

End of Module Assignment: e-Portfolio Submission

All artefacts are hosted in the e-portfolio [here](#)

Link - <http://e-portfolio.samadeniyi.com/rmpp.html>

1. Introduction:

Completing the "Research Methods and Professional Practice" module has been an enriching experience that provided insights into various research and professional skills development aspects. This e-portfolio will cover critical components of the module, including the knowledge and skills acquired during the literature review and research proposal, with a focus on legal, social, ethical, and professional issues in research work, emotional responses, evidence of skills development, and reflections on the impact of the module on personal and professional growth.

2. Evaluation of Statistics Exercises:

Despite my background in statistics, I found the exercises in this module to be unexpectedly demanding. While they provided me with valuable insights into identifying different measurement levels, measures of location and spread, and strategies for hypothesis testing, the overall experience was far from easy. Unit 8's exercises were relatively manageable except for the Hypothesis Testing part, which primarily relied on Excel functions for calculating summary measures.

However, the tasks in Unit 9 proved to be significantly more challenging, requiring the creation of bar charts and histograms. Thankfully, my prior familiarity with Excel helped me navigate through these difficulties. Nevertheless, the exercises could

have been better structured to facilitate a smoother learning process. Initially, figuring out the instructions for Excel and LibreOffice took much work.

3. Evaluation of Literature Review and Research Proposal:

These are, without a doubt, the most enlightening section of the entire module. I struggled to decide on a topic from the list. Finally, I chose "Implementing Machine Learning Tools and/or Techniques in Churn Prediction" my Research Question was: What is the effectiveness of implementing machine learning tools to predict customer churn in the Telecom industry? I learned so much by reading previous literature on Churn prediction in the telecom industry, making me feel overwhelmed and motivated simultaneously with the amount of information I need to digest.

The most intriguing part of the literature review assignment was understanding how Churn management can increase the Customer Lifetime Value (CLTV). Customer retention is crucial in improving CLTV, while high Churn can significantly reduce it. Churn management is essential because attracting new customers is more expensive than retaining current ones. (Vafeiadis, T., et al., 2015; Nagaraju, J., et al., 2023.)

The research proposal proved less challenging than anticipated, primarily because of the extensive reading and literature review conducted before it. Titled "An Investigation into Machine Learning Methods that Most Accurately Predict Customer Churn in the Telecom Industry: A British Context," the proposal highlighted a specific research question. However, upon closer examination of the Methodology and Design section, it became evident that more effort is required, particularly in

considering the approaches taken by other researchers in the field. In hindsight, opting for a different research area might have been beneficial to broaden my understanding and expertise.

4. Reflections:

4.1 Statistical Analysis Skills:

During the module, I engaged in several statistical analyses, mainly focusing on inferential statistics. These analyses included applying t-tests, z-tests, mean, median, mode, geometric mean, range, variance, and p-value to examine relationships, differences, and associations within datasets.

One significant challenge I faced was interpreting the findings of the exercises in Unit 8. Despite understanding the mechanics of the analysis, I had trouble making meaningful interpretations of the confidence coefficients and their significance levels. This experience highlighted the importance of not only knowing how to conduct statistical analyses but also understanding how to interpret and effectively communicate the findings. It emphasised the need for a deeper understanding of the underlying assumptions and implications of statistical tests.

To enhance my statistical analysis skills, I plan to spend more time practising interpreting and communicating the results of various statistical tests. Additionally, I will seek additional resources, such as online tutorials or workshops, to reinforce my understanding of statistical concepts and their practical applications.

4.2 Research Methods Process:

I appreciated how Unit 3 presents research methods, beginning with the importance of understanding research design, which refers to having a plan for how to answer your research question (Saunders et al., 2012). It then goes on to define research methods as "systematic tools used to find, collect, analyse, and interpret information" (Sage, 2021).

A noteworthy aspect of the research methods process that struck me was the importance of reviewing the results and considering efficient methods to analyse and interpret results. (QuestionPro, 2021). Additionally, I learned the significance of ethical considerations throughout the research process, ensuring the protection of participants' rights and the integrity of the research findings.

Moving forward, I will approach research projects with a more critical mindset, carefully considering the alignment between research questions and methodologies. I will also prioritise ethical considerations, ensuring that my research practices adhere to the highest standards of integrity and respect for participants' rights. Furthermore, I will continue to refine my skills in conducting literature reviews, designing research proposals, and analysing data, recognising these as foundational elements of rigorous research practice.

4.3 Professional and Personal Skills:

Completing the professional skills matrix and associated SWOT analysis/action plan has been a valuable exercise that has significantly impacted both my personal and professional experiences. The skills matrix helped me identify my strengths and

areas for improvement in various competencies. This increased awareness has been crucial for my personal and professional development.

Through this process, I have developed a sense of responsibility for my professional growth, which has encouraged me to strive towards continuous improvement. By utilising the skills matrix, SWOT analysis, and action plan, I have been able to capitalise on my strengths to perform exceptionally in my current role while also working on improving my weaker areas to meet the demands of the industry.

5. Conclusion

During this module, I have gained valuable skills and knowledge on how to conduct research. We have analysed legal, social, ethical, and professional issues and actively participated in group discussions. After completing Units 5 and 6, I researched Questionnaire Design, Interviews, and Survey Methods, which has equipped me with the knowledge needed to contribute to the new B2B tiering bet feature research in my current workplace. I am excited for this opportunity.

References:

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Saunders, M., Lewis, P. & Thornhill, A. (2012) Research Methods for Business Students 6th ed. Pearson Education Limited.

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