

Higher Nationals in Computing

UNIT 6

Managing a Successful Computing Project

ASSIGNMENT

No.1

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Class: GCS0801B.1

Learner's ID: GDD18606

Subject's ID: 1625

Assignment due: June 2020

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ASSIGNMENT 1 FRONT SHEET

Qualification	BTEC Level 5 HND Diploma in Computing		
Unit number and title	Unit 06: Managing a Successful Computing Project		
Submission date	June 2020	Date Received 1st submission	June 2020
Re-submission Date	June 2020	Date Received 2nd submission	June 2020
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Class	(1625) GCS0801B.1	Assessor name	Nguyen Van Son
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	Trinh Thi Dieu Huyen

Grading grid

P1	P2	P3	P4	M1	M2	D1

☐ **Summative Feedback:**

☐ **Resubmission Feedback:**

Grade:

Assessor Signature:

Date:

IV Signature:

ASSIGNMENT 1 BRIEF

Qualification	BTEC Level 5 HND Diploma in Computing		
Unit number and title	Unit 06: Managing a Successful Project		
Assignment title	Plan and conduct a small - scale research activity		
Academic Year	2020		
Unit Tutor	Nguyen Van Son		
Issue date	June 2020	Submission date	June 2020

Submission Format:

Format: The submission is in the form of an individual written report that shows how you have managed the project. This should be written in a concise, formal business style using single spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system.

Submission: Students are compulsory to submit the assignment in due date and in a way requested by the Tutors. The form of submission will be a **soft copy in PDF** posted on corresponding course of <http://cms.greenwich.edu.vn/>

Note: The Assignment *must* be your own work, and not copied by or from another student or from books etc. If you use ideas, quotes or data (such as diagrams) from books, journals or other sources, you must reference your sources, using the Harvard style. Make sure that you know how to reference properly, and that understand the guidelines on plagiarism. *If you do not, you definitely get fail*

Assignment Brief and Guidance:

Scenario: Digital Wellbeing is about fashioning and sustaining a healthy relationship with technology. As technology plays a big part in our lives we find ourselves spending an increasing amount of time online and on our devices. Our wellbeing is dependent upon our mental and physical health and thereby our digital wellbeing is influenced by our online interactions and the amount of time we spend on our

devices.

Your company is currently working on [YOUR ASSUMPTION] domain and has a specific product [YOUR ASSUMPTION] that runs well so far. However, with recently attention of digital wellbeing, the board of directors does not want to be left out of this trend.

Tasks:

As a member of Research and Development department, you have been assigned a mini-project to find out do digital technologies improve life or distract from it and to explore the efficacy of products and features specifically designed to improve health and wellbeing.

You need to do primary research (both qualitative and quantitative research) and secondary research to find out that impact and conduct a report for your research. Even it's a mini-project, you must apply project management (PM) techniques such as project charter with aims, objectives, cost etc. As for time management, you need to produce WBS and Gantt chart with reasonable tasks and time. A project logbook is required to provide evidence of the project development process and ongoing reflection for every week. This logbook will be needed later for your reflection and evaluation in Assignment 2. As part of QA (quality assurance) policy, in the report you also need to critically evaluate the PM process and appropriate research methodologies applied.

Your report must have an introduction stating the project aims and objectives. This must be followed by a copy of your project management plan. Your plan should show the milestones when you will review with your tutor your ongoing progress so far. You will submit your logbook which shows how you have carried out the project.

Learning Outcomes and Assessment Criteria		
Pass	Merit	Distinction
LO1 Establish project aims, objectives and timeframes based on the chosen theme.		LO1 & LO2 D1 Critically evaluate the project management process and appropriate research methodologies applied.
P1 Devise project aims and objectives for a chosen scenario. P2 Produce a project management plan that covers aspects of cost, scope, time, quality, communication, risk and resources. P3 Produce a work breakdown structure and a Gantt Chart to provide timeframes and stages for completion.	M1 Produce a comprehensive project management plan, milestone schedule and project schedule for monitoring and completing the aims and objectives of the project.	
LO2 Conduct small-scale research, information gathering and data collection to generate knowledge to support the project.		
P4 Carry out small-scale research by applying qualitative and quantitative research methods appropriate for meeting project aims and objectives.	M2 Evaluate the accuracy and reliability of different research methods applied.	

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Unit 6 – Managing a Successful Computing Project

Part 1: Project Management

I. Introduction (about the chosen scenario)

From 1990s, technology has spread all over the world. Till 2010s it has become fully integrated into our daily lives. We live more fully in a digital world. In spite of lots of benefits that digital technology brings, there is a question that is argued: Is digital technology good for human?

II. Project initialization (P1)

1. Main aim of the project

The main aim of the project is to answer the question: “Do digital technologies improve life or distract from it?”. Moreover, the purpose of the project is to prove the efficacy of products and show features specifically designed to improve health and wellbeing.

2. List of Objectives to achieve the aim (Note Objective should be SMART)

- ✓ *Form a project team*
- ✓ *Create detail plan (WBS, Gantt chart)*
- ✓ *Receive interview/survey result*
- ✓ *Finish report*
- ✓ *Have final deliverables*

III. Project Management Plan (P2)

1. Scope

- ✓ *This project only research about effects of digital technology to human's life*
- ✓ *Object: Users of digital technology devices (smartphones, laptops, computers, tablets)*

2. Time: 2 weeks

3. Communication: Google Meets, Gmail, Facebook, Zalo, Google Forms, Face to face, Keeps, Google Drive

4. Risks

Table 1: Risk

Name of risk	Priority	Actions
Lack of human source	Low	Create table division of detail work. Then, jobs that have not been processed due to a shortage of employees are divided among existing employees. That employees must be paid when doing add that jobs
Tool broken (hardware & software)	Medium	Test and maintenance before use
Lack of funding	High	Create cost table need use after when clear planning for the project
Working environment be limited	Low	Improve and decorate the workspace so that the working environment is no longer issue important
Lack of management experience	High	Get advice from experienced people. Refer to the knowledge about project management. Things to keep in mind and what should / shouldn't be for successful project management
Request to change target too many times	Low	Must stick to the purpose. Re-check the target up to three times before starting to proceed

5. **Resources:** *MS Project, Draw.io, Word, Laptop, Smartphone, Users of digital technology devices, Google, E-Books, Human source*

6. Cost estimation

- ✓ Cost for staff: (2 persons + 15 days: **\$620.00**)
 - + Working all week from Monday to Sunday
 - + 8 hours/day (*from 8am to 4pm*)
 - + The project commencement date is **June 5th 2020**
 - + The estimated project completion date is **June 23rd 2020**
 - + Staff: 2 employees (*Trinh Thi Dieu Huyen and Dinh Thi Mai Linh - receive 100% of the same salary*)
 - + Salary: Standard: **\$10.00/day**, Overtime: **\$5.00/h**
- ✓ Cost for tools: **Free**

IV. Planning (P3)

1. WBS

The work breakdown structure (WBS) is a vehicle for breaking an engineering project down into subproject, tasks, subtasks, work packages, and so on. It is an important planning tool which links objectives with resources and activities in a logical framework. It becomes an important status monitor during the actual implementation as the completions of subtasks are measured against the project plan [2].

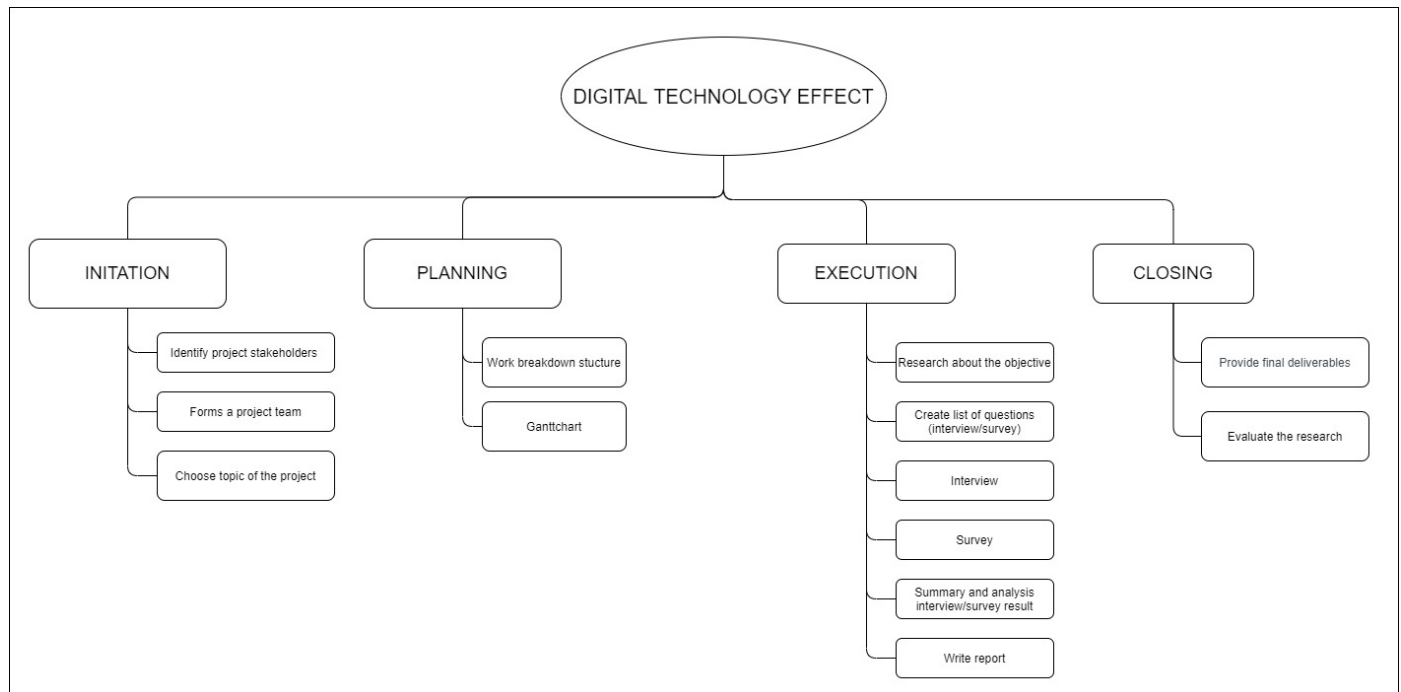


Figure 1: WBS for our project: Digital Technology Effect

2. Gantt Chart

A Gantt chart is a horizontal bar chart that visually represents a project plan over time. Modern Gantt charts typically show you the status of—as well as who’s responsible for—each task in the project [3].

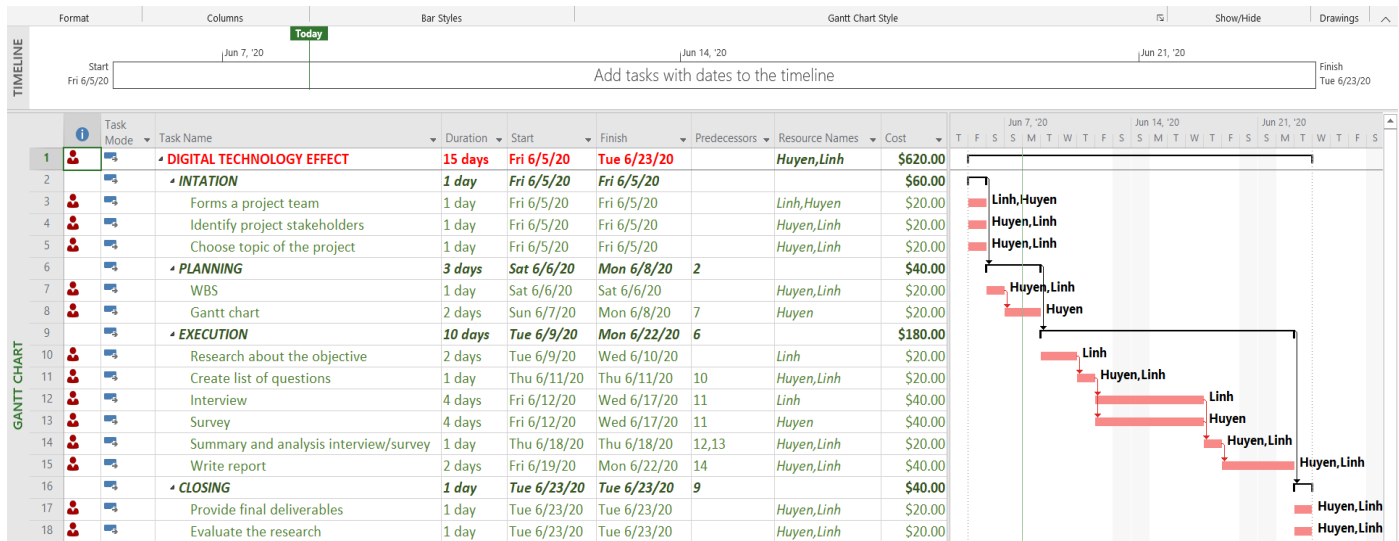


Figure 2: Gantt chart

V. Comprehensive project management plan (M1)

The table below includes the key milestones of the Digital Technology Effect research project. Timelines, progress status will be updated in the next version. The changes in project both being are well documented. That changes must be approved by the project manager as well as the relevant departments. If have delay occurs, the parties involved and the project manager must be notified to take appropriate corrective measures.

Table 2: Comprehensive project management plan

Phase		Start date	Finish date	Status
INTATION	Forms a project team	5 th June 2020	5 th June 2020	Done
	Identify project stakeholders	5 th June 2020	5 th June 2020	Done
	Choose topic of the project	5 th June 2020	5 th June 2020	Done
PLANNING	WBS	6 th June 2020	6 th June 2020	Done
	Gantt chart	7 th June 2020	8 th June 2020	Done
EXECUTION	Research about the objective	9 th June 2020	10 th June 2020	Done
	Create list of questions	11 th June 2020	11 th June 2020	Done
	Interview	12 th June 2020	Not yet	In Progress
	Survey	12 th June 2020	Not yet	In Progress
	Summary and analysis interview/survey result	18 th June 2020	Not yet	Pending
	Write report	19 th June 2020	Not yet	Pending
CLOSING	Provide final deliverables	23 rd June 2020	Not yet	Pending
	Evaluate the research	23 rd June 2020	Not yet	Pending

Part 2: Research (P4)

I. Primary Research

Primary research is defined as a methodology used by researchers to collect data directly, rather than depending on data collected from previously done research. Technically, they “own” the data. Primary research is solely carried out to address a certain problem, which requires in-depth analysis [4].

Table 3: Advantages & Disadvantages for Primary Research [4]

Advantages	Disadvantages
<ol style="list-style-type: none">1. Data collected is first hand and is accurate2. Primary research focuses mainly on problem in hand3. Data collected can be controlled4. Is a time-tested method, should can rely on the results that are obtained from conducting this type of research	<ol style="list-style-type: none">1. Can be quite expensive to conduct2. Can be many time-consuming3. Sometimes just using one primary research method may not be enough

1. List of interview questions

- **Question 1:** *Do you use digital technologies? Which are the types that you use? What are you using them for and at which frequency?*
- **Question 2:** *How do digital technologies affect you?*
- **Question 3:** *In your opinion, what you should notice when using digital technologies? Why?*

2. List of survey questions

1. Do you use digital technologies ? (Bạn có sử dụng các thiết bị công nghệ không?) *

☐ Yes

☐ No

2. Does your job require you to use digital technologies ? (Công việc của bạn có cần phải sử dụng các thiết bị công nghệ không ?) *

☐ Yes

☐ No

Figure 3: List of survey questions

3. What do you usually use digital technologies for ? (Bạn thường sử dụng các thiết bị công nghệ *
kỹ thuật số nhiều nhất cho việc gì ?)

☐ Study (Học tập)

☐ Work (Công việc)

☐ Entertainment (Giải trí)

☐ Health (Sức khỏe)

4. In your opinion, how many hours of digital technologies usage will it affect your health ? (Theo *
bạn, sử dụng các thiết bị công nghệ bao nhiêu lâu thì có hại cho sức khỏe ?)

☐ 2h

☐ 3h

☐ 4h

☐ Over 5h

Figure 4: List of survey questions

5. Do you think you are abusing digital technologies too much ? (Bạn có bị quá lạm dụng vào thiết bị công nghệ hay không?) *

☐ Yes

☐ No

6. How long do you spend for digital technologies each day ? (Thời gian trung bình mỗi ngày bạn dùng những thiết bị công nghệ là bao lâu ?) *

☐ Less than 2h

☐ 2h - 3h

☐ 3h - 4h

☐ Over 5h

Figure 5: List of survey question

7. In your opinion, should digital technologies use software that warn you when you use it too much ? (Theo bạn, các thiết bị thông minh có nên sử dụng phần mềm cảnh báo khi sử dụng quá nhiều không ?) *

☐ Yes

☐ No

8. How do digital technologies affect you ? (Các thiết bị công nghệ kỹ thuật số ảnh hưởng như thế nào đến bạn ?) *

Long-answer text

Figure 6: List of survey questions

3. Summary about interview/survey

First, we want to know if digital technology could affect users or not. That's why we have to make sure that the participants are those who use digital technology in daily life and know which devices they use will help us know exactly what and how digital technology affect them. We also set questions to know which field digital technology has strong impact on. As last, we try to measure the awareness of users about how digital technology affect their life.

II. Secondary research

1. Overview:

Secondary research is a research method that involves using already existing data. Existing data is summarized and collated to increase the overall effectiveness of research. Secondary research includes research material published in research reports and similar documents. These documents can be made available by public libraries, websites, data obtained from already filled in surveys etc. Some government and non-government agencies also store data, that can be used for research purposes and can be retrieved from them [1].

Table 4: Advantages & Disadvantages of Secondary Research [1]

Advantages	Disadvantages
<p>1. Most information is secondary research is readily available</p> <p>2. This is a less expensive and less time-consuming process</p> <p>3. The data that is collected through secondary research, gives organizations or businesses an idea about the effectiveness of primary research. Hence, organizations or businesses can form a hypothesis and evaluate cost of conducting primary research</p>	<p>1. Although data is readily available, credibility evaluation must be performed to understand the authenticity of the information available.</p> <p>2. Not all secondary data resources offer the latest reports and statistics. Even when the data is accurate, it may not be updated enough to accommodate recent timelines.</p> <p>3. Secondary research derives its conclusion from collective primary research data. The success of your research will depend, to a greater extent, on the quality of research already conducted by primary research.</p>

2. List of articles /books and other internet sources

Book:

- ✓ The Art of Project Management [5].
- ✓ A Case Study of Project & Stakeholder Management Failures: Lessons Lean [6].
- ✓ Project Management [7].

Articles:

- ✓ The Potential and Challenges of Digital Well-Being Interventions: Positive Technology Research and Design in Light of the Bitter-Sweet Ambivalence of Change [8].
- ✓ The impact of digital technologies on human wellbeing [9].

Others internet source:

- ✓ Searching for digital technology's effects on well-being [10].

3. Summarize about articles/Books and other internet sources have read

All three books write about project management and the annotates to success project management. In addition, It also research reason the failure of projects. From there, we can learn how to manage projects and manage projects successfully.

Articles and information from other internet sources revolve around the effects and wellbeing of digital technology on human daily lives, especially on health. In addition, It also research and design new technologies with many wellbeing.

4. Evaluation about myself understanding

Because I have no experience in project management so, these documents helped me a lot when I first make project. After reading the above books, I learned how to manage the project using certain sequences. I also know more about the reasons why a project fails, based at it that I can avoid these causes when start make project, thanks for it, my project's probability of failure will be lower. In addition, we are researching on the impact of digital technology and its well-being, so the articles also provide us with a wealth of useful information on this issue. It helps

me understand how the impact of digital technology on life and human is enormous and how to balance technology and people.

If I had more time, I would find and read more materials about products that help human control themselves when using now available digital technologies. From there, I will try to do a software project to create a product helps that balances between people and technology based on existing researches or new ideas.

Part 3: Evaluate

I. Evaluate the accuracy and reliability of different research methods applied (M2)

We use 2 research methods in this project: Primary Research and Secondary Research. By using Primary Research, we are able to collect all the realistic information of the objects, have better awareness about the variety of influence that digital technology makes. The survey and interview are currently do, that's means the document sources is updated and new. However, the authenticity in Primary Research is not as high as Secondary Research. The participants of the survey might not be honest or serious, that straightly affects the reliability of the data. The information that collect by Secondary Research is much more qualified and reliable because it has been accepted by professors or reputed union.

II. Critically evaluate the project management process and appropriate research methodologies applied (D1)

The project management process is not perfect but at least we have the foundation. Plans are made, tasks are divided and reasonable delivered. Timelines are set base on the known resources. Members of the team all involved and know every detail of the project, which means that ones can replace another. All team members work and support each other so that the project wouldn't be intermittent. No step was distracted or skipped, that keep the project more united and accurate.

Every research method has its own weaknesses. In order to maximize the authenticity of the data in project, we decided to use these two methods: Primary Research and Secondary Research. By using both, the result of this project could be improved because one method can reduce the other's weaknesses.

Reference:

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