

Data-Driven Consumer Grouping using Classification Algorithm

DISSERTATION

Submitted in partial fulfillment of the requirements of the

MTech Data Science and Engineering Degree programme

By

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Under the supervision of

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CERTIFICATE

This is to certify that the Dissertation entitled Data-Driven Consumer Grouping using Classification Algorithm and submitted by Mr. Saravanan M ID No.2019ab04162 in partial fulfillment of the requirements of DSECLZG628T Dissertation, embodies the work done by him under my supervision.

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DSECLZG628T DISSERTATION

Dissertation Title: Data-Driven Consumer Grouping using Classification Algorithm

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Abstract

We live in an era where e-commerce companies have endless supply of data. Analyzing such data is an important need. In the information-driven world, data plays an essential role in revolutionizing the e-commerce industry. In this modern era of innovation, where there is large competition to be successful, the business strategy needs to be modernized. One of the important challenges which e-commerce companies face are diagnosing the target potential consumer groups. This is where Machine Learning comes into play, the various algorithms are applied to identify the hidden patterns in the data for better decision making. Consumer grouping is the division of potential consumers in each market into discrete groups based on common characteristics, which allows companies to market each group effectively and appropriately. Given current competition within the market, it is essential to understand customer behavior, their types and their interests. Especially in targeted marketing, categorizing and understanding customers is a crucial step in forming effective marketing strategies. By creating consumer groups e-commerce companies can focus on one group of consumers at a time and tailor their marketing strategies. In this paper, I am making use of an e-commerce data over a period of one year. With this available information, I would create a classifier that allows to anticipate the type of purchase that a consumer group will make.

Key Words: e-commerce, consumer, data, classification, machine learning, consumer groups, classifier models, data model, business strategies, marketing.

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Dissertation Outline

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