

**Faculty of Computer Science & Information Technology**  
**University of Malaya**  
**Semester 1, 2016/2017 Academic Session**

**WIX2002 – Project Management**

---

**Tutorial 1 – Answers**

1. What are the five characteristics that help to differentiate projects from other functions performed in the daily operation of the organisation?

A project is a complex, non-routine, one-time effort limited by time, budget, resource, and specifications. Differentiating characteristics of projects from routine, repetitive daily work are below:

- a. a defined life span
- b. a well-defined objective
- c. typically involves people from several disciplines
- d. a project life cycle
- e. specific time, cost, and performance requirements

2. Why is the implementation of projects important to strategic planning and the project manager?

Strategic plans are implemented primarily through projects such as a new product, a new IS, etc.

The project manager is the key person responsible for completing the project on time, on budget, and within specifications so that the project customer is satisfied. If the project is not linked to the strategic plan of the organisation, resources devoted to the project are wasted, and customer need is not met.

3. Explain the role of projects in the strategic management process.

Strategy is implemented primarily through projects. Successful implementation of projects means reaching the goals of the organisation and thus, meeting the needs of its customers. Projects that do not contribute to the strategic plan waste critical organisation resources.

4. How do projects linked to the strategic plan?

Projects are linked to the strategic plan because projects represent *how* a strategy is to be implemented. Since some projects are more important than others, the best way to maximise the organisation's scarce resources is through a priority scheme which allocates resources to a portfolio of projects which balance risk and contribute the most to the strategic plan.

5. The portfolio of projects is typically represented by compliance, strategic and operations projects. What impact can this classification have on project selection?

By carefully aligning the project proposal with one classification, it may increase the chances of it being selected. Senior management typically allots budgets for each category independent of actual project selection. Knowledge of funds available, risk portfolio, senior management bias, etc. may cause some to attempt to move their project proposal to a different classification to improve the chances of the project being selected.

6. You manage a hotel resort located on the south of Malaysia on the Tioman Island. You are changing the focus of your resort from a traditional fun destination to eco-tourism. How would you classify the following projects in terms of compliance, strategic and operational? How easy was it to classify these projects? What made some projects more difficult than others

- a. Convert the pool heating system from electrical to solar power.
- b. Build a 4-mile nature hiking trail.
- c. Renovate the horse barn.
- d. Launch a new promotional campaign with Malaysian Airlines.
- e. Convert 12 adjacent acres into a wildlife preserve.
- f. Update all the bathrooms in condos that are 10 years or older.
- g. Change hotel brochures to reflect eco-tourism image.
- h. Test and revise disaster response plan.
- i. Introduce wireless Internet service in café and lounge area.

Compliance: f, h

Operational: a, c, (d), j

Strategic: b, d (strategic if it promoted the eco-tourism theme), e, g

7. Two new software projects are proposed to a young, start-up company. The ABC project will cost RM150,000 to develop and is expected to have annual net cash flow of RM40,000. The XYZ project will cost RM200,000 to develop and is expected to have annual net cash flow of RM50,000. The company is very concerned about their cash flow. Using payback period, which project is better from a cash flow standpoint? Why?

Payback = Investment / Annual Savings

Project ABC:  $\text{RM150,000} / \text{RM40,000} = 3.75$  years

Project XYZ:  $\text{RM200,000} / \text{RM50,000} = 4.0$  years

Project ABC is the better payback.

8. A five-year project has a projected net cash flow of RM15,000, RM 25,000, RM30,000, RM 20,000 and RM15,000 in the next five years. It will cost RM 50,000 to implement the project. If the required rate of return is 20 percent, conduct a discounted cash flow calculation to determine the NPV.

	A	B	C	D	E	F	G	H
1								
2	Project 2.3		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
3	Investment		-RM50,000					
4	Cash Inflows			RM15,000	RM25,000	RM30,000	RM20,000	RM15,000
5	Required Rate of Return	20%						
6								
7	NPV =	RM12,895	Formula: =C3+NPV(B5,D4:H4)					

9. The Gem Company has set up a weighted scoring matrix for evaluation of potential projects. Below are five projects under consideration.
- Using the scoring matrix below, which project would you rate highest? Lowest?
  - If the weight for "Strong Sponsor" is changed from 2.0 to 5.0, will the project selection change? What are the three highest weighted project scores with this new weight?
  - Why is it important that the weights mirror critical strategic factors?

Criteria Weight	Strong sponsor	Supports business strategy	Urgency	10% of sales from new products	Competition	Fill market gap	Weighted total Part a.	Weighted total Part b.
	2.0	5.0	4.0	3.0	1.0	3.0		
Project 1	9	5	2	0	2	5	68	95
Project 2	3	7	2	0	5	1	57	66
Project 3	6	8	2	3	6	8	99	117
Project 4	1	0	5	10	6	9	85	88
Project 5	3	10	10	1	8	0	107	116

- Rate Project 5 the highest and project 2 the lowest.
- Yes. Three highest weighted projects are Projects 3, 5, and 1. Given the new strong sponsor weight, Project 3 becomes the first choice.
- It is important that the weights mirror critical strategic factors because failure to do so will cause selection of projects that do not contribute the most to the strategic plan.