MBA5020 專案管理
第一次小考試題卷

1. Howkins Electronics is a company that mainly provides smartphone products, the vision of this company is committed to using the most advanced technology to serve consumers. The CEO of Howkins require R&D department to include at least two innovative ideas to each product to attract more consumers. You are the manager of the project selection team at Howkins. Your team is considering three different projects. Based on past history, Howkins expects at least a rate of return of 20 percent. Given the following information for each project,

   (1) in financial criteria, what should be the order of priority based on return on investment? (Please provide calculation process)

   (2) in nonfinancial criteria, what would be the order of priority? Do you agree with those criteria in the evaluation form? Why? Please complete the project priority evaluation form below then answer the questions.

Project: Alpha

Developed a multi-core CPU for 6G (6th generation mobile networks) smartphones independently.

Year	Investment	Revenue Stream
0	450,000	0
1		50,000
2		250,000
3		350,000

Project: Beta

The first mid-range smartphone developed and produced independently.

Year	Investment	Revenue Stream
0	200,000	0
1		75,000
2		75,000
3		70,000
4		100,000

Project: Gamma

Develop a new business APP that improves productivity and the APP works on all smartphones.

Year	Investment	Revenue Stream
0	50,000	0
1		15,000
2		25,000
3		50,000
4		80,000

Project Priority Evaluation Form of Howkins			Alpha	Beta	Gamma
Want objectives	**Relative Importance 1–100**	**Single project impact definitions**	Weighted Score	Weighted Score	Weighted Score
Increase market share	40	0 = No potential 1 = Low potential 2 = High potential			
Use of advanced technology	70	0 = No potential 1 = Low potential 2 = High potential			
Innovated idea	55	0 = No potential 1 = Low potential 2 = High potential			
Reduce dependence on suppliers	20	0 = No potential 1 = Low potential 2 = High potential			
		Total weighted score			
		Priority			

2. You work for Howkins Electronics. Your R&D people believe they have come up with affordable technology that will double the capacity of existing smartphone CPU. The project is code named BPBI (Better Production Beyond Imagination) and it have to be completed in one year. It's a challenge for R&D department, but BPBI will gain the competitive advantage and increase market share by at least 10% for Howkins Electronics. The CEO has authorized project manager to carry out this project, provide ten million NTD and sufficient human resources to BPBI. If the project success, project manager will get a promotion opportunity, the members will get a three-month salary bonus.

   (1) What kind of project management structure would you recommend they use for the BPBI project? What are the advantages of your recommendation? A strong matrix structure is often recommended by the organization. What difficulties do project managers often face in exercising project authority under such project structure?

   (2) If you are the Project Manager, what kind of organizational culture would you want to form in BPBI? Please identify five organizational cultures and explain how they positively or negatively affect to your project.

3. Your best friend, Justin, is going to submit a scope statement for a summer concert sponsored by the entertainment council at National Taiwan University (NTU). NTU is a research university with over 32,000 students. This will be the first time in five years since NTU sponsored a summer concert. The entertainment council has budgeted 1,200,000 NTD for the project. The event is to occur on July 7th, with 2 months left. Since Justin knows you are taking a class on project management he has asked you to review his scope statement and make suggestions for improvement. Justin considers the concert a resume-building experience and wants to be as professional as possible. Below is a draft of his scope statement.

   (1) Base on the current scope statement, what suggestions would you make on the "Project Objective" and "Deliverables"? Note: you could consider add/edit/remove the items and explain why.

   (2) What are the purposes of "Technical Requirements" and "Limits and Exclusions"?

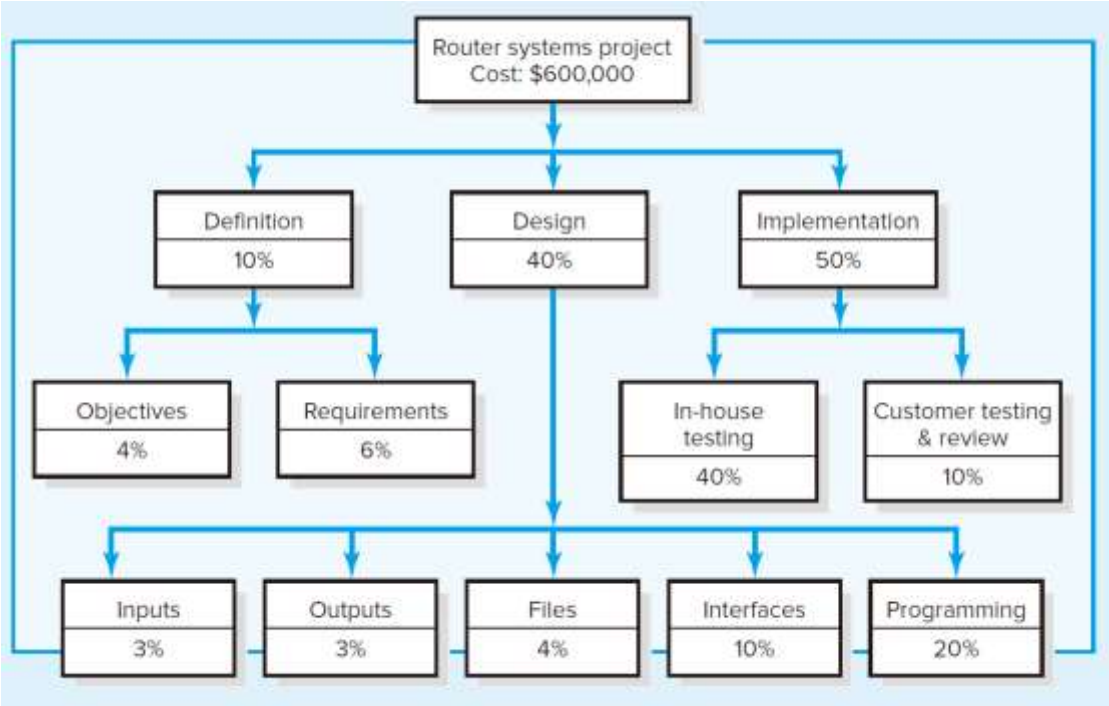
   (3) What are the differences between "scope statement" and "work breakdown structure" (WBS)? Please briefly explain.

NTU Summer Music Concert	
Project Objective To organize and deliver a 6-hour music concert **Deliverables** • Concert security • Contact local newspapers and journalist • Separate beer garden • Six hours of musical entertainment • Design a commemorative concert t-shirt • Local sponsors • Food venues • Event insurance • Safe environment	**Milestones** 1. Secure all permissions and approvals 2. Sign big-name artist 3. Contact secondary artists 4. Secure vendor contracts 5. Advertising campaign 6. Plan set-up 7. Concert 8. Clean-up **Technical Requirements** 1. Professional sound stage and system 2. At least five performing acts 3. Restroom facilities 4. Parking

Limits and Exclusions

- Seating capacity for 8,000 students.
- Performers are responsible for travel arrangement to and from NTU.
- Performers must provide own liability insurance.
- Performers and security personnel will be provided lunch and dinner on the day of the concert.
- Vendors contribute 25 percent of sales to concert fund.
- Concert must be over at 12:00 A.M.

4. The figure below is a project WBS with cost apportioned by percentages. If the total project cost is estimated to be $600,000,



(1) What are the estimated costs for the following deliverables? A. programming; b in house testing.

(2) Assuming that the Implementation will cost $240,000, how would you modify the cost apportioned? Briefly justify your answer.

(3) What weaknesses are inherent in this estimating approach? What would you suggest?

(4) Why the cost estimation is critical for project planning?