**Capstone: Industry Case Studies**

**Data 6000**

**Week-6 Activity**

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**Review By**

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**Feedback Report**

**Summary:**  
This project looks into the factors that drive customer conversions in digital marketing. The main goal is to deliver insights businesses can use to optimize their campaigns. The dataset includes key details like income, ad spend, click-through rates, website visits, and other metrics related to customer behaviour. Firstly, the plan involves cleaning and preparing the data and also getting some visuals to find key insights into the data after that use ML methods like logistic regression and decision trees. This project uses tools like Excel to handle data processing, while Orange will be used for machine learning and PowerBI for visualization.

**Constructive Feedback**  
  
**1. Business Question and Industry Context**  
  
**What’s working well:**

The business question is well defined because focusing on customer conversions will provide very useful insights that are directly applicable to the digital marketing industry.

**What could be improved:**

Narrowing the focus further—such as analyzing specific types of campaigns like social media or email marketing—could make the findings more actionable. It’s also a good idea to ensure that the question fully matches the data you have on hand.

**2. Data Source**  
  
**What’s working well:**

The dataset is well-structured and includes relevant variables, like income, ad spend, and behavioural metrics, all of which support the project’s goals.

**What could be improved:**

Some variables, like loyalty points or social shares, might need more explanation to show how they connect to conversions. You could also consider supplementing the dataset with industry benchmarks or additional data to make the analysis even more robust.

**3. Methodology**  
  
**What’s working well:**

The methodology is well-designed because it begins with data cleaning and feature engineering before applying predictive models such as logistic regression and decision trees, which ensures a solid foundation for analysis. This approach is practical and in line with the project's objectives.

**What could be improved:**

Pay attention to potential biases in the data, especially if the conversion rates are imbalanced. Using techniques like oversampling or undersampling can help address these challenges and improve model accuracy. Additionally, it’s worth checking whether Orange provides enough flexibility to handle more advanced or customized analyses if your project requires it.

**Recommendations and Next Steps:**

**Expand Your Data Sources:**

Look for external datasets or industry reports that address the same issue and could provide useful context or validate your findings. These additional resources may improve the reliability and depth of your analysis.

**Feature Selection:**

Use exploratory analysis to focus on the most relevant variables. Dropping less useful features will make your model more efficient.

**Testing Methodologies:**

Try a few additional models and compare results. For example, ensemble methods like random forests could complement the decision trees you’re already planning.

**Visualization Tools:**

Use tools like Tableau or Power BI to create detailed visuals that can help explain your findings to stakeholders.

**Review Course Materials:**

Revisit notes or lectures on data integration and analysis to ensure you’re covering all the key steps.

**Activity 3: Survey Responses**

**1. How well did your partner understand the direction of their project?**

My partner has a solid understanding of their project and its goals. They clearly explained the business question and connected it to the data and methodology. Their focus on customer conversions shows they have a clear vision for the project’s purpose and its relevance to the industry.

**2. How useful was the feedback for framing your business question, finding data, and selecting a methodology?**

The feedback was quite beneficial because it presented me with practical solutions to make the business question more focused and relevant. Suggestions like analysing data quality and taking into account certain campaign kinds were quite valuable. The technique recommendations, which included logistic regression and decision trees, were encouraging and useful.

**3. How constructive and respectful was the feedback?**

The feedback was both constructive and respectful. It highlighted the project’s strengths while offering useful suggestions, such as validating the dataset and narrowing the focus further. This approach made the feedback feel encouraging and valuable.

**4. Did the feedback provide you with any new ideas?**

Yes, it introduced ideas I hadn’t considered, like adding features such as engagement scores or email performance metrics to improve the dataset.  
  
**5. Did the feedback help you feel more confident about taking the next steps?**

Yes, The feedback confirmed that the project is on the right track, and based on the feedback I will proceed to the next steps.