Assignment 1:

Q1) Explain the statement "Stovepiped operations lead to stovepiped systems; stovepiped systems perpetuate stovepiped operations."

- From the design of stovepipes, we can notice that there is no communication or connectors between them, except things can flow out from the top between them.

Since enterprises consist of different departments (functional areas) which act like stovepipes, so each functional area works separately and has its own employees who are specialists on their area. Moreover, the most important point is decisions which is taken by top management without any realization of how much may these decisions affect other functional areas. Thus, specialized employees will work and deal with specific functions will create their own information system which suits their needs and their functions, and this point explained the first clause of the statement.

At the same time, decision making process which is based on information from a specific functional area, but without using any information from other functional areas because of difficulty to get it, will produce decisions from a narrow perspective and that means no new features or improvement for area operations. As a result, stovepiped operations will be perpetuated because of using stovepiped systems.

[1]: Dunn, C., Cherrington, J., & Hollander, A. (2005). An Introduction to Integrated Enterprise Information Systems. In Enterprise information systems: A pattern-based approach (3rd ed., pp. 5-6). Boston: McGraw-Hill/Irwin.
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Q2) Do you think activities that could be re-engineered away should serve as foundational building blocks in an enterprise information system? Why or why not?

- According to the importance of the foundational building blocks in any enterprise information system, I don't think those activities should serve as foundational elements in an enterprise information system. Because these activities may be changed or eliminated in reengineering process, so using them as base blocks in a system will affect the entire enterprise information system and hence will destroy it completely if activities were eliminated.

On the other hand, activities which are essential and cannot be changed or fixed on the enterprise system should be used to serve as foundational blocks. So, any changes during reengineering process will not affect the substance of the enterprise.

[2]: Dunn, C., Cherrington, J., & Hollander, A. (2005). Representation and Patterns: An Introduction to the REA Enterprise Ontology. In Enterprise information systems: A pattern-based approach (3rd ed., pp. 24-25). Boston: McGraw-Hill/Irwin.
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Q3) Do some events occur outside enterprise boundaries? Should information system designers focus on events that lie beyond an enterprise's boundaries? Support your answer with a suitable example.

- Yes, since the world around the enterprise will affect its performance, so, it will be noticed from the value system and value chain levels which events the enterprise should engage to ensure that its business process is working perfectly and can compete other enterprises. For example, Noor System lets student parents, (outside enterprise), see the progress and the monthly report. Also, SEU lets students or their family to pay fees through Sdad bills via a bank account, so you just log in to your account and you can see if you have a bill to pay or don't. If you payed via the bank, it will inform you if the process completed successfully. That means all these events happen outside the enterprise.

So, information system designers should pay attention to events outside an enterprise's boundary. It's important for any enterprise to include all events related to the business process whether within the organization (internal events) or outside the organization boundaries (external events). They need to look to all activities which will be performed to design, produce, distribute or deliver, and maintain your product or service, no matter inside or outside an enterprise boundary.

[3]: Dunn, C., Cherrington, J., & Hollander, A. (2005). The REA Enterprise Ontology: Value System and Value Chain Modeling. In Enterprise information systems: A pattern-based approach (3rd ed., pp. 37-38). Boston: McGraw-Hill/Irwin.
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Q4) Case Study of "Bowerkate Corporation "
- "Bowerkate Corporation" sells handcrafted surfboards to customers through its network of company salespeople .
- Each surfboard is given a unique identification number and a suggested selling price when finished .
- Upon employment, each salesperson is immediately assigned to service a separate group of customers .
- When customer data is initially entered into Bowerkate's information system, the customer is immediately assigned to a salesperson .
- Each sale can include one or more surfboard and can be paid for in any of three ways:
    (1)Immediately in cash
    (2)On the 15th of the following month
    (3)Over the course of six months.
- No more than one salesperson participates in making a particular sale .
- A salesperson may negotiate with a customer and agree on a selling price for any surfboard that is lower than that surfboard's suggested selling

price, especially if the customer is a high volume customer or if that surfboard is a slow seller (i.e., it has been in stock for a long time) .

- Although the vast majority of cash receipts come from customers (any particular cash receipt would be from only one customer) for sales, some cash receipts come from other sources (e.g. bank loans) .
- Every cash receipt is processed by exactly one of Bowerkate's several cashiers and is deposited into one of Bowerkate's bank accounts .
- Information about surfboards, employees, and customers often needs to be entered into the database before any transactions involving them have occurred.

The following data items (attributes) are of interest to potential users of this model:

-surfboard-id# -cash-account-balance-customer-name -qty-of-items-sold-on-a-particular-invoice-salesperson-name -cashier-name-cash-receipt-total-amount -description-of-surfboard-location-of-cash-account -customer-accounts-receivable-balance-sale-number -salesperson-number-cash-receipt-amount-applied-to-a-sale -cashier-ID-number-cash-account-number -cash-account-type customer-number -suggested-selling-price-for-a-surfboard-actual-selling-price-for-a-surfboard -sale-total-amount-salesperson-commission-rate -remittance-advice-number

Note: Salesperson commission rate is determined per contractual arrangement with each salesperson and for a particular salesperson it is the same percentage rate no matter what items he or she sells

Required: Create an REA model for Bowerkate Corporation's Revenue Cycle as described above. Be sure to include all relevant entities, relationships, attributes, and participation cardinalities.