Part A

From your project, explain the 4 stages of a project. Show how each of them led to the project'ssuccess.

Concept stage is idea stage where the project is conceived. Discussion of preliminary goals,deliverables; strategic vision alignment, problems raised, impact assessment in terms of TBL and life cycle, potential benefits identifies, alternative approaches researched ; provisional costing determined. Planning stage is following the decision to proceed in stage 1, all work required is planned ; scheduled. Objectives are finalized, resources are assigned, quality is signed off on(include TBL and life cycle guidelines & standards), final costs are approved, the timing agreed ; all others administrative matters are determined. Execution stage is the project has commenced during this stage; the emphasis is moved to tracking actual progress using the schedules developed in stage2 as the comparison point of reference. All work is monitored, controlled; corrected wherenecessary with schedules being reviewed, revised; updated as required. Finalization stage is the project has been completed; the deliverable handed over to the client. Resources are disposed of or reassigned, the project is evaluated, reports are written; presented ; the administration arm of the project is closed.

North Rankin A(NRA) commissioned in 1984, is one of the world's largest gas productions platforms operating in the North Rankin and Perseus gas fields. The North Rankin Redevelopment Project is a A$5 billion project with its main objective to recover the remaining low pressure gas from the area inorder to extend the field life until 2040. This project is being implemented using the OPREP process (Opportunity and Project Realisation Process) in both Woodside and Transfield Worley. This is a five stage process; 'Assets, Select,Develop, Execute and Operate/Evaluate'. The strategy that is use to approach the case study is through the usage of the key project management life cycle, which includes concept stage, execution stage and finalization stage. In order to have deeper understanding of the project, the include integration, scope, time, cost, quality, human resources, procurement and contracts, risk and communication. For concept stage, it is crucial to the success of any project as it lays an important foundation of information that can be steadily build upon. The TBL consideration is important for the project.

Neither Woodside nor Transfield Worley explicitly outlines TBL as criteria for measuring business success. Woodside has stated that their overall mission is to deliver superior shareholder returns. Similarly, Transfield Worley outlines values which are integral to TBL, with a large emphasis on safety. Their key performance measures for this project are safety, Budget, Schedule and Specification.

The planning stage for both Woodside and Transfield Worley was crucial for the success of the project. Both companies refer to their planning phase as 'select and develop'. The execution stage is where fabrication and construction has commenced and the emphasis is moved to tracking actual progress using the schedule developed in the previous stage. Overall, NR2 was initially expected to be finalized by Woodside by early 2013, during the writing of this report, the project is yet to be completed. However, Transfield Worley has fimalised some aspects of their contribution to the project, including BLM's.

Explain how a sustainable approach is consistent with the Triple Bottom Line. Explain how it could improve the project when applied to every stage of the project.

'Triple bottom line' (TBL) is a holistic concept of sustainability where'environmental', 'social' and 'economic' considerations are identified and considered concurrently in decision making. It is envisaged that triple bottom line sustainable project management can lead to the management of allresources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems.

In other words, sustainable project management is about ensuring that environmental, social and economic objectives each be given balanced consideration in the management of a business. It is important, to recognize that short and long term economic benefits can be achieved through adoption of positive social and environmental measures. Essentially, this is all about managing project management so as to gain as many of the benefits, whilst eliminating or appropriately managing any negative impacts.

Neither Woodside nor Transfield Worley explicitly outlines TBL as criteria for measuring business success. Woodside has stated that their overall mission is to deliver superior shareholder returns". This statement suggests that the company"s main interest lies with financial stakeholders. However, sustainability reports are released yearly which are said to follow the guidelines of the Global Reporting Initiative (GRI). This criterion consists of economic, environmental and socialsustainability. Similarly, Transfield Worley outlines values which are integral to TBL, with a large emphasis on safety. Their key performance measures for this project are Safety, Budget, Schedule and Specification. These performance measures do not consider any social or environmental impacts or stakeholder influence.

3. What key information should be included in the project scope and why? Discuss.

When we document the project scope, it is important to specify the inclusions (what is required) and exclusions (what is not required). It is recommended to have the below elements in the initial scope baseline.

1. Initial Justification – Justify the project coming into being.

2. Objectives – Some characteristics of the objectives are specific (concise and to the point), measurable (able to be quantified), achievable (able to be performed), relevant (related to the project), Time frame (able to be performed within a set time)

3. Deliverables – What the asset owner/client/sponsor pay for and get at the end of the project.

4. Resource Capability – It explains whether the organization has enough resource

capacity or not and if they require any additional resources or not.

   5. Schedule – Planned start date and finish date of the project.

   6. Budget forecast – What is the planned budget (BAC) for the project?

   7. Issues and risks – How to tackle risks and issues (risk management plan)? Is there a need for risk management team?

   8. Approval Process – Someone should take the responsibility for reviewing the scope baseline.

   9. Reporting Requirements – Different stakeholders want different types of information at different times.

   10. Performance measurement – Agree how exactly performance will be measured.

  Scope is the basis for the project plan and investigates if expectation meets capability. Moreover, setting up objectives and deliverables are important as the scope is compared to check whether the objectives are met at the final stage of the project.

4.What is the Program Evaluation Review Technique (PERT network diagram)?

Discuss and provide examples to substantiate your answer.

PERT network diagram illustrates

- The project's logic and how it is tied together
- The relationships between required tasks
- The flow of work throughout the project
- Where the critical path lies throughout the project
- The potential bottlenecks
- How is task required for the project to be completed

PERT diagram is like a flowchart that depicts the sequence of activities needed to complete a project. When drawn, the network consists of a series of activities (sometimes referred to as nodes) and connecting lines and arrows, indicating the relationship between the activities and the direction of the project. It can contain 'in-series' path or 'parallel' paths.

Advantages:

Excellent visual and interactive graphic to demonstrate the schedule

shows the critical path.

Participative decision making

Joint risk identification & response strategy

Negotiated concessions

Improved team ownership

Eliminates idle time

Disadvantages:

Difficult to read if the project is large

No timeline

Difficult to monitor & report performance

Not always easy to understand

Limited amount of information that can display

Example: Construct an office building

Event	Description	EXPECTED Time in weeks	Preceding
A	Approve design and get permits	10	None
B	Dig subterranean garage	6	A
C	Erect frame and siding	14	B
D	Construct floor	6	C
E	Install windows	3	C
F	Put on roof	3	C
G	Install internal wiring	5	E, F
H	Install lift	5	G
I	Put in floor covering and paneling	4	D
J	Put in doors and interior decorative trim	3	I,H
K	Turn over to building management group	1	J

5. What information should be found in the project 'close out report' and why? Discuss.

- Evaluate Overall Project Performance

Document how the project performed against each performance goals established in the   Project Performance Plan.

- Document Actual Project Cost

State the BAC and AC for the project. The planned cost should be approved in the initial cost baseline and the project charter, while the actual cost is the actual project cost at completion. Document the variances and explain why such variances exist.

3. Document Actual Project Schedule
   Compare the initial approved schedule baseline against the actual completion dates. Document all planned and actual start and finish dates, describe the schedule variances

with explanation.

    4. Document Scope Changes
   Document any changes to the project scope and their impact on performance, cost, or schedule baselines.

    5. Describe Resources' Statuses
Describe the use of resources throughout the project.

   6. Perform Operations and Maintenance Plan
   Describe the plan for operation and maintenance of the project deliverables.

    7. Record Post-Implementation Review
   Identify the date for completing the post implementation report and the person responsible for this action.

   8. Identify Open Issues
    List and describe the open issues for resolution within the context of project closeout

   9. Archive Project Documents & Artifacts
    Ensure that all project documents and artifacts are properly stored for future use or references. Make sure all necessary approvals and signatures are present.

6. What is procurement management planning and what benefits does it bring to any project? Discuss and provide examples to support your answer.

Procurement management planning consists of processes necessary to purchase or acquire products, services or results needed from outside the project team.

Process-based function driven by a particular department or local division seeking to get possession of something that solves an operational issue.

Value-adding function that focuses on the efficient attainment of goods, services, or results that deliver a number of very specific and measured benefits to the project.

Make the best possible use of supplier's products & or services while supporting the changing scope, goals & objectives of the project itself (if/when necessary);

TBL and life cycle thinking as the core of Procurement.

Procurement management process includes

- Identify the requirements of all goods and services from all business units.

- Identify and evaluate a list of suppliers.

- Negotiate the contracts with the selected supplier.

- Raise a purchase requisition and release the purchase order

- Complete the payment process upon receiving an invoice.

- Receive and audit delivery of requested goods/services.

- Maintain proper records of invoices.

From Managing Coastal Vulnerability project, they have purchased the BIS (Bathymetric Information System) using the Department of Transport tender. Also, they purchased MCP using the tender system and the supplier is ESRI Australia.

It benefits the project in different ways:

- If the project doesn't have enough capability (technical or resources), procurement management would help to acquire the services from outside the team.
- Moreover, it helps to purchase goods required for the project to execute the project successfully.

7.Explain how team conflict can have both positive and negative outcomes in a project. Provide examples to support your answer.

Team conflict can have positive outcomes. They are

- Exploration of new ideas
- Consideration of other people's perspectives
- Adjustments/modifications made
- Clarification of different positions/interests
- Postponed decisions
- Time to reconsider, clarify and communicate a proposal

Team conflict can also have negative outcomes. They are

- The breakdown in communication
2. Increased hostility
3. The cessation of work on the project
4. Legal action taken for contract breaches
5. Project personnel being replaced

Some team members have different opinion and perspectives compared to other team members. So, considering other team members' perspectives is one positive outcome of team conflicts. Some projects require team members to sign contracts before commencing their work. Client data breaches can result in the cessation of work and behavioral issues can cause the project personnel to be replaced by someone else.

8. What are the key attributes of an ethical project manager? Discuss and provide examples to substantiate your answer

Ethical managers/project managers/leaders should provide a good role model by:

Being ethical & honest at all times (obeying to wide loyalty and integrity principles):

- Telling the truth
- Admitting failure
- Communicating shared ethical values to employees;
- Rewarding employees who behave ethically & punish those who do not.
- Protecting employees (whistleblowers) who bring to light unethical behaviors or raise ethical issues.

Establish codes of ethics & decision rules.

Hire individuals with high ethical standards.

Have all levels of management continually reaffirm the importance of code of ethics & the organization's commitment to the code.

Publicly reprimand and consistently discipline those who break the code.

Provide ethics training.

Conduct independent social audits.

Provide support for individuals facing ethical dilemmas.

For example, many organizations give mandatory ethical trainings and if they have not completed, it would impact employees' performances. Moreover, a project manager should punish an employee who violates the ethical values such as sexual harassment etc.

9. What is a code of ethics? Discuss the benefits and limitations of a code of ethics and provide examples to substantiate your answer.

Code of ethics state the moral responsibilities of engineers as seen by the profession and as represented by a professional society. It includes the values and principles that shape the decisions we make in engineering practice. It functions as a commitment by the profession as a whole, that engineers will serve the public health, safety and welfare.

One example is that a project manager discovers faulty construction equipment and applies a violation tag preventing its continued use. The project manager's boss, a construction manager views the situation as a minor infraction of safety regulations and orders the tag removed so the project will not be delayed. In this case, the project managers's boss is violating the ethical theories. They need to consider the following ethical principles before taking a decision.

1. Engineers should protect the safety, health and welfare of the public.

2. Engineers shall avoid deceptive acts.

3. Engineers shall act as faithful agents or trustees for their employers/clients.

4. Engineers should adhere to highest principles of ethical conduct.

Some limitations of codes are

1. No substitute for individual responsibilities in dealing with ethical dilemmas.

2. Codes may include only general wording leaving areas of vagueness.

3. Despite the value of guiding professional conduct, codes are not always complete and final word.

10.What are the benefits of managing a project ethically? Discuss and provide examples to support your answer.

1. Serving and protecting the public: Engineering involves advanced expertise that professionals have and public lack. Accordingly, professionals stand in a fiduciary relationship with the public. Trust and Trustworthiness are essential.

2. Guidance: Codes provide helpful guidance by articulating the main obligations of engineers.

3. Inspiration: Codes provide a positive stimulus for ethical conduct.

4. Shared standards : Since the professionals have different moral view points, it is essential that professions establish explicit standards. In this way, public is assured of a standard of excellence.

5. Support for responsible professionals: Codes provide support to professionals seeking to act ethically.

6. Education and mutual understanding: Codes encourage a shared understanding among professionals, the public and government organizations about the moral responsibilities of engineers.

7. Deterrence and discipline: Codes can serve as the formal basis for investigating unethical conduct. Professional societies do suspend members whose professional conduct has been proven unethical.

8. Contributing to the profession's image: The reputation of a profession like the reputation of an individual professional is essential in sustaining the trust of the public.

Case 1: "A cafeteria in an office building has comfortable tables and chairs, indeed too comfortable: They invite people to linger longer than the management desire"

Designing uncomfortable chairs and tables to discourage such lingering is not a good idea as it is not ethical and a manager finds other ways to warn against longer lingering.

11.What are the strengths and weaknesses of the 'utilitarian' (or consequences based) ethical theory? Discuss and provide an example to support your answer.

Advantages:
Happiness - Happiness is given intrinsic value.
Harm - Harming people is intrinsically wrong.
Greatest good - The greatest good for the greatest number. For example a pharmaceutical company releasing a new drug with a few side effects. The drug is beneficial to a large number of people who suffer from the disease than those
Easy to use - Weighing up the positive and negative effects of our actions is straightforward
Secular – Utilitarianism doesn't rely on specific beliefs about God.
Objective – The positive and negative consequences of our actions can be measured.
Universal – The principle of utility, reducing harming and increasing happiness, is universal, and applies in every culture.

Disadvantages:
Other goods – 'Happiness' is not the only thing that is of intrinsic worth. For example, love, human life, freedom.
The end don't justify the means – Imagine I killed one healthy person and gave their organs to save 5 others. The balance of happiness over harm supports doing this, but we know that it is not right.
Immeasurable – You can't assign a value to an amount of pleasure.
Subjective – We all have different definitions of happiness.
Unpredictable – You can't actually know what is going to happen in the future.

12.What are the Universal Moral Values for Corporate Codes of Ethics studied in the course? Discuss and provide examples to support your answer.

According to Schwartz, universal moral values are generated by considering three sources:

(1) Corporate codes of ethics;

(2) Global codes of ethics; and

(3) The business ethics literature;

Based on the convergence of the three sources of standards, 6 universal moral values for corporate codes of ethics have been proposed:

1. Trustworthiness (i.e. Integrity, honesty, loyalty, transparency, etc.);

2. Respect (i.e. Respect for human rights);

3. Responsibility (i.e. accountability, self-restraints, etc.)

4. Fairness (i.e. equity, impartiality, etc.);

5. Caring (i.e. no harm); and

6. Citizenship (i.e. TBL, life cycle thinking, obeying the law, etc.)

Due to globalization, companies operate in many countries. There would be chances of working with different nationalities. Based on the universal moral values, we have to repect other cultures and do not show discrimination based on their religion, culture etc.