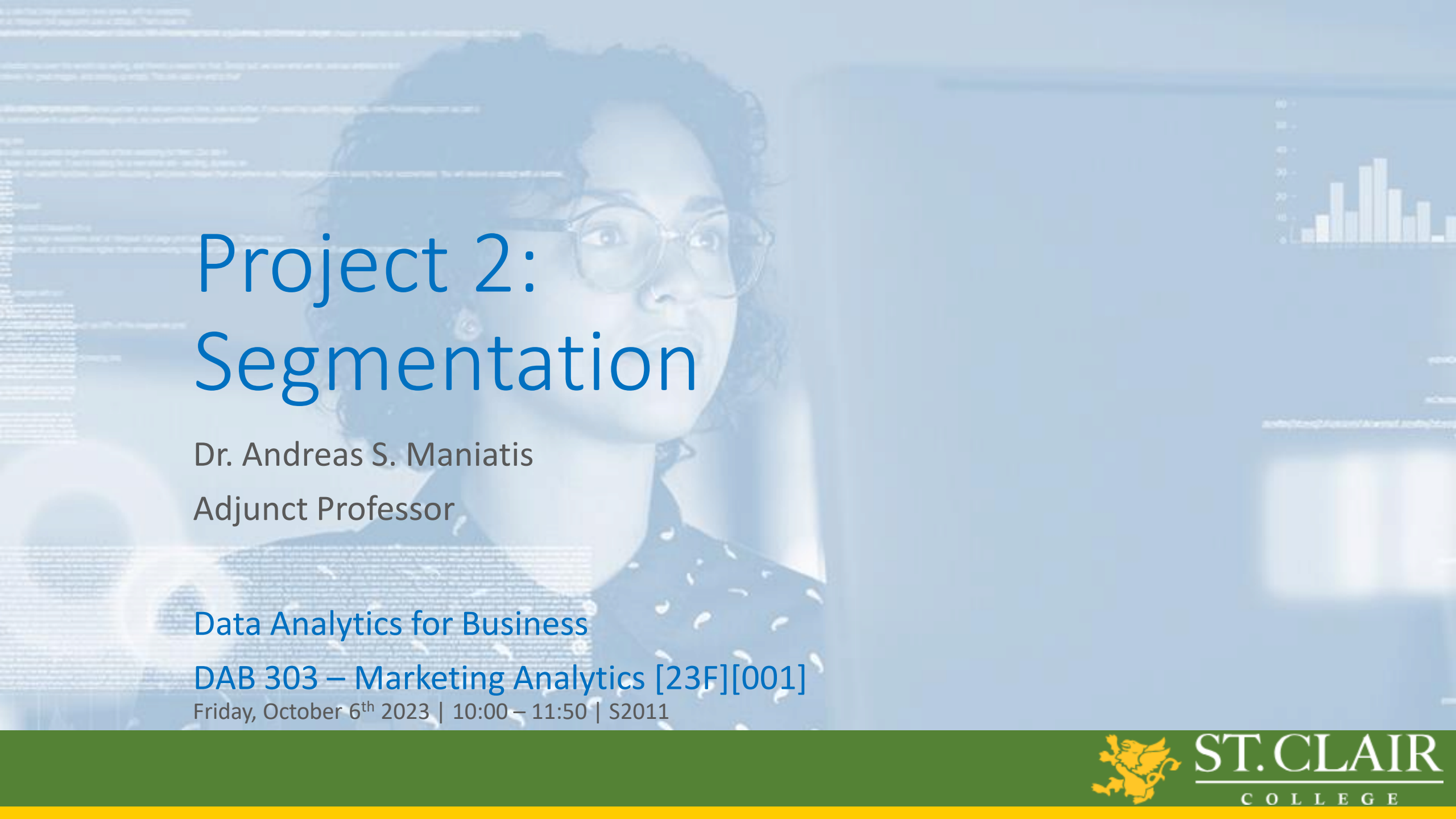

Project 2: Segmentation

Dr. Andreas S. Maniatis

Adjunct Professor

Data Analytics for Business

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

Friday, October 6th 2023 | 10:00 – 11:50 | S2011

ST. CLAIR COLLEGE

Agenda

- Business objective of the project
- About Segmentation
- Implementation methodology
- Submission details

Business Objective

Business Objective of the Project

- Understand and gain insights from a retail dataset, by performing various exploratory data analysis, data visualization, and data modelling tasks
- Focus specifically on Segmentation (notions, applications, etc.)
- Performa Advanced Data Science Analysis

Segmentation Description

Segmentation Description

- In marketing, *Market Segmentation* is the process of dividing a broad consumer or business market, normally consisting of existing and potential customers, into sub-groups of consumers (known as segments) based on shared characteristics
- In dividing or segmenting markets, researchers typically look for common characteristics such as shared needs, common interests, similar lifestyles, or even similar demographic profiles
- The overall aim of segmentation is to identify high yield segments – that is, those segments that are likely to be the most profitable or that have growth potential – so that these can be selected for special attention (i.e., become target markets).
- Many ways to segment a market have been identified:
  - Business-to-business (B2B) sellers might segment the market into different types of businesses or countries
  - Business-to-consumer (B2C) sellers might segment the market into demographic segments, such as lifestyle, behavior, or socioeconomic status

Methodology

Methodology (I)

- The project is spread over 2 weeks and is completed in 1 part
- Description of the various steps will be presented (Jupyter Notebook). You need to:
  - Review the provided code
  - Run the code,
  - Secure that the final code is error free,
  - Explain the code with commenting, and
  - Include all code output on the Jupyter Notebook
- 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?

Dr. Andreas S. Maniatis
Adjunct Professor
AManiatis@StClairCollege.ca
http://www.linkedin.com/in/andreasmaniatis

ST. CLAIR COLLEGE