CA1 – Business Analytics

Github link : <https://github.com/RiddleASL/CA1-Tims>

# Business Problem 1 – Interpretation of Findings

The information from each task that has been carried out can assist Alexa sales and management decisions in the following ways:

1. Cleaning up the data: This ensures that the data included is complete for a more reliable analysis
2. Top salespeople: This allows Alexa to actively see who is engaging with the community as well as who may be able to hand the responsibilities for future training and leadership roles.
3. Sale Amount: Alexa can now view their overall sale performance and identify high-value and well received products.
4. Sale amount per City: Allows the optimization for marketing.
5. Top 5 of each Category and Bike Sales: Optimize the inventory and view what products may need more advertising efforts.
6. Segment (channel) and Category: Target specific channels that have a higher or lower user rate to help decide future marketing campaigns.
7. Sale Analysis: By investigating a successful sale and looking at reoccurring patterns, this could be used for future reference.
8. Consumer Analysis: By selecting a specific demographic, you can use the data gathered for how to proceed with marketing.
9. Commissions: This allows you to evaluate a sales team performance.
10. Top 5 Commission Salespeople: This helps with the recognition of the top performers within the company.
11. Visualisation: By visualising the data, we can deduct certain outcomes from past events. In this example, we can learn where our marketing is lacking or where to conduct serveys to learn why people are not buying from the store.

A graph of sales

Description automatically generated

# Business Problem 2 – Interpretation of Findings

The model can be used to improve Alexas sales by allowing the identification of high-value customers. This makes it possible to create personalized marketing campaigns that suit the high-value customers preferences and, in turn, increase the sales.

With the identification of high-value customers, this also allows us to optimize the cost of ad spending. By prioritizing what customers value and what they don’t, we can learn what items we need to focus our attention onto.

The model can also be used to improve the customer support for visitors to increase the sales further. This can be done by prioritising customer support for high-value customers as well as allow identification of potential future high-value customers.

# Business Problem 3 – Interpretation of Findings

By implementing a recommendations system, we could potentially increase the sales. By personalizing the results of the recommendations based on previously viewed or purchased products, it can increase the amount of impulse purchases as well as attract and retain customers, making them want to come back again in the future.

The implementation of a recommendation system could also allow us to further the customer satisfaction with customer support. By directly informing the customer of other products they may be interested in, it allows them discover new products and curate new product recommendations based on the users preferences.