Task Performance
Billing System

Objective:

At the end of the exercise, the students should be able to:

- Describe the activities involved in system implementation and deployment

Software Requirements:

- MS Word
- MS PowerPoint

Instruction:

1. Read the case study entitled “Hudsonbanc Billing System Upgrade” below.

   Two regional banks with similar geographic territories merged to form HudsonBanc. Both banks had credit card operations and operated billing systems that had been internally developed and upgraded over three decades. The systems performed similar functions, and both operated primarily in batch mode on mainframe computers. Merging the two billing systems was identified as a high-priority cost-saving measure. HudsonBanc initiated a project to investigate how to merge the two billing systems. Upgrading either system was quickly ruled out because the existing technology was considered old, and the costs of upgrading the system were estimated to be too high. HudsonBanc decided that a new component-based, Web-oriented system should be built or purchased. Management preferred the purchase option because it was assumed that a purchased system could be brought online more quickly and cheaply. An RFP (request for proposal) was prepared, many responses were received, and after months of business modeling and requirements activities, a vendor was chosen. Hardware for the new system was installed in early January. The software was installed the following week, and a random sample of 10 percent of the customer accounts was copied to the new system. The new system was operated in parallel with the old systems for two months. To save costs involved with complete duplication, the new system computed but didn’t print billing statements. Payments were entered into both systems and used to update parallel customer account databases. Duplicate account records were checked manually to ensure that they were the same. After the second test billing cycle, the new system was declared ready for operation. All customer accounts were migrated to the new system in mid-April. The old systems were turned off on May 1, and the new system took over the operation. Problems occurred almost immediately. The system was unable to handle the greatly increased volume of transactions. Data entry and customer Web access slowed to a crawl, and payments were soon backed up by several weeks. The system wasn’t handling certain types of transactions correctly (e.g., charge corrections and credits for overpayment). Manual inspection of the recently migrated account records showed errors in approximately 50,000 accounts. It took almost six weeks to adjust the incorrect accounts and update functions to handle all transaction types correctly. On June 20, the company attempted to print billing statements for the 50,000 corrected customer accounts. The system refused to print any information for transactions more than 30 days old. A panicked consultation with the vendor concluded that fixing the 30-day restriction would require more than a month of work and testing. It was also concluded that manual entry of account adjustments followed by billing within 30 days was the fastest and least risky way to solve the immediate problem. Clearing the backlog took two months. During that time, many incorrect bills were mailed. Customer support telephone lines were continually overloaded. Twenty-five people were reassigned from other operational areas, and additional phone lines were added to provide sufficient customer support capacity. System development personnel were reassigned to IS operations for up to three months to assist in clearing the billing backlog. Federal and state regulatory authorities stepped in to investigate the problems. HudsonBanc agreed to allow customers to spread payments for late bills over three months without interest charges. Setting up the payment arrangements further aggravated the backlog and staffing problems.

2. Answer the following questions. Place your answers in MS Word.

    a. What type of installation did HudsonBanc use for its new system? Was it an appropriate choice?
    b. How could the operational problems have been avoided?

3. Create a PowerPoint presentation about it.
4. Present your output in class.

GRADING RUBRIC:

Criteria	21–25	16–20	11–15	6–10	1–5	Score
Content	Content is accurate, and information is presented in a logical order.	Content is accurate; some information is not presented in a logical order but is still generally easy to follow.	Content is accurate, but the information is not presented in a logical order, making it difficult to follow.	Content is questionable, and information is not presented in a logical order, making it difficult to follow.	Content is inaccurate, and information is not presented in a logical order, making it difficult to follow.	/25
Slide Creation	The presentation flows well and logically, reflects an extensive use of tools in a creative way, and has the correct number of slides.	The presentation flows well; tools are used correctly; the number of slides is correct; overall presentation is interesting.	The presentation flows well; some tools are used to show acceptable understanding; the number of slides is correct.	The presentation is unorganized; tools are not used in a relevant manner; the number of slides is lacking.	The presentation has no flow; there are no tools used; the number of slides is insufficient.	/25
Delivery	Good volume and energy; proper pace and diction; avoidance of distracting gestures.	Good volume and energy; good pace and diction; few or no distracting gestures.	Adequate volume and energy; generally good pace and diction; few or no distracting gestures	More volume/energy needed at times; pace too slow or fast; some distracting gesture or posture	Low volume or energy; pace too slow or fast; poor diction; distracting gesture or posture	/25
Images & Layout	Images are appropriate; the layout is pleasing to the eyes.	Images are appropriate; the layout is cluttered.	Most images are appropriate.	Images are inappropriate.	No images used.	/25
Total						**/100**

REFERENCE:

Satzinger, J., Jackson, and R., Burd, S. (2016). Systems analysis and design in a changing world – Course Technology. USA. Cengage Learning.