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REVIEW QUESTIONS

Chapter One

1. Why are information systems (IS) essential in organizations?

Information systems standardize and enforce rules on business transactions, which helps to ensure quality of both service and process. IS informs management of a business' health, mid-level managers of department needs and planning, employees of standard operating procedures, and customers of business services. IS also provides numerous communications tools for all levels of business, both for quicker collaboration and asynchronous discussions.

2. Why do systems analysts need to know who the stakeholders are in the organization?

The system analyst is responsible for understanding the perspectives of everyone who will have some form of interaction with a system, be it ownership, supervision, architects, or programmers, end-users within the company, or customers. Any deployed system that fails to take into consideration the unique needs and perspectives of any one of these groups will, at the very least, require refactoring and, at the worst, end in project failure as one or multiple groups reject the system.

3. What kind of knowledge and skills should a system analyst possess?

As the diplomat between the various IT and business cultures in an organization, the most important quality of the system analyst is good communication skills. To support this ability to communicate, the system analyst must posses a strong grasp of the many different technological languages, such as programming, hardware and networking, as well as the many levels of business-specific language, such

as the terminology used in management's high-level view of the business, the employee-level users' terminology for their various tasks, and the customer-level users' perspective on the system.

4. What are some of the business drivers for today's information systems?

E-commerce has expanded competition between companies beyond local communities, forming online communities of customers who may live anywhere in the world and offering a host of new innovations for customer service. Globalization has expanded competition between companies to an international scale, introducing a whole new realm of challenges from language-barriers, differing currencies, and country-specific laws and regulations. Management and decision-makers are now able to gather and manipulate large volumes of metrics for informing business decisions and identifying areas of improvement.

5. What are the four steps in a system development process? What happens in each step?

System development begins with an initiation step, a series of meetings to define the need, establish project scope, budget, and schedule. This is followed with an analysis phase, where user requirements are hammered out in detail, and items like project scope, budget, and goals are adjusted accordingly. The design phase then takes the user requirements and defines in detail various potential technological solutions to the need according to what current technological solutions are currently available and what innovations will impact the current solutions. Once designed, the system is implemented, code written, software installed, and everything thoroughly tested and reviewed by the user to ensure quality control. Once implemented, a system is rarely perfect; therefore, the system enters a maintenance or support phase, where user issues with the production system are gathered and addressed with new versions of the system.

Chapter Two

1. What is the difference between front-office information systems and back-office information systems?

Front-office IS focuses on customer interactions, be it customer service, advertising, or point of purchase. Back-office IS deals with the behind-the-scenes business operations, such as wholesale purchases, supply chain management, and executive management.

2. How do transaction processing systems (TPSs), management information systems (MISs), and decision support systems (DSSs) interact with each other?

TPSs gather information from various transactions, be they customer purchases, company purchases, or employee processes. MISs turn this raw data into metrics to inform management, and DSSs turn this raw data into metrics for decision making.

3. What are the three business goal-oriented perspectives or views of an information system that systems owners and system users tend to focus on? What are the three technological perspectives that system designers and builders tend to focus on?

Owners and users are focused on the accuracy and relevancy of the knowledge they give and take from a system, that business processes are accurately represented in the system, and that communications between the relevant levels of business are maintained or improved. With regards to these three attributes, designers and builders are focused on how to translate the knowledge needs into a database architecture with logic to enforce business rules, an interface and programming that accurately replicates the business flow, and the proper medium to facilitate communications between users and the proper technology to facilitate communications between systems.

4. In any given building blocks of an information system, the views of four groups of stakeholders need to be taken into account during the development of the system. What are these four stakeholder groups?

System owners, such as management, are concerned with the high-level overview of the system's effect on business. Users are concerned with the system enabling them to fulfill their job functions. Designers are interested in the interfaces and applications flow that will fulfill the users' and owners' needs. Builders are then required to construct the application logic, according to the design, using the accepted programming language and database.

5. What are the two most critical goals in the communication building blocks?

The system must enable communications and collaboration between employees, management, and customers as well as enable communications between information systems within, and possibly outside of, the organization.