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| https://lh6.googleusercontent.com/ENp5iVIZzIHv2b4n4mkS4vHt4UkEBlWYmz738CY-LLW4hqPglKHQ6jUh7UR0d4Ymmrr709Maa1nSxWlKGCsAkajArO1QhFOMQzxwHhEhk0zqlMRi4_H7oj2RIxwzkiz_qKiY_Giy | **Work Integrated Learning Programmes Division**  **M.Tech (Data Science and Engineering)** |

**Data Visualization & Interpretation   
(DSECL ZG555))**

**First Semester, 2020 -21**

**Assignment 1 – PS2 - [BANKING DATA ANALYSIS] - [Weightage 12%]**

1. **Problem Statement**

You work for one of the leading Banks as a data analyst. The bank has a very huge customer base. Along with the routine banking operation support, the bank also has a diversified product portfolio, which is also made available to the bank customers from time to time. For this purpose, the bank’s marketing department runs several campaigns and many details about those campaigns are documented properly. Time to time, the marketing executives refer back to this recorded data in order to figure out the success rate of the campaign.

When the marketing campaign is run, the customers are selected randomly from the huge customer base of the bank. The marketing executives of the bank contacts these customers in order to make them aware of the different banking products that are offered by the bank and to enable them to make purchases of such products either through online mode or offline mode. As the potential customers are selected randomly, the success rate of the campaign varies a lot from each other run of the campaign. The bank’s marketing team has taken a note of this variance and decided to figure out the contributing factor for this change in success rate. They have concluded that instead of selecting the customers randomly, a proper process needs to be in place so that right potential customers are identified and further on those only should be contacted with the product offerings.

For this purpose, they have assigned you a task of data analysis of earlier run campaigns data in order to figure out what are the contributing factors that help in successful conversion of phone conversation into purchase of the product. Then these contributing attributes will be accommodated in the process of potential customer finding and targeting.

For this exercise, use the below dataset





You can make use of Tableau Desktop tools for Exploratory Data Analysis in order to figure out the most significant attributes that help in product purchase. If required, feel free to make proper assumptions about the data and the analysis process to be followed. Don’t forget to mention the assumptions at the right places

With the EDA carried out, you should prepare a dashboard for the **Marketing department leaders**, which will enable them to augment the customer finding process with the right set of attributes.

**The objectives include**

1. Clearly demonstrate the Visualisation Context.

What questions are you trying to answer/display in your visualizations? Write these as specific questions. You need to come up with 3 questions at least, each of which will be answered using one Viz.

1. Chart 1: What type of viz did you create? Why did you select the viz that you did?
2. Chart 2: What type of viz did you create? Why did you select the viz that you did?
3. Chart 3: What type of viz did you create? Why did you select the viz that you did?
4. For each of the Visualisation, identify at least 3 Gestalt principles employed.
5. For each of the Visualisations, mention the pre-attentive attributes used and how you strategically used them to draw the audience's attention.
6. Create your dashboard
7. **Deliverables**

Zipped file containing

* The word doc with answers to question 1 through 6 above.
* The tableau workbook containing the dashboard.
* The file name should be the respective group name.

1. **Deadline**

* The strict deadline for submission of the assignment is **< January 07, 2021> EoD.**
* Late submissions won’t be evaluated.

1. **How to submit**

* This is a group assignment.
* Each group consists of up to 3 members. All members of the group will work on the same problem statement.
* Each group should zip the deliverables and upload in CANVAS in respective locations under ASSIGNMENT Tab.
* Assignment submitted via means other than through CANVAS will not be graded
* **The Assignment is released with the current groups formed as this point in time. There are many groups with Zero members now.**

**If one of you or more than one of you end up being shifted to the other group on your own or by operations, your Assignment number will be the one that is mapped to that Group no and not your old group number from where you have been shifted out.**

**If your submission is the Problem statement of your old group no, then the submission is considered void and awarded Zero marks.**

1. **Evaluation**

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| **Sl. No** | **Criteria** | **Description** |
| 1 | Data Preparation + Effective usage of context  (15%) | * Clearly identify the context using the concepts learnt in the class * Use the design principles and strategies while drafting the presentation |
| 2 | Choice of appropriate visuals  (25%) | * Identify the appropriate visuals while communicating the message |
| 3 | No clutter in the visuals  (25%) | * The visuals presented should not have any unwanted elements that reduces the understanding of data |
| 4 | Audience attention  (10%) | * The visuals presented should have the right kind of visual clues that help the audience to focus the attention wherever required. |
| 5 | Effective Dashboard  (25%) | * Use Principles of Effective Dashboard Design to come up with an interesting Dashboard. |

**ALL GROUP MEMBERS WILL BE CREDITED THE SAME MARKS.ITS INDIVIDUAL’S RESPONSIBILITY TO ENSURE HIS/HER PARTICIPATION AS WELL AS TEAM’S RESPONSIBILITY TO ENSURE EVERYONE’S PARTICIPATION.**