**SAMPLE EXAM 08-09**

This exam should take you no more than 2 hours to finish on your own, given that you have all your books and notes open. Good luck and Godspeed!

The actual exam may contain additional or fewer topics compared to this exam. This sample exam simulates the length of the exam.

**Project Scoping Case (30 min.)**

# WOW-MANILA TOURS, INC.

Michael and Rita Rodriguez operate their own specialized tour business that focus on showcasing historic and scenic Manila. Their first trip was a tour around Intramuros and visiting the old churches in the vicinity. The trip was a resounding success, and they became convinced that they could make a livelihood doing something that the both enjoyed.

After the first year, **Wow-Manila Tours, Inc**. began to slowly expand the size and scope of the business. The Rodriguez’ strategy was a simple one. They recruited experienced and reliable people who shared their vision of promoting the Philippines, particularly Manila, as a tourist destination. They helped these people organize specific trips and advertised the excursions over the Internet and travel magazines.

**Wow-Manila Tours, Inc**. has grown from offering 4 trips a month to having 16 different tours scheduled, including trips to Corregidor and some marine sanctuaries in Batangas. Each trip would include 3-4 destinations including restaurants for lunch or dinner. By then, they had an administrative support of 3 people and a relatively stable group of 5 trip planners/guides whom they hired on a trip-by-trip basis. The company enjoyed a high level of repeat business and often used their customer’s suggestions to organize future trips.

Although the Rodriguezes were pleased with the success of their venture, they were beginning to encounter problems that worried them about the future. A couple of tours went over budget because of unanticipated costs, which eroded that year’s profits. In one case, they had to refund 30 percent of the tour fee because a group was stranded two days in Corregidor when boats refused to ferry back their tourists due to inclement weather. They were also having a hard time maintaining a high level of customer satisfaction to which they were accustomed. Customers were beginning to complain about the quality of the accommodations and the price of the tours. One group unfortunately was struck by a bad case of food poisoning when brought to a restaurant in Remedios, Malate.

The Rodriguezes felt they wanted an Information System (IS) to be able to trace back each tour, specifically the places where the tourists where brought. This, they thought, would enable them to avoid similar incidents and evaluate the different destinations based on their customers’ feedback.

QUESTION:

If you were to propose the Project for the Rodriguezes, what would be the scope of this project? Be able to identify at least the relevant objectives, the deliverables, the milestones and the limitations and exclusions of your project.

**Project Scoping Case (30 min)**

Apple is one of the top retailers of “hip” fashion and accessories globally. It views the Asia region as a high growth area, already having outlets in Hong Kong, Japan, South Korea and Singapore. But apart from “brick and mortar” stores, Apple also sells its products via catalogs and online. Two years ago, it pirated Howard Martin from one of its rivals, Mango, and named him CEO for Asia Pacific. Back then, Howard presented his 5-year plan, known to his management team as “Big Leap”, which outlines the following organization strategies: (1) Find and exploit a differentiator between Apple and its competitors; (2) Enhance relationships with existing customers; (3) Spot trends and changing customer preferences; (4) Ensure Apple’s good image in fashion magazines; and (5) Develop effective and at the same time cost efficient marketing strategies. All of these are meant to increase Apple’s “share of the closet”.

Around three months ago, Barry Golding, the Chief Information Officer for Asia Pacific, accompanied Howard on a visit to Apple’s stores in Hong Kong. In one of their dinners, Barry decided to share an idea he had been thinking for some time. “Howard, remember what you said about gaining share of the closet? I think we can use information about our customer to make that happen.”

Howard seemed interested.

“A CRM system,” Barry took a deep breath. “We have a marketing database, but it isn’t truly integrated with our transaction database. The stores and catalog business operate like separate companies. We don’t know if catalog mailing drives store traffic. I’m not saying that CRM will solve all of this, but it can help us integrate the data we have and help us gather the right information going forward – and that’s the first step to building share of closet.”

By the time they finished dinner, Howard had given a provisional thumbs-up. “This has great potential,” Howard said. “But you need to find out if it has legs internally. Most of our investment capital is already committed, so you’ll have to get money from operations, store planning, and the buyers to start this thing. If they say they’ll chip in, you have my blessing to start exploring.”

As soon as he could, Barry logged on to his wireless email and put Sally Chang, his second in command, to work. “CRM phase one is a go,” he typed. Within a week, he was able to sell his idea to the senior managers. To sweeten the pot, he entertained all features that these senior managers would like to see in the system. Barry’s enthusiasm was infectious. He promised a CRM system that would not only work off sales data but would also use marketing incentives to get customers to provide more information about themselves. The company would learn customer’s preferences. Customer loyalty – share of the closet – would soar.

But that was then. Three months have passed. The CRM task force assembled in the large conference room on the fourth floor of headquarters. The group included the following regional leads: Ted Antonelli (Vice President of Store Operations), Sarah Wronski (CFO), Brad Winston (Vice President of Marketing), Wendy Black (General Manager for “brick and mortar” Stores) and Roger Zinn (General Manager for Online and Catalog divisions). “I really want to thank you for allowing us to spend so much time with your teams over the past 3 months assessing their needs,” Barry began. “The vendor we’ve chosen, Customer Understanding (CU), has conducted a preliminary review of our existing systems but will be taking a much more thorough look over the next few weeks. Our seed fund will take us through the rest of this analysis and design phase,” he said, “but we’re going to need to look at fresh funding beyond that.” Barry’s team then went on describing project progress and the proposed high-level system design, which is a summarized version of a memo they’ve earlier circulated to the attendees.

“Barry,” Ted interrupted. “I assume we can be a bit informal here. If I’m reading the memo correctly, it’s going to be almost two years before we get to the parts that make a real difference at the store level. I can’t invest for that long without getting some payback along the way.”

“I’ve got some issues, too,” Wendy added, flipping through the memo’s pages. “I don’t see a lot of things we talked about when we were making up our wish list.” Barry was momentarily thrown, but he recovered quickly. “Well, naturally, at that point we are scoping out possibilities, not final specifications,” he said. “And there are some legacy-system quirks that are keeping us from doing everything you wanted.”

“Well, when I committed money to this, I figured I’d get most of what I wanted,” she said. Other heads at the table nodded.

Ted spoke again: “Same-store sales have been flat for two months now. I have some managers who need to make their numbers to qualify for the bonus plan. They’ll have a better shot at it if I can give them more money for personnel and display.”

“Ted, that’s shortsighted and you know it,” Roger interrupted. “I can prove that the more I know more about my customers, the more I can sell to them. And that’s true not only for catalog.” But just as Barry was beginning to perceive a real ally, Roger raised a concern. “I was wondering, though: What are we going to do to ensure the purity of data? Information collected at the store level can be pretty unreliable. I need it to be pristine.”

“Roger, I think we can handle that,” replied Barry. “The POS system we’ve just implemented will be a big help.”

“It’d better be. From what I’ve read, data integration is where CRM systems break down,” Roger said. “I want to see how your system handles that before I get in any deeper. Fancy slides from CU won’t do... Show me something more, and maybe I’ll be ready to commit more money.”

“I’m with Roger,” Ted added. “I’m just not convinced we’re seeing enough to justify another round of investment.” The meeting then broke up, but with Barry’s team members lingering behind. They sulked as they gathered up their charts and handouts. “So many color-ink cartridges gave their lives in vain,” said one of them.

“You know how investment requests are received around here,” Barry tried consoling them. “People should know that CRM projects are multiyear. But they think waiting a week is long-term.” One of this subordinates said: “I really wish Howard had been here.”

**Question:** Assume Barry was able to get funding for the CRM project. You’ve been requested to draft a scope document for the project. Note that CU, the software vendor, already has a CRM product which just needs to be customized to Apple’s needs. Answer in outline form.

**Project Strategy (20 min)**

With its global hub at Heathrow Airport (LHR) in London, Supreme Airlines is among the top five flight carriers shuttling passengers between the East Coast of the United States and Western Europe. Known for having very attentive staff as well as a modern fleet furnished with the latest in seat designs, entertainment systems and other amenities, it caters primarily to business travelers. Its most popular route is its five times daily New York to London service, and in close second is its thrice daily New York to Paris service.

Since two years ago, the goal of the company has been to continuously grow its business traveler clientele at the rate of at least ten percent a year, knowing that better profit margins can be gained from these people compared to families or budget travelers. Consumer behavior studies have indicated that business travelers expect a comfortable flight and minimal queues inside airport terminals. They are willing to pay a premium to experience priority service, such as use of airline lounges, priority check-in, priority baggage handling and advanced boarding. They also want to have as much control over their travel booking as possible, valuing opportunities to receive their itineraries on demand and to make advanced seat reservations. And similar to other classes of passengers, generous mileage and reward programs encourage loyalty among business travelers. Supreme Airlines’ primary strategy is really to pamper the business traveler. This is followed by streamlining business processes to save on unnecessary costs, one strategy shared by a lot of companies in different industries.

You have been hired by Supreme Airlines to audit the workings of its IT Department Project Selection Team, which is in charge of choosing the IT systems the airline will be implementing. You came across with three of the projects the team approved last year, as follows. Note that all amounts are in thousands of British pounds.

**Route Analysis System (RAS**). Implement a decision support system that could suggest the most optimal utilization and placement of planes when fed with route and passenger volume data. This is expected to decrease cost of operations. Initial investment = 13,500

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| --- | --- | --- |
| Projected Annual After-Tax  Cash Flows | Year 1 | -1000 |
| 2 | 7500 |
| 3 | 7500 |
| 4 | 6400 |

**Supreme Web Experience.** Link the Supreme Airlines ticketing and reservation system with a newly purchased e-commerce engine for its web site to facilitate online booking of flights. Instead of paper tickets, e-tickets (automatically sent to passengers via email or fax) will be used. Also develop functionality that allows online check in for booked passengers up to two days before the scheduled flight date – allowing passengers to choose seats in advance, and merely pick up their boarding passes at a pre-designated counter upon arrival at the airport. This service, which will definitely minimize check-in queue time, is targeted to be available for frequent passengers, with or without check-in luggage. Initial investment = 3,400.

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| --- | --- | --- |
| Projected Annual After-Tax  Cash Flows | Year 1 | 200 |
| 2 | 1400 |
| 3 | 1550 |
| 4 | 1700 |

**Inflight Entertainment System Promotion.** Advertise in major travel and business magazines the new on-demand audio and video entertainment system progressively being installed in all the business class seats of Supreme Airlines’ fleet. Initial investment = 300.

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| --- | --- | --- |
| Projected Annual After-Tax  Cash Flows | Year 1 | 350 |
| 2 | 50 |
| 3 | 0 |
| 4 | 0 |

Last year, the prevailing guideline from the Chief Financial Officer of Supreme Airlines is that all projects should have a return on investment of at least 16% by year 4 (or earlier, of course). And based on the performance of the investments then, the discount rate to be applied is 8%.

QUESTION:

Based on the team’s approach to review all project proposals based on purely a combination of two factors – return on investment as well as NPV, do you agree with their decision to approve all three proposals? Which, if any, projects should have been approved? Which, if any, should have been declined? Why? Answering in outline form is encouraged; separate your calculations from the body of your answer.

**Networks, Lags and Crashes (60 minutes)**

24/7 International is a business outsourcing firm that specializes in the development and implementation of Human Resource Systems. One of their clients is Pearl International, a manpower agency that sends Overseas Foreign Workers to various countries as sailors, captains and blue and white-collar workers.

Just recently, Pearl International requested 24/7 to manage the bidding and deployment of an on-line recruitment kiosk something similar to the ones found in SM Megamall that one uses to determine where a particular store is; only in this case, the kiosk will allow the users to enter their basic information. The kiosk is composed of a casing and the kiosk itself (composed of the computer and the screen). Pearl International already has 20 of the kiosks but no casings yet. The kiosks will be located in strategic locations and with the partners of Pearl International so that prospective OFWs can enter their bio-data online.

You were tasked by your PM to create the Network Diagram and do some “what-if” scenarios.

After talking to the concerned people, you found out that the project is divided into two major phases -- Software Acquisition and Site Improvement; each phase can run in parallel with the other.

**The Software Acquisition Phase:**

Three teams were tasked to create a requirements analysis: the technical team, the management team and the end users team. The Technical Team would need inputs from the network team and from the software integration team. The network team said that they would need 15 days to complete their analysis, while the software integration team would need 8 working days. The technical team would then compile these requirements and produce their report 7 days after.

The management team said that they would require 21 days to create their analysis, while the end user team would require 18 working days to create their analysis.

Once all of the teams have finished compiling their requirements, an RFP will be created. This will take four working days. After which, Pearl International and 24/7 will wait for bids to arrive and takes around 20 days. Once all the bids are in, they are then evaluated. This process of bid evaluation will take 12 days. The winning bid is then publicly announced, which will simply take 1 day.

Once the winning bid has been announced two activities start immediately and in parallel: the acquisition of the software and the training of the people in the use of the software. The former takes 30 days for software tweaking, then an appropriation for a 14 day lag for delivery. While the training will take only 20 days.

# Site Improvement

After all the requirements have been completed (at the same time that the RFP is being created), the sites where the kiosks will be installed is inspected. There are twenty sites to be inspected and it was estimated that it takes a day of inspection per site. Once the site has been inspected, three activities are done in parallel: network cabling, taking care of the electrical wiring, and building the casing. The cabling can be done in 6 days and the wiring will take 10 days. Building the casing can be done in 30 days. Once the cabling and the wiring are finished and the casing built, the casing can now be installed in all the sites (takes a total of 2 days per site). After putting the casing, the kiosk itself can be installed – it will take a total of 40 days for all sites combined.

**Putting it together**

Once the software has been acquired, the people have been trained and the kiosk been installed, only then can the software be installed. It is estimated that the installation will take 20 days.

1. Create the project network (including the corresponding lags) and compute for the ES, EF, LS, LF, slack and determine the critical path. Pearl International wants to finish the project in no more than 160 days. Will the project finish on time?
2. It has already been a week after the start of the evaluation of bids, it was found out that two of the members of your bid evaluation group has been bribed by some of the bidders. You have decided to halt the evaluation for a week and look for new members of the evaluation group. You found two volunteers, but they need 8 days to study the requirements and read the materials again. After which you again need 7 days to do the evaluation. Given this new development, top management agreed to extend the deadline, but they only gave you 10 days – for a total of 170 days. Will you make the deadline or not? To illustrate, you can redraw the network diagram again. By how much will you be ahead or delayed?