



### **ASSIGNMENT 2 FRONT SHEET**

| Qualification         | BTEC Level 5 HND Diploma in Computing |                              |                     |
|-----------------------|---------------------------------------|------------------------------|---------------------|
| Unit number and title | Unit 13:Computing Research Project    |                              |                     |
| Submission date       |                                       | Date Received 1st submission |                     |
| Re-submission Date    |                                       | Date Received 2nd submission |                     |
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## **Student declaration**

I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.

| Student's signature |  |
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# **Grading grid**

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**P6** Reflect on the effectiveness of research methods applied for meeting objectives of the computing research project.

1. Project's proposal

After researching and researching the field of digital transformation, I see the flexibility of digital transformation for many fields, each field has its own characteristics and attractions, but I decided to choose the main topic. Regarding e-commerce, I want to know how digital transformation when applied to e-commerce will have an impact on the environment and people. Besides, I also want to learn about the development level of e-commerce. I think that e-commerce is a fairly popular and attractive field today, but from the user's perspective, it is difficult to see many aspects in this field. Therefore, the purpose of choosing this topic is not only to learn about digital transformation applications in the field of e-commerce, but also to exploit their downsides. I will prove that the application of digital transformation to e-commerce can help protect the environment, develop business and life.

2. Reflection on the merits, limitations and potential pitfalls of the chosen methods.

To complete my research project, I decided to combine many methods such as: qualitative, quantitative, inductive, deductive, in the process of learning about different types of research methods, I realized potential values that these methods bring to your research project, specifically:





First with the qualitative research method, I think that this method is quite important in the study of a particular problem, a certain topic, most researchers do the research method. this to be able to take the basis of proving a problem of depth. During my survey too, I decided to use qualitative research method by conducting interviews with experts, of course we can also choose from many different types of interviews. But I think that with midnh's research topic, unstructured interviews with experts with deep knowledge of the field will be more suitable. In the process of conducting unstructured interviews, it helps me have a deeper insight into the research field, collects data from experts, and gives me a valid basis to prove my point, moreover. I can learn the style of observing, looking at and evaluating problems from experts, the key to this interview is that I can rely on the evaluation basis of experienced people to help prove my thesis. My scores are measurable and reliable.

While many great things have been learned from doing interview research, using this method also has pitfalls that concern me, such as dissent among experts, dissenting This score can measure the success of the research process, you may have difficulty in qualitative arguments and may find it difficult to give accurate results for your research problem. Fortunately, in my project this is not the case, based on observations, they all agree very much with each other. Therefore, I can rely on the bases to prove the point easily. In short, during the interview process, there were no problems.

As for the survey method, I think this is a good choice when deciding to use this method in my research project. This is a fairly common method these days. Not only does it help to collect large amounts of data quickly, but it also makes evaluation and analysis easier. Because I see the special potential of this survey method, I decided to include it in the research, in the process of using the survey research method, I can collect big data from many different angles. Moreover, based on the survey research results, I was able to easily evaluate the results as well as know the weaknesses and strengths in my application so that I could come up with the right solution. for improvement and development.

Although this method has many great points to make my research process easier, I am also quite concerned with issues such as: the level of knowledge of the respondents, the level of clarity. , the subjectivity and superficial responses of the participants, ... according to learning about the limitations of this research method, I realized the problem I encountered during my survey research. That is the question, the questions seem to be a bit vague and do not go into depth so it can make it difficult to analyze the data, besides, I only use the survey in the university area. In the Greenwich study, despite the quick access to the data, it left me with a limited perspective and unable to draw a conclusive conclusion.

For the observative method. I think this method is not too strange, most of the time, surveying and monitoring in order to better understand a specific problem or phenomenon, it is necessary to use this method. especially using this method to be able to make the most accurate assessments, the evaluation based on actual observations helps to increase the reliability, and in my project, I use





this method to Being able to assess the pollution situation in Nhue river, by observing the reality from behavior to phenomenon, I can know the cause and the situation from which it helps me to draw accurate conclusions to make method to improve the problem of environmental pollution by applying digital transformation.

However, I encountered limitations in the process of implementing this research method: incurred time, operational costs as well as limited scope. These potential pitfalls make it more difficult to analyze the data to draw conclusions, because of the time limit I can only observe one particular phenomenon, and that is not enough. , evidence to help me grasp the problem from many different perspectives.

3. The roles of Literature review in your project.

I think literature plays a very important role in the field of scientific research. Finding research papers not only helps you gain a deeper understanding of the research area, but also provides a basis for your hypothetical questions. In my research, studying documents related to the research topic of digital transformation applications in e-commerce, helped me understand the level of development as well as the influence of this field. to the environment and people, from the collected documents and conduct analysis and evaluation, I can come up with hypotheses to serve my research purposes. In addition to finding documents for his research topic. I have also studied documents related to research methods, from these documents, I can better understand qualitative, quantitative, inductive, deductive, and capture research methods. purpose as well as the advantages and disadvantages that the research methods bring, to be able to choose the appropriate research tools, to bring efficiency to the research process. An important key to using literature review in research methodology is being able to help prove hypotheses. In order to increase the reliability and accuracy of the research thesis, I think that the comparison of the data after collecting data from different methods and famous documents and articles in other countries. In addition, it will help to make the research results more certain and more reliable, which I have applied to the research process to prove the hypothesis.

In short, literature review is an extremely important part of scientific research. However, in order to get the best research results possible, you need to look for quality, specific articles on the issue. This is to assess the success of the research process. Your selection of articles of poor quality with insufficient court integrity, will make it difficult for you to identify the problem and the area of research, and it will cause your research to be misdirected and unsatisfactory. not good results.

4. How did you create project plan and how often you did you update it. Why you need you need to update the plan.

Because the research process requires very careful and thorough. In order to ensure that the process of carrying out their research takes place most effectively, as well as the progressiveness of research results, high accuracy must be achieved. I have created a specific plan:





Milestone one: learn about digital transformation(March 15, 2023)

- Learn the concept and impact of digital transformation
- Areas where digital transformation can be applied (detailed)
- Choose your favorite field.

Milestone two: Research and analyze the topic(March 20, 2023)

- Select the topic, explain the reason for the choice
- State the research purpose, project objectives, project scope

Milestone three: Research and analysis of deployment methods (March 22, 2023)

- Analyze and evaluate the learned methods (qualitative, quantitative, inferential) deductive reasoning, inductive reasoning, etc.)
- On the basis of analysis and evaluation, select the appropriate method to deploy project development.

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Milestone four: Survey research (March 27, 2023)

- Search for documents related to the research topic
- Select meaningful information and interpret the content related to the research topic
- Proposing research points to be addressed in the entire research paper

Milestone five: Questionnaire design (March 29, 2023)

Based on the hypotheses prepared in the previous session, design the questionnaire, select survey options

(interview, survey, observation), explain the reasons

Milestone six: Planning to carry out the main research (3/4/2023)

- Information about subjects/groups of subjects participating in the survey: name, age, address, level of

knowledge in the field

- Survey technique: interview/survey/observation, survey type
- Time and place of survey
- Content of survey questions

Milestone seven: Conduct main research(April 5, 2023)

- Conduct interviews, surveys, report results

Milestone eight: Research data analysis(April 10, 2023)

- Summarize survey results, conduct data analysis

Creating a plan helps my research process become more standard, with this plan sheet, I can easily understand what I need to do, specific time to help ensure ensure their research progress, detailed and clear plans to help exploit the most complete and clear information to help ensure the full exploitation





of information and data. That's why I create a plan to make sure my research goes as smoothly as possible.

#### How often did you meet the tutor and how the tutor helped you to create more effective research.

My research paper would be difficult to complete without the guidance of the teacher. For me, teachers not only play an important role in helping me grasp and better understand the knowledge, or methods to apply in the research process, but also help me receive the evaluations. and most accurate review. In the process of doing the research, I faced many difficulties, but after being reviewed and received quality evaluations from the teachers, I had more direction on my research assignment and at the same time improve their research problems. Thanks to the guidance of the teacher, I was able to see the problem and know how to exploit the information as well as improve the gaps in the research paper..

5. How did you choose participations(sample types, sizes) and the importance of it?

It is extremely necessary and important to collect data from research methods. If you want your research results to be as good as possible, you need to carefully consider and select your respondents. And to ensure that the data collected is effective, I have selected subjects suitable for different research methods. Specifically:

Based on the size of the study as well as the topic given in the interview, I decided to choose a non-random sample for the interview form on my research topic. I think it only takes 2 experts to represent digital transformation and e-commerce. These are all experts with extensive experience in the field of e-commerce and digital transformation in the form of interviews with unstructured questions, with their qualifications and experience in line with the questions that I asked. given, they are able to present the most honest opinions based on their expertise. I think the selection of experts for this interview is completely appropriate, they play the role of helping me have the most accurate facts and helping me understand the depth of the research field to learn from. That is the basis for proving the hypothesis.

For the survey, I decided to select a survey in the form of a random sample for the students of the University of Greenwich, the random selection of the sample helps me to collect a lot of data quickly from many sources. students, besides also helping me have a multi-dimensional view, from being able to assess the problem, the larger the sample size participating in the survey, the more accurate the results and the higher the efficiency will be.

For the observational research method, in this method, I choose the form of random observation only in the area around Nhue river. With the application of a random sample in the observation, I can independently observe the specific pollution problem of the Nhue river area, thereby giving the most reliable and evaluation results.

6. How did you present your research result?





I have presented the research results by describing the information about the research topic including the objectives and benefits, besides, after analyzing the data based on the collected documents, I will also Hypothesizes to be researched and proven.

Second, I collect data and present research results based on research methods such as interview, survey, observation. After conducting the survey, interview and observation process, I analyzed the data, the results from the research methods were collected and explained.

Based on the facts and evidence gathered, I prove and confirm or refute the hypothesis of the research topic.

P7 Consider alternative research methodologies and lessons learnt in view of the outcomes.

Overall, the results I got in this project make me quite satisfied, the collection of data on many different research methods, helps me to have a basis to be able to draw accurate conclusions in this project. his research. In my opinion, each research method has its own wonderful features and characteristics in data collection. Each method helps me to see the problem from different perspectives and it is also the key to help me gain a deep understanding of the issues in the research process. I think it is perfectly appropriate to use research methods in this project.

Due to time constraints, I am unable to devote my full energy to this research project. In the future, I will improve my research by focusing on collecting data from a variety of research methods. Maybe, in the interview and survey not just for experts and university students of greenwich, but I will expand the data collection method by expanding the interview scope and the size of the questions. questions, as well as enhancing the depth of the problem by focusing on issues related to the field of study. for observational research I will invest extra cost and time in this process, it is not just doing observational research at a particular phenomenon as before, instead I will improve it by Expand the field of view, from many different areas.

#### Conclusion

After completing the research and evaluating the results I was able to better understand how the research was conducted, how to collect the data, and how to find research papers to support my topic. Although I didn't have enough time, the research is still incomplete, but I think I can grasp the process, how to research on a particular topic. I think in the future I will invest more time to have to prove as closely as possible.