

The background of the slide is a light gray gradient, decorated with numerous realistic water droplets of various sizes. Some droplets are in the top left corner, others are scattered in the middle, and a cluster of larger droplets is in the bottom right corner. The droplets have highlights and shadows, giving them a three-dimensional appearance.

CA 30%

BUSINESS ANALYTICS 2017

INTRODUCTION

- FOR THIS ASSIGNMENT YOU ARE REQUIRED TO:
 1. PREPARE AND ANALYSE THE DATA IN THE INSURANCE.XLS WORKBOOK. (20%)
 2. WRITE A SUMMARY REPORT DETAILING THE WORK COMPLETED. (10%)
- THE SKILLS TO BE DEMONSTRATED WILL BE BASED ON BOTH LECTURES AND LABS AS WELL AS SELF DIRECTED LEARNING.

THE DATASET

- INSURANCE DATA RELATES TO CUSTOMERS THAT HAVE OR HAVE HAD POLICIES, THE PREMIUMS, LENGTH OF SERVICE, TIME UNTIL RENEWAL ETC, THE ASSOCIATED SALES REPS AND THEIR SUPERIORS, THE LEDGER OF ALL TRANSACTIONS.

THE DATASET

- INSURANCE POLICY DATA.
 - LEDGER2012: TRANSACTIONS FOR THE YEAR (10-12)
 - SALES REP 2012: SALES REP DETAILS
 - SALESREPALLSUPERIORS2012: SALES REPS SUPERIORS
 - CUSTOMERS 2012: CUSTOMER DETAILS (02-12)
 - POLICY 2012: POLICY DETAILS

GENERAL REQUIREMENTS

- USE OF INSURANCE DATA
- CHOOSE ONE USER (FOR EXAMPLE:)
 - CFO
 - CEO
 - MARKETING MANAGER
 - CUSTOMER SERVICE MANAGER,
 - SALES REP
 - SALES MANAGER
- DATA PREP AND ANALYSIS, DESCRIPTIVE STATISTICS, PIVOT TABLES, GRAPHICAL PRESENTATION OF THE FINDINGS
- SUMMARY REPORT
- ALL YOUR OWN WORK.

1. DATA PREP AND ANALYSIS

- THE DATA REQUIRES CLEANING PRIOR TO BEING ANALYSED.
 - THERE ARE MISSING VALUES, UNUSABLE DATA, INCONSISTENT VALUES, AND INCONSISTENT DATE FORMATS.
- YOU MAY CHOOSE A SUBSET OF THE DATA SHEETS ON WHICH TO PERFORM YOUR ANALYSIS.
- ANALYSIS OF THE DATA USING EXCEL TO PRODUCE SUMMARY STATISTICS AND PRESENTATION OF THE DATA IN VISUAL FORM (CHARTS, BOX PLOTS, SCATTER ETC).

1. DATA PREP AND ANALYSIS

- THE ANALYSIS SHOULD PROVIDE AN OVERVIEW OF THE DATA TO A PARTICULAR USER, FOR EXAMPLE A SALES MANAGER OR CUSTOMER SERVICE MANAGER. THIS OVERVIEW MAY BE OF ONE, TWO OR ALL YEARS OF THE DATA.
- YOU MUST FIRST FAMILIARISE YOURSELF WITH THE DATASET, UNDERSTAND THE DATA AND THEN CHOOSE WHAT DATA IS SUITABLE FOR THE USER CHOSEN.
- THIS DATA PREPARATION AND ANALYSIS IS TO BE YOUR OWN WORK AND REPORTED IN THE FINAL DOCUMENT.

3. SUMMARY REPORT

- A SUMMARY REPORT THAT DETAILS THE DATA ANALYTICS PROCESS UNDERTAKEN.
- THE REPORT SHOULD INCLUDE DETAIL ON:
 - DATA DISCOVERY (FAMILIARISATION WITH THE DATASET, DESCRIPTIVE STATISTICS, CHARTS ETC)
 - DATA PREPARATION (ENSURING GOOD QUALITY DATA)
 - EXPLORATION AND ANALYSIS OF DATA
 - PRESENTATION OF THE FINDINGS USING APPROPRIATE GRAPHICAL MEANS
- THE REPORT SHOULD INCLUDE ALL SUMMARY STATISTICS AND DATA ANALYSIS CONDUCTED DURING THE DATA DISCOVERY AND PREPARATION STAGES IN RELATION TO THE USER GROUP CHOSEN.

GRADING SPECTRUM

Data Preparation	Data Analysis	Data Presentation	Report
Basic cleaning	Basic analysis conducted	Simple charts and descriptive statistics	Outline of work conducted
Complete data discovery and data prep suitable for user group	Complete analysis using method taught	Well thought out use of various appropriate charts	Detailed report
Additional transformations and data created	Additional data used, advanced analysis with some new methods	Clear, complete and appropriate presentation using new methods	Complete, well written report with rationale for approach
Data discovery and data prep to very high standard	Advanced analysis demonstrating self directed learning, identification of valuable insights in the data	Advanced presentation of findings	As above

MARKING SCHEME

- <40% (FAIL): POOR DATA PREP AND ANALYSIS CONDUCTED. VERY FEW FEATURES HAVE BEEN IMPLEMENTED. THE DASHBOARD CONTAINS ERRORS THAT PREVENT IT FROM BEING DISPLAYED PROPERLY (E.G., SOURCE DATA ERRORS).
- 40 - 50%: SUMMARY REPORT CONTAINS ADEQUATE DETAILS ON WORK COMPLETED. SUFFICIENT DATA PREP AND ANALYSIS CONDUCTED TO PRESENT FOR THE USER GROUP CHOSEN. STUDENTS HAVE IMPLEMENTED MOST OF THE DASHBOARD FEATURES REQUESTED. THE DASHBOARD CAN BE DISPLAYED WITH NO ERRORS.
- 50-69%: SUMMARY REPORT WELL WRITTEN WITH DETAILS ON EACH STAGE OF THE THE PROCESS. VERY GOOD DATA PREP AND ANALYSIS CONDUCTED AND DOCUMENTED WITH APPROPRIATE GRAPHICAL PRESENTATION OF THE WORK (USING SOME NEW METHODS).
- 70% OR MORE: SUMMARY REPORT VERY WELL WRITTEN WITH ADDITIONAL MATERIAL INCLUDED AND RESEARCH CONDUCTED. STUDENTS HAVE DEMONSTRATED ALL THE ABOVE TO A HIGH LEVEL OF PROFICIENCY (E.G., VISUAL AND TECHNICAL QUALITY). IN ADDITION THE STUDENT HAS DEMONSTRATED INDEPENDENT LEARNING BY ADDING SOME FUNCTIONALITIES THAT HAVE NOT BEEN COVERED DURING THE CLASSES OR LABS

PROJECT ONE: ORIGINALITY

- THE PROJECT MUST BE YOUR OWN WORK AND I WILL VERIFY THE ORIGINALITY OF THE WORK AGAINST THE WEB + OTHER STUDENT SUBMISSIONS.
- IF YOU DO RE-USE TECHNIQUES SOURCED EXTERNALLY, I EXPECT
 - YOU TO UNDERSTAND THESE TECHNIQUES
 - SPECIFICALLY INCLUDE A REFERENCE TO THE SOURCE OF THE TECHNIQUE (FAILURE TO ATTRIBUTE IS CONSIDERED PLAGARISM)

http://www.wit.ie/images/uploads/Polines_PDF/Academic_Regulations.pdf

PROJECT ONE: DELIVERY

THE ZIPPED SUBMISSION SHOULD INCLUDE:

- EXCEL DATA FILE AFTER DATA PREP WAS CONDUCTED
- SUMMARY REPORT
- ALL CONTENT NEEDS TO BE INCLUDED IN A ZIPPED FOLDER LABELED WITH YOUR STUDENT NUMBER

PROJECT ONE: SUBMISSION

- THE PROJECT NEEDS TO BE SUBMITTED ON OR BEFORE THE DEADLINE
- LATE SUBMISSION WILL RESULT IN A REDUCED MARK OF 5% FOR EACH DAY LATE.
- THE ASSIGNMENT NEEDS TO BE SUBMITTED VIA MOODLE USING THE DEDICATED SUBMISSION FOLDER
- ALL CONTENT NEEDS TO BE INCLUDED IN A ZIPPED FOLDER LABELED WITH YOUR STUDENT NUMBER.
- DUE DATE FOR HANDUP IS SUNDAY 19TH NOV BY 11:00PM USING ASSIGNMENT DROPBOX ON MOODLE IN THE MODULE ASSESSMENT AND RESOURCES TOPIC AREA.