**PME 603 Week 3 Quiz**

**Study Guide**

**11/6/20**

1. In order to calculate the net present value, that might be associated with a proposed product, it is necessary to:

a. create a sales forecast.

b. calculate the internal rate of return, IRR.

c. define the payback period.

d. assesses costs.

**Hint:** In order to calculate the net present value of sales for a proposed product, it is necessary to forecast future cash flows. These yearly revenues are then discounted to the present value using a discount rate. That rate typically is equal to the firm’s cost of capital. Often, there is also a risk premium added to this discount rate. Finally, the discounted future values of yearly revenues are added together to calculate the Sum of the Present Values of Future Revenues. From this figure another figure is subtracted to arrive to the Net Present Value. That figure may be, for example, the cost of customer acquisition.

2. It is difficult to forecast success for:

a. product improvements

b. line extensions

c. new-to-the-world products

d. flanker brands

**Hint:** It is difficult to forecast if no data exist on past sales or whether the new technology would be accepted. So, more subjective techniques are required here. The forecasting task is obviously a lot more difficult in this case, and some might think it to be almost impossible.

3. Leah Hubert senses that her "favorite" product concept might be dismissed due to "inappropriate and unreasonable" financial analysis tools that cannot accurately reflect its potential. Leah has attempted to use her influence to push the concept past such obstacles. In this scenario, Leah is functioning as a \_\_\_\_\_.

a. product architect

b. financial forecaster

c. product champion

d. financial analyst

**Hint:** In this scenario, Leah is promoting an idea without depending on prior quantitative analysis. She depends on her subjective assessment of the merits of the project she has decided to sponsor.

4. A firm may approve many new product projects if:

a. simple financial hurdles are not the only criterion.

b. resource constraints are included in the NPV calculations.

c. the management ignores small, quick-hit projects to focus on developing new product technologies.

d. low-quality work reduces the quality of information used for decision making.

**Hint:** A firm may initially approve more new product projects by making Go/No Go decision at the fuzzy front end. This can be appropriate when such decisions can be made with preliminary and not very extensive information.

5. Leading product innovators use a type of \_\_\_\_ system instead of following the relay race model.

a. non-repetitive

b. sequential

c. concurrent

d. linear

**Hint:** Experimentation is a good model very early in the new product process. This process seldom requires accountability for results because creativity and luck cannot be mandated.

6. Esqua Inc., a manufacturer of soaps and shampoos, claims that its latest brand of soaps, Esqua Plus, is superior to the average soap brand because, unlike other soaps, Esqua Plus combines both antibacterial and moisturizing properties and offers longer-lasting deodorant protection. In this scenario, which of the following concepts is Esqua using to encourage its customers to try its products?

a. Product positioning

b. Product testing

c. Product diversification

d. Product innovation

**Hint:** Assume that the firm announces the item as new and gives the end user a real reason for trying it. In the process, it shows the end user what problem it attacks and what about it makes it better than whatever they are using now.

7. When an automobile manufacturer makes a statement, "The car, using the new German 11-Z4 engine, must accelerate from 0 to 60 miles per hour in 8 seconds," he is expressing a product function in terms of a(n) \_\_\_\_\_.

a. design parameter

b. embedded feature

c. cost benefit

d. tangible feature

**Hint:** This requirement does not tell us what features will yield that performance. What it does is answer the question of how the customer achieves the benefits of exciting (or safe) start-ups. This performance requirements are included in the Product Requirements Document.

8. Which of the following types of firms are most likely to question the need of utilizing quality function deployment (QFD)?

a. Consumer-goods firms

b. Industrial product developers

c. Home appliances firms

d. Firms in the packaged food industry

**Hint:** Firms that can receive an immediate feedback from the market may be less inclined to try to find out what a Voice of the Customer is and do not need to build their Houses of Quality.

9. Which of the following statements is true of product design?

a. The design of a product should be considered only after the product is about ready to be manufactured.

b. In practice, design as a term holds the same meaning for different companies in different industries.

c. Firms that are judged to be higher in design effectiveness tend to report lower profits due to R&D expenditure.

d. Design can be best described as the synthesis of technology and human needs into manufacturable products.

**Hint:** Design is what a customer sees and experiences. The role of designers is to take prototypes of a product and make it work in the hands of customers.

10. Firms that are concerned with, or seek to promote environmental concerns are most likely to employ design for \_\_\_\_\_.

a. disassembly

b. ergonomics

c. visual equity

d .ease of manufacture

**Hint:** Firms that are concerned with, or seek to promote environmental concerns are most likely to employ the technique by which products can be taken apart after use for separate recycling of metal, glass, and plastic parts.

11. With reference to the design process, the practice of putting the various individuals or functional areas in close proximity so as to shorten communication lines and increase team cohesion is called \_\_\_\_\_.

a. relocation

b. approximation

c. resettlement

d. colocation

**Hint:** Think about the water cooler. Now… think about what is Covid-19 doing to this concept.

12. The creation of a solid object directly from a three-dimensional computer model is called \_\_\_\_\_.

a. wire framing

b. rapid prototyping

c. technological ideation

d. assembly design

**Hint:** The creation of a solid object (a prototype) directly from a three-dimensional computer model can be accomplished much faster than doing this task by any other method.

13. In a functional organization structure, \_\_\_\_\_.

a. team members are informed about key issues, and communication is comparatively easy

b. the work is high risk and mainly involves the development of new-to-the-world products

c. most of the power leans toward the project manager

d. team people are project people first and functional people second

**Hint:** Functional organization structure (silo structure) is not efficient or effective from the New Product Development point of view. The communication between functional staff stays inside the silo and may be efficient. However, communication with staff from outside of such silo will not be efficient of effective.

14. In the \_\_\_\_\_, both functional and project views are critical—neither ongoing business nor the new product should be the driver.

a. functional option

b. balanced matrix option

c. venture option

d. project matrix option

**Hint:** neither ongoing business nor the new product should be the driver. Think about the effectiveness of such approach? Who drives that boat?

15. In the context of the competencies tied to radical innovation, \_\_\_\_\_ refer to the process of transitioning the radical opportunity into a business proposal.

a. incubation

b. acceleration

c. discovery

d. projectization

**Hint:** In other words, chicklets are taken care first before they grow and can walk on their own.

16. Globally dispersed teams or GDTs have increased in prominence because:

a. accelerated product life cycles require that expertise should be gathered from wherever it resides.

b. interpreting very complex problems using e-mails, or a company intranet is easier than by meeting in person.

c. creativity seems to be much higher in these teams than in in-person teams.

d.so far, they have, in general performed better than domestic teams.

**Hint:** Talent can be found all over the world. Especially, less expensive talent.

17. Which of the following is a disadvantage associated with use testing?

a. The risk of a competitor obtaining the firm's product and entering the market first

b. The higher costs involved as compared to the loss of the earnings flow from a successful product

c. The inability of the test to follow a schematic system

**Hint:** Test marketing has more risk that other types of testing.

18. Firms that copy innovative products:

a. usually commit the innovator's mistakes as well.

b. tend to be the industry leaders.

c. typically have no imitators to worry about.

d. gain higher profits than the innovators due to price competition.

**Hint:** Russians used to copy our products. Intel and NASA taught them a couple of lessons. Copied microchips did not work and The Burat spaces shuttle almost disintegrated at the entry. Needless to say, that spaces ship never flew again.

19. Identify the use test that provides knowledge from initial reactions of users to color, speed, durability, mechanical suitability, etc., of a new product.

a. Reactive beta test

b. Alpha test

c. Gamma test

d. Pre-use sense reaction

**Hint:** For example,potential new car’ impression upon first entering a dealership will most likely determines the probability of purchase. First impressions are most important.

20. When a respondent uses an item, describes activities, and explains problems encountered, it is known as:

a. retrospective testing.

b. the introspection method.

c. the think aloud method.

d. constructive evaluation.

**Hint:** First, the process itself is called “ evaluation”. The approach may be constructive or not constructive.