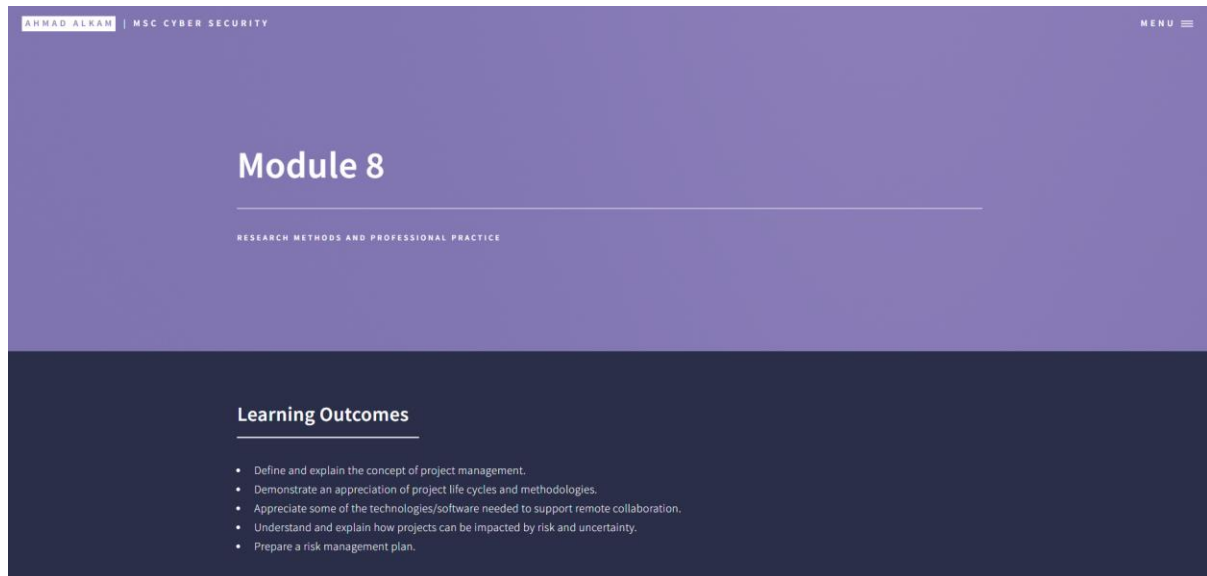


<https://ahmadalkam.github.io/>

University of Essex

Research Methods and Professional Practice January 2022

## The Final Assignment



The e-Portfolio link is: <https://ahmadalkam.github.io/>

❖ Artefacts:

Unit 1 - 3:

[Unit1 - Discussion 1 Initial Post](#)

[Unit1 - Reasoning Quiz](#)

[Unit2 - Literature Review and Research Proposal Outline](#)

[Unit3 - Discussion Summary Post](#)

[Unit3 - Research Proposal Review](#)

Unit 4 – 6:

[Unit4 - Literature Review Outline](#)

[Unit5 Reflective Activity2](#)

[Unit6 - Wiki Activity - Questionnaires](#)

Unit 7 – 9:

[Unit7 - Discussion2 - Initial Post](#)

[Unit7 - Literature Review](#)

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[Unit8 - Research Proposal Outline](#)

[Unit8 - Statistics Exercises](#)

[Unit9 - Discussion2 - Summary Post](#)

[Unit9 - Statistics Exercises](#)

**Unit 10 -12:**

[Unit10 - Individual Presentation](#)

[Unit10 - Research Proposal Presentation transcript](#)

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[Unit12 - Self Test Quiz.pdf](#)

**Professional Skills Matrix and Action Plan:**

[RMPP Professional Skills Matrix](#)

[RMPP Action Plan](#)

❖ **Revaluation of my Literature Review:**

In week seven, we were asked to choose one topic from the unit 1 task list; I decided to go with cloud computing as a literature review. It was my first time writing down a literature review, so it was a new and exciting challenge. I struggled to start as I had a high workload during this module with the number of activities I should do between this module and the PDFCYL module. However, after I started reading about how to plan and conduct a literature review, I began to fill the gap in this topic to learn more about cloud computing and how to review this topic.

While reading the literature review, many exciting academics talked about cloud computing and how it has rapidly grown in the last two years. Also, I have tried to find how to create the research questions, and I have found that it should be after lots of reading on the required topic and see all the gaps it should fill. In general, my literature review wasn't the best or very good as I wanted it to be as there were lots of points I should work on to cover all the missed parts.

For example, I have had to restructure the literature review and focus more on the general topic talk before going in deep, focusing more on talking wider about the topic's background and adding more references to my literature review.

I have already started to read more about the literature review and covered many parts I missed in the assignment. I have learned many new skills in this assignment, and I am happy as that can be reflected in my final dissertation and help me avoid gaps in my skills.

### ❖ Revaluation of my Research Proposal:

In this assignment, I have started to think about writing the research proposal on the same literature review topic I have chosen in week seven or starting a new challenge and thinking about my final dissertation for my master's. So I have decided to merge between the two of them, writing down the same literature review topic (cloud computing) but adding what I have learned in previous modules about cybersecurity and talking widely about the cyber security for cloud computing and datacentres.

To be honest, it wasn't easy for me to cover both sides in a short time and then create and record presentation slides for everything, as I have just two weeks to do it along with the second assignment for the PDFCYL module. I struggled in most of the sections of this research proposal but was doing my best to cover as much as possible. I have started with the research questions and finding the gaps in cybersecurity for cloud computing, which can drive the organisation to make risky decisions. Also, all companies need to start thinking about cloud computing and choosing which services and applications should be migrated to the cloud and which should remain in on-premises data centres.

I have struggled to find the academic research that discussed both parts in the same study. In the end, my assignment wasn't good and had lots of points that need to be improved as I should focus more on the deep research questions, analyse more data, understand more about these topics, and find more gaps to cover for better cover. However, all of that was helpful for me to learn more about what I have to do in my final dissertation and how to start my next step with our final project in the master's and future research and reports in my work.

Research is the systematic process of collecting, analysing, and interpreting data to solve a given problem. Research can happen by following guidelines in an established framework for defining the goal, managing data, and communicating results. Frameworks show researchers what should be included in their research and how to conduct it to know what kinds of conclusions may be drawn from collected data. For example, the study begins with at least one question about the phenomenon of interest before formulating hypotheses that may lead to another question or evidence-based conclusion.

Sociological research can provide government with the information needed to identify the size of a problem, and to plan a response to that problem. (McNeill, 2006)

Starting the first week of this module, I have learned more about what research means. I have done lots of research in the past modules, but now I know it was not at the professional level as it should be. It was good to know how research ethics can guide researchers to avoid harming the participants. I have learnt how deduction and induction can take us between ideas and observations. Referencing tools like JabRef and Mendeley were fantastic additional as I have started to use JabRef in my literature review.

Research questions and Literature reviews were entirely new to my academic journey. A research question is one which makes explicit the precise area of an investigation. (Lewis & Munn, 1987). When A literature review enables you to establish a familiarity with and understanding of your current research in a particular area before conducting new studies. After reading several articles and books about the literature review, I knew I had to improve my skills in it and read more about

the research methods and have a significant understanding of research design types like the exploratory and the conclusive research. Research design is a plan of the proposed research work. (Akhtar, 2016).

Before starting unit 4, I had a good knowledge level about Data collection and how gathering the information can help governments and organisations have more accurate strategic planning and make better decisions. Still, I have had no idea about the difference between quantitative and qualitative observations. Reading more about the observations gave me more sights which method would be more suitable for my dissertation. A simple way to decide which method should be used first is to build on the decision about which method will be principle. (Morgan, 1998)

Learning more about the quantitative research method drove me to know how interviews are a conversational piece and involve only one person at a time, providing opportunities for the researcher to get in-depth details from them when the survey is a quantitative method for collecting data from respondents asking them multiple questions.

The literature review gave a different understanding for using several academic platforms like IEEE and Google scholar and filled the gap of the research questions.

Unit 6 covered the Questionnaires as we know the questionnaires used to collect data; we have to design the questionnaires to cover the research objectives, arrange them in the correct order, and choose the suitable management method. Personally, I have not yet done any questionnaire but learning about it was a good point for my dissertation if needed.

Unit 7 helped me learn more about the benefits of validity, reliability and generalisability. Validity is the precision in which the findings accurately reflect the data, while reliability is the consistency of the analytical procedures. (Noble & Smith, 2014). I have read more about the two types of validity. It was good to know that Internal validity is the extent to which a study's design and execution are free from biases. On the other hand, external validity is confirmed by generalising its conclusions to a wider population. It was also good to know that Generalisability is the applicability of a study in other settings. To measure generalisability requires inner truth and judgment on whether or not these findings apply to this particular group. The ability to analyse and solve problems is vital because it allows me to find solutions for common issues. It also helps me make an educated decision about the next course of action, which can be crucial in any position no matter what level- understanding a problem and analysing the situation for solutions will help with this.

Inferential statistics have helped me come up with explanations for specific situations or phenomena. It has allowed me to draw conclusions based on the ones I extrapolate from. This is fundamentally different from descriptive statistics which only summarize measured data. the two measures that should be reported for quantitative variables are measures of the centre and variability as measures of location and spread. (Parvin, 2007). Further testing and using hypothesis testing have allowed me to make an assessment of the strength of my claims before implementing them into my dataset. The only way to ensure that a claim is valid is by using hypothesis testing. It was very beneficial to know more about the difference between the charts and how it can help me explain the analysis of the data collected. Data will be an essential part of my investigation, whether qualitative or quantitative. I have learnt that presenting data in a way that communicates to the reader is something I should think about early on. Charts and graphs are often used to set the scene and present data- both qualitative as well as quantitative- clearly.

Research writing includes sharing the answer to my research question, providing evidence for the answers, and listing the sources I used in answering my research. As a technical guy, I usually do not

write down a lengthy report; understanding research writing is a significant skill for my dissertation writing. Furthermore, by reading many project management and risk management books and articles, I figured out the concept of project management and how to use the time plan in my dissertation.

Risk management is the process of determining what to do in order to reduce the likelihood that a risk will occur. Risk management can help me identify all the risk factors that can affect my dissertation project's objectives and mitigate the impact. my plan for the next couple of weeks is to improve my project management and risk management skills by reading more books and doing more research about them.

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