**Chapter 7a - Review Questions**

1. **Describe the trend that views software as a service rather than a product. What effect has this trend had on software acquisition options?**

* In recent years there has been a trend to view software as a service rather than a product that a company would purchase and implement in their business. Software as a Service (**SaaS**) is a newer model where software is deployed to a business as application software provided via the internet. The introduction of these “services” has greatly increased the available options that businesses have for new software solutions and has given more flexibility to companies in what and how to spend their IT funds.

1. **Explain the difference between horizontal and vertical application software.**

* Horizontal Application Software is software that can be used by many different types of organizations. A good example of this would be a payroll application. It is able to be utilized by many different companies or by several divisions within a large, diversified company. Vertical Application Software is software developed to handle requirements for a specific type of business. A good example of this would be a college. The college has specific requirements unique to their business (class schedules, enrollment, available instructors, etc.). Some businesses may actually require the use of both types of application software.

1. **What is the most common reason for a company to choose to develop its own information system? Give two other reasons why a company might choose the in-house approach.**

* The biggest consideration for a company as to whether to develop a software package in-house is the Total Cost of Ownership (TCO). Sometimes a new system may cost less initially, but when you factor in the maintenance costs and everything else that goes into it in the long term, you find it would cost more to go with that option than with another that costs more up front but is less expensive to maintain. Other factors that can affect the decision to develop in-house solutions would be whether there are products available commercially that will meet the unique needs of your business, how much the new system will require the business to change its operations, whether the new system would interface correctly with existing software or hardware the company currently uses, and how important it is for the company to develop its own IT resources and capabilities for the future.

1. **What is an RFP, and how does it differ from an RFQ?**

* An RFP (Request for Proposal) is a document that describes your company, lists the IT services or products you need, and the specific features that you require. It also spells out the level of service and support your company will need. Based on the RFP, vendors can determine if they have a product to meet the company’s needs. An RFP also requests specific pricing or payment terms. An RFQ (Request for Quotation) is more specific than an RFP. When using an RFQ, you already know the specific service or product that you want and you need to obtain price quotes or bids for the system.

1. **What is the purpose of a benchmark test?**

* The purpose of a benchmark test is to determine whether a system or software can handle a certain transaction volume efficiently. The benchmark measures the time it takes for a package to process a certain number of transactions. For example, a benchmark test could measure the amount of time it takes for a system to process 1,000 payroll transactions. Benchmark tests are conducted in a controlled environment, and may not resemble exactly what your company handles on a day-to-day basis. Benchmarking can’t predict your specific results, but is a good way to measure the performance of multiple systems competing for your business in a standard environment.

**Chapter 7a - Personal Trainer, INC**

1. **Should the new system be designed as a Web-based system? Why or why not? What are some specific issues and options that Susan should consider in making a decision?**

* I do believe that the new system should be a web-based system. The company is expanding into new markets and introducing new products/services to their customers. The systems they have currently will not handle the expansion or the new areas they are expanding into. Using a web-based system will allow them to use a system that will scale with their business as it grows, and will not be as dependent on the hardware they are running currently. Susan needs to look at where the company is now and where they want to be in 5, 10 or 20 years down the road. She needs to look at the cost of acquiring the software as a service rather than a product, and what the differences in cost and company IT involvement would be.

1. **Assume that Cassia Umi, Personal Trainer’s president, has asked Susan to prepare a system requirements document and deliver a presentation to the management team. What should be the main elements of the system requirements document? Also, based on the suggestions in Part A of the Systems Analyst’s Toolkit, what visual aids should Susan use during her presentation?**
   * The system requirements document should contain the requirements for the new system, what alternatives were considered during the investigation and make a recommendation to management as to which option to choose. The presentation should begin with a brief overview of the purpose and primary objectives of the new system, the objectives of the presentation and what decisions need to be made. The alternatives should be summarized, including the costs, advantages and disadvantages. An explanation should be given as to why the team chose the option they did. Time should be set aside for questions and answers that may arise. A final decision should be reached from management, or a time table agreed upon for the next step in the process. Use of flowcharts, whiteboards, and a power point presentation would be good visual aids for Susan to use during her presentation.

**Chapter 7a - Case in Point 7.1: TURNKEY SERVICES**

Offshore outsourcing is beneficial to a business due to the lower bottom-line costs to the business. If you outsource different IT functions, the company has to invest less in maintenance/upkeep of the system and has less payroll tied up in IT staff. Offshore outsourcing often costs less due to the lower wage requirements in the countries where the outsourced companies are physically located. There are some concerns regarding offshore outsourcing, however. Control of a project and the security of sensitive information can be an issue. Having critical functions located halfway around the world and communication barriers can also cause reason for pause. There are often political issues and compliance issues involved with offshore outsourcing as well. All of these things must be considered when making the decision to outsource at all, let alone doing so in an entirely different country/hemisphere.