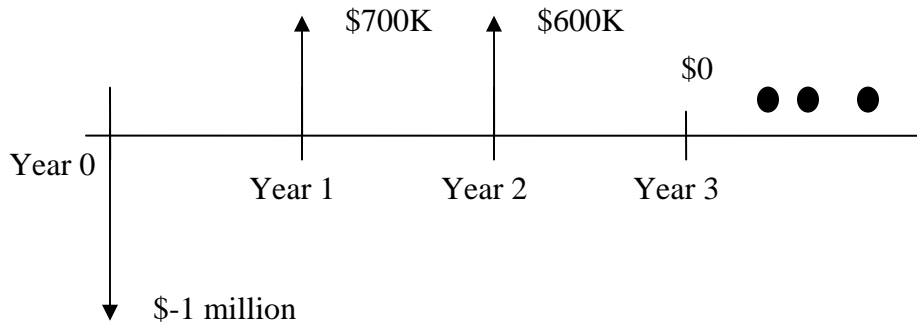


ISM 50 - Assignment 2

~~Due April 11, 2005 in class~~ (Deadline changed) -- Due April 13, 2005 in class

- I) You have a plan to deploy an information system in your company. Your boss tells you to deploy your proposed information system if the return on investment is more than 20%. Suppose the information system requires an initial investment of \$1 million, and will result in a savings of \$700 thousand in year 1, \$600 thousand in year 2, and no savings in the years 3 and after. Should you deploy the information system? What is the return on investment? For purposes of calculation, assume that the savings are realized in “lump” sums each year rather than distributed throughout the year. This is illustrated by the figure below.



Hint: the return on investment is found by finding a discount factor i such that the discounted sum of all the cash flows is 0. Hence

$$x_0 + x_1(1-i) + x_2(1-i)^2 + x_3(1-i)^3 + \dots = 0$$

where x_t is the cash flow in year t .

- II) Matching (Taken from the “Review Quiz” on page 60 of O’Brien Chapter 2, 7th edition)

Consider the following key terms and concepts:

1. Agile company (54)
2. Business process reengineering (51)
3. Competitive forces (42)
4. Competitive strategies (43)
5. Creating switching costs (45)
6. Customer-focused business (47)
7. Interenterprise information systems (45)
8. Knowledge-creating company (57)
9. Knowledge management system (58)
10. Leveraging investment in IT (46)
11. Locking in customers and suppliers (44)
12. Raising barriers to entry (46)

Match one of the key terms and concepts listed previously with one of the brief examples or definitions that follow. Try to find the best fit for answers that seem to fit more than one term or concept. Defend your choices. A sentence or two should suffice.

1. A business must deal with customers, suppliers, competitors, new entrants, and substitutes.

2. Cost leadership, differentiation of products, and new product innovation are examples.
3. Using investment in technology to keep firms out of an industry.
4. Making it unattractive for a firm's customers or suppliers to switch to its competitors.
5. Time, money, and effort needed for customers or suppliers to change to a firm's competitors.
6. Information systems that reengineer business processes or promote business innovation are examples.
7. Internet technologies enable a company to emphasize customer value as its strategic focus.
8. Highlights how strategic information systems can be applied to a firm's business processes and support activities for competitive advantage.
9. A business finding strategic uses for the computing and telecommunications capabilities it has developed to run its operations.
10. A business using information systems to build barriers to entry, promote innovation, create switching costs, and so on.
11. Information technology helping a business make radical improvements in business processes.
12. A business can prosper in rapidly changing markets while offering its customers individualized solutions to their needs.
13. A network of business partners formed to take advantage of rapidly changing market opportunities.
14. Many companies use the Internet, intranets, and extranets to achieve strategic gains in their competitive position.
15. Learning organizations that focus on creating, disseminating, and managing business knowledge.
16. Information systems that manage the creation and dissemination of organizational knowledge.
17. Using the Internet and extranets to link a company's information systems to those of its customers and suppliers.

III) Construct a basic Porter 5-forces model for McDonald's. Define the industry; list some of McDonald's direct competitors, its suppliers, buyers, substitutes for its products, and potential new entrants. Draw your porter model in the classic way that we used to draw our example in class. For each item you list in your model, state whether you think that item has strong or weak negotiating power, or is a strong or weak threat, and justify your answers. For example if you listed labor as one of the suppliers, do you think McDonald's labor have strong or weak negotiating power, say as compared to a skilled labor force at a hi-tech company?