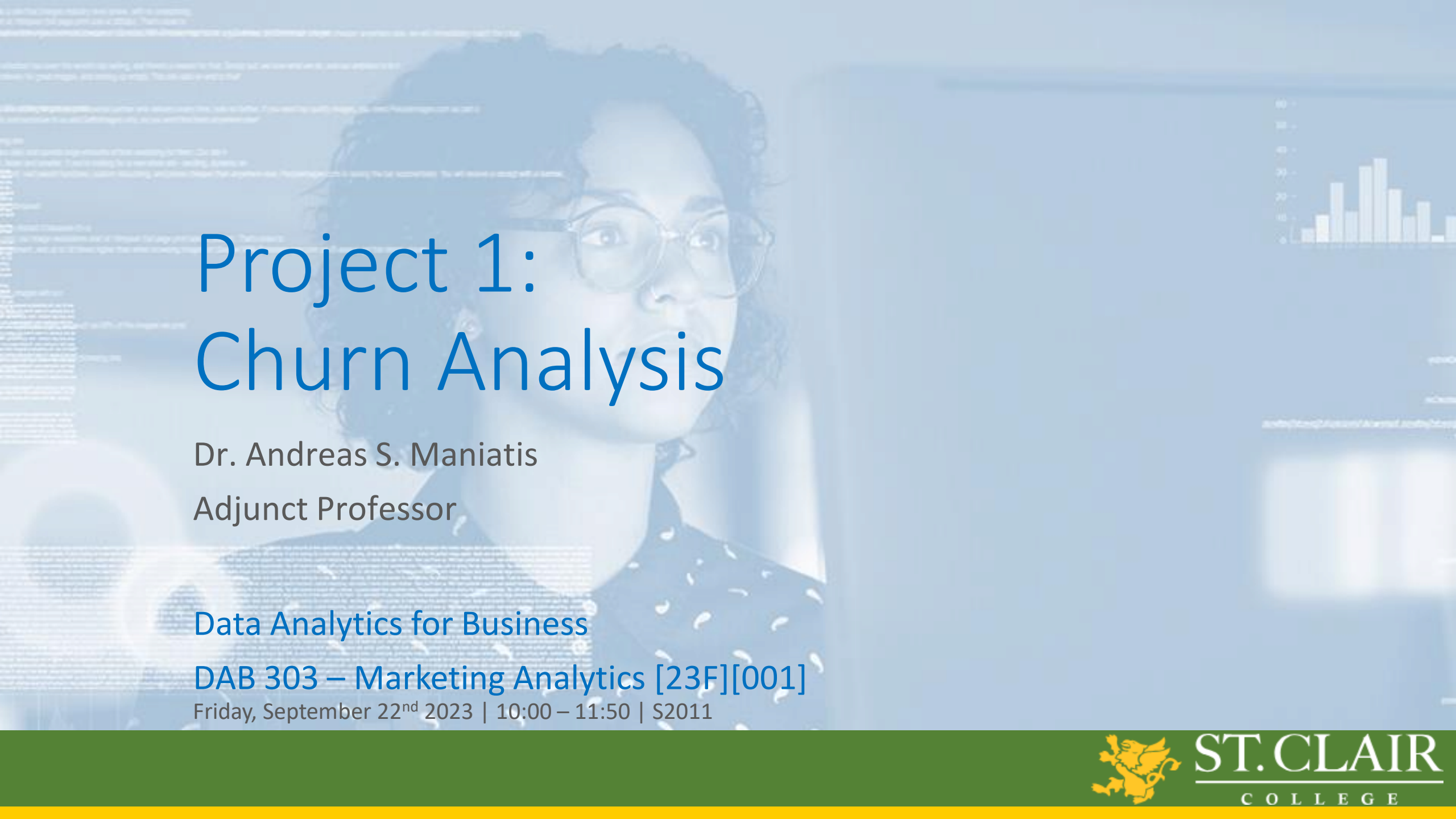

Project 1: Churn Analysis

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Data Analytics for Business

DAB 303 – Marketing Analytics [23F][001]

Friday, September 22nd 2023 | 10:00 – 11:50 | S2011

ST. CLAIR COLLEGE

Agenda

- Business objective of the project
- Churn rate Description
- Implementation methodology
- Submission details

Business Objective

Business Objective of the Project

- Perform analysis of the customer base of an e-commerce site, determine the characteristics of the individuals who have stopped using the service (known as “customer churn”), and devise strategies to target similar individuals
- Enable the retention team to have the list of likely churn customers from the churn model created with the help of churn predictive analysis
- Reduce customer churn by proactively contacting customers likely to churn

Churn Rate Description

Churn Rate Description

- Churn Rate captures the number of people a business can retain at the end of a time period.
- Retaining customers that are already acquired is very critical for the growth of a business.
- Churn Rate is often adopted by companies using a subscriber-based service model, for example in the telecommunication industry.
- To calculate the customer churn rate, you need:
  - Customers at the beginning of usage interval
  - Customers at the end of the usage interval
- Churn prediction estimates the likelihood that a customer will leave based on previous behavior and feedback so that we can choose the marketing strategy and business plans that would possibly the retain existing customer
- Churn analysis should tell whether the current customers will leave or stay, help the causes of client cancellations to develop a strategy to reduce them

Methodology

Methodology (I)

- The project is spread over 2 weeks and is completed in 2 parts
- Similar code will be presented (Jupyter Notebook). You need to:
  - Adapt the code to the current dataset
  - Secure that the final code is error free, and
  - Explain the code with commenting
- Reporting/presentation must include insights (through visualizations), and recommendations

Methodology (II)

1. Data Import
2. Data Overview
3. Data Cleansing
4. Exploratory Data Analysis (EDA)
5. Variable distribution in Churn and non-Churn Category
6. Create various visuals using Python Packages
7. Variable Summary
8. Correlation Matrix
9. Data Pre-Processing for Model Building
10. Model Building

Methodology (III)

- Prepare a final report document/presentation:
  - Record your observations with respect to the customers who have already churned,
  - use your findings to identify the groups of people most likely to churn next, and
  - devise a high-level marketing strategy to entice these individuals to continue using the service.

Submission

Submission

Submission will be done via Blackboard, and it will be group submission, including:

- One file per group (in .zip format):
  - Jupyter Notebook/lab file (.ipynb)
  - Exported Jupyter notebook in html (.html)
  - Report (.pdf) and presentation (.pptx)

Thank you!

Questions?

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