Big Data Analytics Project Close-Out

# Project Summary

**Project Description:**

Customer segmentation and profiling is they key objective of this paper. We found what attributes does a customer has to have to be segmented in one bucket and does it work to predict future purchases and total amount based on the segmented buckets. To simply managed the focus is on behaviour modelling of consumers and on the method-oriented part of this research.

There were other few areas where this project focused and those are:

• Sales surge in specific time of the year due to festivals.

• Any particular product sold more in specific season.

• Price difference for products sold in different continents and so on.

**Project Objective:**

Some of the goals of customer segmentation are:

• Segment customer based on buying pattern and geography.

• Top selling products across the world and segment of customer buying it.

• Highest shipping charges for products and finding the reason behind it.

• Predicting future sales of specific product based on histogram for that product and region.

• Find out top highest profit-making products and top sales region with lowest profit-making products and its region.

• Visualization of all the results using Microsoft Power Business Intelligence Tool.

**Project Scope:**

• Geographically segmenting consumers for distribution as tailored adverts for consumers in specific areas.

• Finding Customers who spends more on specific items based on geography.

• To increase leads and brand exposure, marketing, for instance, might create and customize material to appeal to, educate, and satisfy the demands of audience members.

• Identifying if specific product is in demand in a particular region and if the customer is ready to pay more for it to be delivered quickly.

• Creating a model which would funnel down the products and give us the top performing product globally and then a breakdown for it in a country and then in a city.

• A few of the questions which are at the top priority for this research now are mentioned below in the project purpose section and this Analysis of segmentation efforts will reveal how clients are arranged, allowing for updates and alterations as necessary.

• Creating an analytical model which would give us the products which are highly discounted and if even after discounts, are they making good profit.

# Completion Criteria

Identify the criteria required to complete the project.

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| --- | --- | --- |
| **Item** | **Completion Criteria** | **Complete** |
| Data Cleaning | Fixed structural errors, filtered errors, merged datasets | Y |
| Data Sorting | Format data, sort algorithm | Y |
| Data Ready for Analysis | Created, deploy and debug model | Y |
| Secondary Analysis | Use Apache hive, checked for Hive vs PowerBi | Y |
| Concluding Analysis | Finalize report structure, selected visuals, concluded with report | Y |
| Handing Deliverables | Recapitulate milestones, report handover, transform of PowerBi dashboard | Y |

# Project Close-Out Package

This section details all items that are contained in the Project Close-Out Package. Detail all deliverable items referred to in the Project Charter.

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| **Item** | **Method of Delivery** | **Complete** |
| Final Presentation | All the ppt files and relevant document file has been shared in the SharePoint | Y |
| PowerBi Dashboard | .pbix file shared in SharePoint and GitHub | Y |
| Apache Spark | .ipynb file shared in SharePoint and GitHub | Y |
| DataSet | excel file shared in SharePoint and GitHub | Y |
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# Document Approvals

This section lists the significant stakeholders related to the project

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| --- | --- | --- | --- |
| **Project Role** | **Name** | **Signature** | **Date** |
| Client | Richard Lambroff |  | 3/29/20 |
| Project Manager | Brunilda Xhaferllari |  | 11/29/22 |
| Student 1 Role | Nikhil Sharma – Team Leader | nikhil | 11/29/22 |
| Student 2 Role | Romil Patel - Business Analyst | romil | 11/29/22 |
| Student 3 Role | Hunny Kikaganesh - Developer | hunny | 11/29/22 |

Our SharePoint link is:

<https://georgiancollege.sharepoint.com/sites/CustomerSegmentationItsImpactGlobally>