**CHAPTER 2**

1. **Three examples of business needs for a system include:**
   1. **Increasing sales to continue growing and attracting investors**
   2. **Increasing market share to keep up with (catch up to) competition**
   3. **Improved customer service to help gain customer loyalty and grow customer retention rates**

**2. What is the purpose of an approval committee? Who is usually on this committee?**

**Once the feasibility analysis has been completed, it is submitted to the approval committee, along with a revised system request. The purpose of an approval committee is to approve the project, decline the project, or table it until additional information is available.**

**The answer is on page 58. I have not found out who is on this committee yet.**

**3. Why should the system request be created by a businessperson as opposed to an IS professional?**

**System requests should be created by a businessperson, because they can ensure that they system will be based on real business objectives. A system needs to affect the organizations bottom line and a businessperson can make sure that happens. A businessperson will also be able to describe the business reason for building the machine and the value that the system is expected to provide.**

**4. What is the difference between intangible value and tangible value? Give 3 examples of each.**

**Intangible Value means that the value of some cost or benefit does not have an exact numerical amount. A lot of the times it is valued on the beliefs or needs of the company or person that is dealing with it. Such as improved customer service, increase in employee moral, better brand recognition, or increased market share.**

**Tangible Value means that the value of the cost or benefit can be directly collected or avoided by the entity. Such as increased sales, cost savings, better supplier costs, and reduction in staff.**

**5. The purpose of the System Request is to provide a document that describes the business reasons for building a system and the value that the system is expected to provide. The purpose of the Feasibility Analysis is to guide the organization in determining whether or not to proceed with a project. It also identifies the important risks associated with the project that must be addressed if the project is approved. The System Request and Feasibility Analysis are used in the project selection process allow the approval committee to decide whether to approve the project, decline the project, or table it until additional information is available. At the project level, the committee considers the value of the project by examining the business need (found in the System Request) and the risks of building the system (presented in the Feasibility Analysis).**

1. **Two special issues that may be important to list on a system request could be:**
   1. **Special security clearance (access) for personnel that will be working with system data**
   2. **Any special deadlines issued by authoritative agencies (the government) or deadlines relevant to have the system implemented for an upcoming time of higher than normal customer demand**
2. **Describe the three techniques for feasibility analysis.**

**The first technique is technical feasibility which is the extent to which the system can be successfully designed, developed, and installed by the IT group. Technical feasibility analysis is in essence a technical risk analysis that strives to answer this question: Can we build it?**

**The second element of a feasibility analysis is to perform an economic feasibility analysis (also called a cost-benefit analysis), which identifies the financial risk associated with the project. It attempts to answer the question: Should we build the system? Economic feasibility is determined by identifying costs and benefits associated with the system, assigning values to them, and then calculating the cash flow and return on investment for the project.**

**The final technique is to assess the organizational feasibility of the system, how well the system ultimately will be accepted by its users and incorporated into the ongoing operations of the organization. Organizational feasibility attempts to answer this question: If we build it, will they come?**

**8. What factors are used to determine project size?**

**Project size can be measured in three different ways: 1. The number of people on the development team. 2. The length of time it will take to complete the project. 3. The number of distinct features in the system.**

**9. Describe a risky project in terms of technical feasibility. Describe a project that would not be considered risky.**

**Technical feasibility is the first technique in the feasibility analysis which is used to determine if the project can be successfully designed, developed, and installed by the IT group. It strives to answer the question “Can we build it?” Project risks include, Lack of familiarity of the business functional area and/ or technology by the group, Project size, and the compatibility of the new system with what currently exists in the organization.**

**A good way to determine if a project is risky or not is to compare it to prior projects undertaken by the organization and another is to consult with experienced professionals for their opinions. Although, A “non” risky project would be described as something that the IT group knows very much about and can work well with during the designing, developing, and installation of the project. As well as an appropriate group size relative to the difficulty and type of project.**

**10. The steps for assessing Economic Feasibility (aka Cost-Benefit Analysis) are:**

**a. Identifying Cost and Benefits – List the tangible costs and benefits for the project. Include both one-time and recurring costs.**

**b. Assigning Value to Costs and Benefits – Work with business users and IT professionals to create numbers for each of the costs and benefits. Even intangibles should be valued if at all possible.**

**c. Determining Cash Flow – Project what the costs and benefits will be over a period of time, usually three to five years. Apply a growth rate to the numbers, if necessary.**

**d. Determining Net Present Value – Calculate what the value of future costs and benefits are if measured by today’s standards. You will need to select a rate of growth to apply NPV formula.**

**e. Determining Return on Investment – Calculate how much money the organization will receive in return for the investment it will make using the ROI formula.**

**f. Determining the Break-Even Point – Find the first year in which the system has greater benefits than costs. Apply the break-even formula using figures from that year. This will help you understand how long it will take before the system creates real value for the organization.**

**g. Graphing the Break-Even Point – Plot the yearly costs and benefits on a line graph. The point at which the lines cross is the break-even point.**

1. **Two intangible benefits are:**
   1. **Improved customer service/satisfaction. This can be quantified by estimating the costs of reduced customer phone calls.**
   2. **Increased employee IT knowledge and skill. This can be quantified by estimating the costs of training that would be necessary if the employees (users) were not involved in the development of the system. (i.e.-Sending them out of town for “formal” training versus “in-house” training).**

**12. List two tangible benefits and two operational costs for a system. How would you determine the values that should be assigned to each item?**

**Two operational costs are salaries for operating staff and software licensing fees.**

**Revenues and cost savings are the tangible benefits the system enables the organization to collect or the tangible expenses the system enables the organization to avoid. Two tangible benefits include increased sales and reductions in staff.**

**The best strategy for estimating costs and benefits is to rely on the people who have the clearest understanding of them. Analysts also consider past projects, industry reports, and vendor information, although these approaches probably will be a bit less accurate.**

**13. Explain the net present value and return on investment for a cost benefit analysis. Why would these calculations be used?**

**Net present value is used to compare the present value of future cash flows with the investments outlay required to implement a project. Return on investment is a calculation that measures the amount of money an organization receives in return for the money it spends. ROI is determined by finding the total benefits, less the costs of the system, and dividing that number by the total costs of the system. These calculations are used because they paint a more accurate picture of the projects worth. They consider the time value of money and they show the overall benefit the organization is receiving from this investment.**

**14. What is the break – even point for the project? How is it calculated?**

**A break- even point for the project, is the point in time that the organization will be making money from the job they are doing.**

**The way that this is determined is by looking at the cash flow over time and identifying the year in which the benefits are larger than the costs. Then the difference between the yearly and cumulative Net Present Value for that year is divided by the yearly NPV to determine how far into the year the break - even point will occur. PG53**

**15. Stakeholder Analysis is a way to assess organization feasibility through analyzing the attitudes of the stakeholders towards the project in consideration. A stakeholder is a person, group, or organization that can affect (or will be affected by) a new system. Three stakeholders relevant to most projects are:**

**a. Champion – Initiates and promotes the project. Allocates his or her time to the project. Provides resources.**

**b. Organizational Management – Know about the project. Budget enough money for the project. Encourage users to accept and use the system.**

**c. System Users – Make decisions that influence the project. Perform hands-on activities for the project. Ultimately determine whether the project is successful by using or not using the system.**