

# [Randd implementing essay](https://assignbuster.com/rd-implementing-essay/)

If a firm has the option of investing in R&D implementing the technology is the exercise price nature of the option benefit of exercising the option the value of the option Instructor Explanation: Chapter 7, page 143 1. Question : (TCO A) If you were in charge off Research and Developed department for a large pharmaceutical company, would you encourage you researchers to do basic research or applied research? Provide the rational answer. I would have them use applied research which is d towards understanding a topic to meet a specific need.

I would need something long- term and basic research cannot offer that. Development is defined as activities that apply knowledge to produce devices, materials, and processes. The ways that this research and development would apply research threw customers, external networks, competitors, suppliers, scientific information, and technical information. Instructor Explanation: The Research and Development (R&D) department for a large pharmaceutical company should probably encourage its researchers to do both basic research and applied research. Basic research is directed at increasing understanding of a topic or field.

This type of knowledge will help the company to better understand the medical field and to come up with approaches to applied search. For example, research to understand why and how people develop diabetes would provide guidelines into approaches to treatment. Applied research is targeted at increasing knowledge for a specific application. The development of new methods of treatment based on the findings of basic research would be the next logical step to take. This type of research would also require creativity and innovation but would be targeted at treating an illness in a certain way Points Received: 25 of 30 Question 2.

Question : (TCO A) Ata retreat by the Salisbury City Council, community traders held a discussion on attracting and developing new businesses and increasing employment rates in the city. One leader suggested that the city consider sponsoring a business incubator. Explain what an incubator is and how this might help the city meet its goals. Business incubators are programs designed to support the successful development of entrepreneur companies in support resources and services that include physical space, capital, coaching, common services, and network connections.

The incubator can provide the resort with financial and technical services to build the business. They can offer office and manufacturer space at a low rate staff supplies can be used, and advice in developing the business can be utilized. The retreat can stay in the incubator for two years to make sure their goal is met to reduce overhead and operational cost for the new businesses. Instructor Explanation: An incubator is an institution designed to nurture the development of new businesses that might otherwise lack access to funding or advice. It allows companies to share costs and resources until they can stand on their own.

If an incubator were started in Salisbury, it would help new businesses to grow ND prosper. These businesses could then move out to locations of their own and hire local residents as employees. The city would not have to offer tax breaks or compete with other cities for the location of existing companies, but would be growing their own businesses. Points Received: 30 of 30 Question 3. Question : (TCO B) Explain why it is that if a company’s technology is adopted by users ahead of other technologies, it might be at a tremendous advantage and competitors will have trouble catching up.

Early adopters are more integrated in the social system and are respected by their peers giving that dominant design. Competitors cannot keep up due to higher innovation and prices dropping due to customer penetration. These advantages asset a companies technology diffusion. Other factors involved are the time it would take to switch technologies or develop new competencies. It would also affect the new technology fit with the firms position in complementary resources and the affective rate of diffusion of the new technology.

Path dependency also plays a big part in early adoptions since sponsors can be aggressive by pressuring suppliers or distributors to support the technology which gives a controlling share of the rake. Instructor Explanation: As users adopt the technology, this generates revenue that can be reinvested in improving the technology, provides feedback about how the product works and can be refined, and attracts developers of complementary goods. Furthermore, the company that produced the technology gains absorptive capacity which means that they can learn more in the future and have a better understanding of the components of the technology.

Thus even a technology that was initially inferior to other technologies may improve faster than others if it is adopted earlier. It can be very hard for competitors to catch up. Page: 65 29 of 29 Question 4. Question : (TCO B) Explain what factors affect the technology trajectory and chance of success of a new technology besides its quality and technical advantage. The factors that could affect technology trajectory are timing, complementary goods, and installed base technology. Any company that gets a jumpstarted on technology cannot be overtaken in the market.

Whoever sponsors the new technology can also affect how the technology life spam is determined. The reputation and success of the industry leader determines the type of support the ewe technology receives and if the complementary goods will be affective. THe installed base determines the number of users using the technology for long-term benefits and the complementary goods can be free or trial periods that the industry leader can innovate. These practices can make the product stand out and have a dominant design. Instructor Explanation: Timing is an important influencing factor.

If a company can be first with its technology, it may become so entrenched that even technically better offerings cannot overtake it in the market. The sponsor of the new technology an also make a big difference. If a new technology is introduced by an industry leader, it has a greater chance for success and a longer life span. This is due not only to the reputation and past success of this market leader, but also due to the pressure this company can place on its distributors and suppliers to support the technology.

Complementary goods and installed base can also be very important; a company that gets a Jumpstarted on either of these (because of luck, or because it gives its product away for free, etc. ) may start a network externalities cycle that makes it more and more dominant. Question 5. Question : (TCO C) Even though many aerospace manufacturing firms are very profitable, there are very few upcoming firms. Explain the reason using at least one force from Porter’s Model. The Porter’s model is used what attracts the industry.

One of the reason that could affect upcoming firms is the external environment by how it creates threats and opportunities for new firms. The degree of existing rivalry has a few factors that are obvious like related size of competitors, price, avoiding head-to- head competition, difference in competitors, and demand conditions. If their is less impetuous then business seem to prosper more than those with more competitors. Some upcoming firms are not good at committing with price causing downfalls in the business.

IF a upcoming firm is not aggressive enough to com petite it does not gain long-term value. Some competitors maybe so different less direct rivalry is placed. If the demand for the aerospace firm isn’t high new upcoming firms cause less competitive pressure. Instructor Explanation: The important factor from Porter’s Five-Force Model is the threat of potential entrants. This threat is relatively low because of the entry barriers. The cost of starting an aerospace company is high and the existing companies are well-established.

These companies are large, have the contacts, personnel, and skills necessary to meet the market demand, making it almost impossible for a new company to compete with them. Hence the threat of potential entrants remains low. Chapter 6, page 115 Question 6. Question : (TCO D) Johnston Products has gathered data to evaluate the attractiveness of a potential project. It knows the cash flows expected under different scenarios. It has conducted a focus group that ranks various product attributes, and t has the ranking of various marketing techniques provided by a consulting company.

What method should Johnston use to evaluate this project? Why is this method the best one to use? Johnston Products should use the Data envelopment analysis since it focuses on cash flow estimates, ranking of the project with existing competencies, ranking the project’s potential for building future competencies, scoring technical feasibility, and sore for customers desirability. The case measurements are cash-flow, focus group, and using a consulting company to analysis multiple criteria to make multiple decisions.