Accounting Information Systems Controls and Processes 4th edition Turner Solutions Manual

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Turner/Accounting Information Systems, 4e
Solutions Manual
Chapter 1

Concept Check

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2. d
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10. a

Discussion Questions

11. (SO 1) *How might the sales and cash collection processes at a Wal-Mart store differ from the sales and cash collection processes at McDonald's?* Wal-Mart sells items that are pre-priced and bar coded with that price. Therefore the cash registers at Wal-Mart use bar code scanners. However, McDonalds sells fast foods that are not bar coded. The cash registers at McDonalds use touch screen systems that require a cashier to indicate the items purchased. The cash collection processes are not different. In both cases, the employee collects the cash or credit card, and returns any change.

12. (SO 1) *Can you think of any procedures in place at McDonald's that are intended to ensure the accuracy of your order?* Student responses may vary, however, following are a few examples: Often, at either the drive-through or the inside cash register, the customer can see a screen that displays the items ordered. In addition, a fast food restaurant uses pre-designed slots to hold certain types of menu items. When a customer orders a particular sandwich, the person filling the order knows exactly which slot to pull the sandwich from. Each customer receives a printed receipt with the items listed and the customer can verify the accuracy.

13. (SO 1) *How might the sales and cash collection processes at Boeing Co. (maker of commercial passenger jets) differ from the sales and cash collection processes at*

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McDonald's? Boeing does not sell to end-user consumers; rather, it sells to companies such as airlines. Therefore Boeing does not have stores, nor inventory in stores, nor cash registers to process sales. Boeing is more likely to maintain a sales force that visits potential customers to solicit sales. Those sales may be entered by the salesperson into a laptop computer connected to Boeing's network. McDonald's, on the other hand, sells to consumers, uses order input touch screens at each location, and maintains supplies of perishable food products.

14. (SO 1) *Are there business processes that do not in some way affect accounting records or financial statements?* There may be processes that do not directly affect accounting records (such as recruiting and hiring a new employee), but all processes have a direct or indirect affect on accounting records. All processes use resources such as material or employee time. Therefore, all processes have expenses related to those processes that will affect the accounting records.

15. (SO 2) *Briefly describe the five components of an accounting information system.*
    1. Work steps within a business process that capture accounting data as the business process occurs.
    2. Manual or computer-based records that capture the accounting data from the business processes.
    3. Internal controls within the business process that safeguard assets and ensure accuracy and completeness of the data.
    4. Work steps that process, classify, summarize, and consolidate the raw accounting data.
    5. Work steps that generate both internal and external reports.

16. (SO 2) *Describe how sales data are captured and recorded at a restaurant such as Applebee's.* At most Applebee's restaurants, a server writes the order on a pad and carries that pad to a cash register. The server enters the order on a touch screen terminal. The order information is then displayed on a terminal in the kitchen. When the customer has finished the meal, the server prints a check and delivers the check to the table. The customer pays the server by using cash or a credit card. The server processes the payment on the touch screen register and returns the change or credit card slip to the customer.

17. (SO 2) *What occurs in an accounting information system that classifies accounting transactions?* For each business process that affects accounting records, the accounting information system must capture any resulting accounting data, record the data, process it through classification, summarization, and consolidation, and generate appropriate reports.

18. (SO 2) *What are the differences between internal reports and external reports generated by the accounting information system?* Internal reports are used by management to oversee and direct processes within the organization. External reports are the financial statements used by investors and creditors to make

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decisions about investing or extending credit to the organization.

19. (SO 3) *What types of businesses are in the supply chain of an automobile manufacturer?* The types of businesses in an automaker's supply chain are often manufacturers of parts used in cars. This would include manufacturers of tires, batteries, steel, plastic, vinyl and leather, as well as many other manufacturers making the thousands of parts in a car.

20. (SO 3) *When a company evaluates a supplier of materials, what kinds of characteristics might be evaluated?* The supplier's characteristics that are likely to be evaluated include price and payment terms, quality, reliability of the materials, as well as whether the supplier can deliver materials when needed.

21. (SO 3) *How do you think a company may be able to influence a supplier to meet its business processing requirements?* A company may be able to influence a supplier by choosing only suppliers that meet expectations regarding the terms of price, quality, and delivery timing. Those suppliers that do not meet these expectations may not be used in the future. This exerts some influence over suppliers, as the suppliers will lose business if they do not meet the buyer's requirements.

22. (SO 4) *Describe any IT enablement that you have noticed at a large retail store such as Wal-Mart or Target.* The most noticeable IT enablement is the use of bar coded systems on the products and how they are read by the cash registers.

23. (SO 4) *How do you think the World Wide Web (WWW) has led to business process reengineering at companies such as Lands End or J.Crew?* Prior to the World Wide Web, customers placed orders either on the phone or by mail. Both phone and mail orders require employees to take the order and enter it into the computer system. Using online sales, customers enter their own orders and no company personnel are needed to key orders into the computer system. Therefore, there was a major change in the number of people employed to key orders.

24. (SO 4) *What two kinds of efficiency improvement result from business process reengineering in conjunction with IT systems?* The use of IT systems usually leads to two kinds of efficiency improvements. First, the underlying processes are reengineered (through rethinking and redesign) to be conducted more efficiently. Second, the IT systems improve the efficiency of the underlying processes.

25. (SO 5) *Explain the differences between a field, a record, and a file.* A field is one set of characters that make up a single data item. For example, last name would be a field in a customer database. A record is a collection of related fields for a single entity. For example, last name, first name, address, phone number, and credit card number fields might make up a single customer record. A file is a collection of similar records. For example, all customer records together make up a customer file.

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26. (SO 5) *Explain why random access files would be preferable to sequential access files when payroll personnel are changing a pay rate for a single employee.* When the desired action is to access a single record, random access is preferable. If sequential access storage is used, all records must be read in sequence until the desired record is reached. On the other hand, random access allows a single record to be accessed without the necessity of reading other records. This makes it more efficient to access a particular employee record to change the pay rate.

27. (SO 5) *Why do real-time systems require direct access files?* If transactions are to be processed online and in real-time, it is necessary that the computer access a single record immediately. Thus, direct access files are required so the records can be accessed in real-time.

28. (SO 5) *Why is data contained in the data warehouse called nonvolatile?* Each time a new transaction is completed, parts of the operational data must be updated. Therefore, the operational database is volatile – with constantly changing information. However, the data warehouse does not change with each transaction. The data warehouse is only changed when periodic updates occur. The data in the data warehouse are nonvolatile because they do not change constantly.

29. (SO 5) *How is an extranet different from the Internet?* The extranet allows access only to selected outsiders, while the Internet is open to an unlimited number of outsiders (essentially anyone having access to the Internet). On the other hand, extranets are typically used by companies to interact with specific suppliers and customers who have been granted access to a company's network.

30. (SO 6) *Prepare a list of the types of businesses that you have been in that use point of sale systems.* Student responses may vary, but would likely include department stores, grocery stores, specialty stores, restaurants, gas stations, and car washes.

31. (SO 6) *What do you think would be the advantages of an e-payables system over a traditional system that uses paper purchase orders and invoices?* An e-payables system should be faster and more efficient than a paper-based system. In addition, fewer processing errors should be expected from an e-payables system.

32. (SO 7) *Describe why enterprise risk management is important.* All organizations face risks and Enterprise Risk Management (ERM) assists managers in reducing and controlling risk. ERM also involves personnel across the entire business organization, as they implement strategies to achieve the organization's objectives.

33. (SO 7) *What is the difference between general controls and application controls?* General controls apply overall to the IT accounting system. They are controls that are not restricted to any particular accounting application. An example of a general control is the use of passwords to allow only authorized users to log into an IT-based accounting system. Application controls are used specifically in accounting applications to control inputs, processing, and output. Application controls are

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intended to insure that inputs are accurate and complete, processing is accurate and complete, and that outputs are properly distributed, controlled, and disposed.

34. (SO 7) *In what way is a code of ethics beneficial to an organization?* If top management institutes a code of ethics and emphasizes this code by modeling its principles and disciplining or discharging those who violate the code, it can help reduce unethical behavior in the organization.

35. (SO 8) *What roles do accountants have in relation to the accounting information system?* Accountants are users of the AIS, they assist in the design of the AIS, and they are auditors of the AIS.

Brief Exercises

36. (SO 1) *For each category of business processes (revenue, expenditure, conversion, administrative), give an example of a business process*. Student responses are likely to vary greatly, as they may refer to any of the subprocesses within each category. For example, the revenue processes include sales, sales returns, and cash collections; the expenditure processes include purchasing, purchase returns, cash disbursements, payroll, and fixed asset processes; the conversion processes include planning, resource management, and logistics; administrative processes include capital processes, investments, and general ledger processes. Accordingly, any type of business process can be cited to answer this question, but the student must match the example with the appropriate process.

37. (SO 2) *Think of a company that you have worked for or with which you have done business. Which departments within the company need reports generated by the accounting information systems?* Student responses are likely to vary greatly, as nearly every department within a business organization uses reports generated by the accounting information systems. For example, sales departments need customer account information to help in their efforts to sell products to customers. Purchasing departments need product information to help in their efforts to purchase products needed in the business. These types of information are maintained in accounting information systems. There are numerous additional examples that could apply.

38. (SO 3) *Explain a supply chain linkage and give an example*. A supply chain linkage is the connection of activities in the supply chain, including the entities, processes, and information flows that involve the movement of materials, funds, and related information through the full logistics process – from the acquisition of raw materials to the delivery of finished products to the end user. It therefore includes the linked activities of vendors, service providers, customers, and intermediaries. In addition to the example of McDonald's buns given in the text, another example would be a shirt sold by the Gap. The Gap's supply chain linkage would likely include a supplier from whom the shirt was purchased, a manufacturer who assembled and sewed the shirt,

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a secondary supplier that provided the fabric from which the shirt was constructed, and a farmer who raised cotton used to make the fabric.

39. (SO 4) *Explain how business process reengineering occurs. Also, explain how it differs from the typical changes in company policies*. With business process reengineering (BPR), the underlying business processes are reengineered to be conducted more efficiently. In other words, a comprehensive rethinking and redesign takes place in order to enhance performance of the process. A key component of BPR is the leveraging of IT capabilities to improve process efficiencies. BPR differs from typically organizational change in that it involves "thinking outside the box" in order to offer completely new and improved methods for business processes.

40. (SO 4, 6) Describe automated matching in the purchasing process and explain how this IT enablement has improved efficiency in companies.

    Microsoft Dynamics GP has automated purchase order matching functionality. This functionality electronically matches a purchase order, receiving report and vendor invoice within the system.

    In MS Dynamics GP a vendor purchase order can be created and printed in the system. The purchase order is sent to the vendor identifying the amount of the authorized purchase. When the goods or services are received, the person responsible for logging the receipt can pull up the original purchase order and receive the items on the PO. If there are any discrepancies between what was ordered and what was received the system adjusts for the discrepancies. Later when the vendor invoices for the goods or services that were received, the matched PO and receiving report can be selected and compared with the prices and quantities of the items invoiced. If there are any differences between the amounts ordered/received and invoiced, the system will adjust for the differences. This automated matching of a PO/receiving report and vendor invoice eliminates the need to manually match these items.

    Automated matching is an example of IT enablement. In this example of IT enablement, the process is more streamlined, efficient and reduces the likelihood of errors..

41. (SO 5) *For an accounts receivable system, what kind of data would be found in the master files and transaction files, respectively?* An accounts receivable master file would include relatively permanent data necessary to process customer transactions. This would include a record for each customer. The data in the master file would likely include customer name, address, phone numbers, credit limit, and current balance. A transaction file for accounts receivable would contain the relatively temporary data that must be processed to update the master file, such as details from individual sales and cash collection transactions from customers.

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42. (SO 5) *Describe the differences in the following three types of processing:*
    a. *Batch processing* involves the grouping of similar transactions to be processed together;
    b. *Online processing* involves processing individual transactions, one-at-a-time; and
    c. *Real-time processing* is an online processing method that involves the immediate processing of individual transactions.

43. (SO 5) *The networks discussed in this chapter were LANs, Internet, intranet, and extranet. Explain each*. A LAN is a computer network that spans a relatively small area such as a building or group of buildings within a business organization. The Internet is the global computer network made up of millions upon millions of computers and subnetworks throughout the world. An intranet is an organization's private computer network, accessible only by employees of that organization to share data and manage projects. An extranet is an expansion of an intranet that allows limited access to designated outsiders such as customers and suppliers.

44. (SO 7) *Give a brief summary of each of the following:*
    a. *enterprise risk management* is an ongoing strategy-setting and risk assessment process that is effected by top management but involves personnel across the entire entity.
    b. *corporate governance* is an elaborate system of checks and balances whereby a company's leadership is held accountable for building shareholder value and creating confidence in the financial reporting process.
    c. *IT governance* is the corporate governance process that applies specifically to the proper management, control, and use of IT systems.

45. (SO 9) *Describe why accountants should be concerned about ethics*. Accountants should be concerned about ethics because accounting information systems are often the tools used to commit or cover up unethical behavior. Accountants need to be aware of the possibility of fraud within the AIS so that they can help develop and implement effective internal controls to reduce the risk of such unethical acts. In addition, accountants need to be prepared to resist the temptation to commit unethical acts and to avoid being coerced into assisting with a fraudulent cover-up.

46. (SO 9) *Melanie Gibson is currently pursuing her accounting degree at Ohio State University. She has excelled in each of her major courses to date; however, she tends to struggle in her computer classes and with assignments requiring use of computer technology. Nevertheless, Melanie confidently claims that she will become an excellent accountant. Comment on the practical and ethical implications of her position*. Melanie is mistaken in her position for the following reasons:
    - Practically speaking, accountants need to be well-informed about the operation of accounting information systems, which nearly always involve computer technology. The AIS is the foundation of most accounting functions, so to resist computer technology would be unreasonable, if not impossible. Also, in order to assist in developing internal controls, accountants must understand the

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processes within the AIS, including the use of technology, so that effective controls can be developed and implemented to reduce risks.

- Ethically speaking, accountants need to be well-informed about the operation of the AIS so that they are poised to recognize fraud and errors that may occur. Without an understanding of the underlying technology, accountants would be unable to effectively capture and monitor business processes. Rather than fulfilling her responsibility as an accountant to develop and implement internal controls, Melanie's ignorance of the AIS could actually allow fraud to be perpetrated without being prevented or detected.

For these reasons, Melanie's viewpoint is quite dangerous.

Problems

47. (SO 2) *If an accounting information system were entirely a manual system (no computers used), explain how data would be captured, recorded, classified, summarized, and reported. Discuss how the sophistication of the company's computer system impacts the accounting output and, alternatively, how the requirements for accounting outputs impact the design of the accounting information system*. In a manual accounting information system, data would be captured on source documents and recorded by hand in subledgers or special journals. Account classifications would be determined by the accountants responsible for recording the transaction. The accountants would perform mathematical computations to summarize the records and post them to a general ledger. The general ledger would be manually summarized at the end of the period so that financial statements could be prepared. The financial reports would be manually compiled based on the ending general ledger balances. Since a great deal of paper and human processing are required for a manual system, it is prone to error. More sophisticated, computer-based systems tend to produce more output that is more accurate because they are programmed to process data consistently. They also use programming to perform mathematical computations, which promotes accuracy and time savings. Therefore, IT usage to support business processes results in increased accuracy, increased efficiency, and reduced costs.

    The requirements for accounting outputs impact the design of the AIS. Work steps within a business process can be designed to capture data in a manner that is consistent with the desired content and format of the related output. This promotes efficiency and effectiveness of the overall process. When business process reengineering is used to design business processes, IT systems can be introduced to take advantage of the speed and efficiency of computers to enhance the AIS.

48. (SO 1,3) *Classify each of the following processes as either a revenue process, expenditure process, conversion process, or administrative process*:

    a. *Selling common stock to raise capital* - ADMINISTRATIVE
    b. *Purchasing electronic components to manufacture DVD players* - EXPENDITURE

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c. *Moving electronic components from the stockroom to the production floor to begin making DVD players* - CONVERSION
d. *Paying employees at the end of a payroll period* - EXPENDITURE
e. *Preparing financial statements* - ADMINISTRATIVE
f. *Receiving cash payments from customers* - REVENUE
g. *Buying fixed assets* - EXPENDITURE
h. *Moving manufactured DVD players from the production floor to the warehouse* - CONVERSION

49. (SO 1) *Business processes are composed of three common stages: an initial event, a beginning, and an end. For items a through h listed in Problem 47, identify the applicable initial event, beginning, and end of the process*. Student responses may vary as their experiences are likely to be different. Different businesses may have different events that trigger these processes; however, the following are common examples:

a. *Selling common stock to raise capital*: Initial Event – Contacting and communicating with investors; Beginning – Receiving consideration from investor; End – Recording transactions in the accounting records.
b. *Purchasing electronic components to manufacture DVD players*: Initial Event – Receiving a purchase request from operations personnel; Beginning – Placing an order with a supplier; End – Recording the payment for the component parts.
c. *Moving electronic components from the stockroom to the production floor to begin making DVD players*: Initial Event – Receiving a request from the Production department for the movement of materials; Beginning – Removing inventory from the stockroom; End – Recording the receipt of goods in the production area.
d. *Paying employees at the end of a payroll period*: Initial Event – Receiving a time sheet or other record of time worked; Beginning – Recording hours in the payroll records; End – Distributing paychecks or depositing paychecks in employee accounts.
e. *Preparing financial statements*: Initial Event – Preparing end-of-period adjusting entries; Beginning – Summarizing adjusted account balances; End – Compiling data in financial statement format and writing related disclosure notes.
f. *Receiving cash payments from customers*: Initial Event – Communicating with customer about a sale; Beginning – Notifying customer of amounts owed related to the sale; End – Recording the receipt of cash and deposit in a bank account.
g. *Buying fixed assets*: Initial Event – Planning for an expenditure as part of a capital budgeting process; Beginning – Placing an order for the fixed asset; End – Receiving the asset and recording it in a subsidiary ledger.
h. *Moving manufactured DVD players from the production floor to the warehouse*: Initial Event – Receiving notification from the Production department regarding completion of products; Beginning – Removing finished goods from the production floor; End – Recording the receipt of finished goods in the warehouse.

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50. (SO 1,2,7) *Each of the points listed next represents an internal control that may be implemented within a company's accounting information system to reduce various risks. For each point, identify the appropriate business process (revenue, expenditure, conversion, administrative). In addition, refer to the description of business processes under Study Objective 2 in the chapter, and identify the appropriate subprocess. (Some subprocesses may be used more than once, and others may not be used at all.)*

    a. *Customer credit must be authorized before a business transaction takes place.* Revenue process, sales subprocess
    b. *An authorized price list of goods for sale is provided.* Revenue process, sales subprocess
    c. *A shipping report is prepared for all shipments of goods so that customers may be billed in a timely manner.* Revenue process, sales subprocess
    d. *Access to personnel files and paycheck records is available only in accordance with management specifications.* Expenditure process, payroll subprocess
    e. *New vendors are required to be authorized before a business transaction takes place.* Expenditure process, purchasing subprocess
    f. *Access to cash is restricted to those employees authorized by management.* Revenue or Expenditure process, Cash collection or cash disbursement subprocess, respectively
    g. *Costs of goods manufactured is properly summarized, classified, recorded, and reported.* Conversion process, resource management subprocess
    h. *Amounts due to vendors are reconciled by comparing company records with statements received from the vendors.* Expenditure process, cash disbursements subprocess
    i. *Employee wage rates and paycheck deductions must be authorized by management.* Expenditure process, payroll subprocess
    j. *Specific procedures such as the performance of a background check are carried out for all new employee hires.* Expenditure process, payroll subprocess
    k. *The purchasing manager is notified when stock levels are low so that items may be restocked to prevent backorders.* Conversion process, resource management subprocess
    l. *Two signatures are required on checks for payments in excess of $5000.* Expenditure process, cash disbursement subprocess
    m. *When excess cash is on hand, the funds are invested in short-term securities.* Administrative process, investment subprocess
    n. *Goods received are inspected, and any damaged or unmatched items are promptly communicated to the vendor.* Revenue process, sales subprocess
    o. *The monthly bank statement is reconciled to the company's cash records by an outside accountant.* Revenue or Expenditure process, Cash collection or cash disbursement subprocess, respectively

51. (SO 3) *Using an internet search engine, search for the terms "RFID" and "supply chain." Put both of these terms in your search and be sure that "supply chain" is in quotation marks. Read some of the resulting web sites you find and answer these*

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questions:

a. *What is RFID?* Radio-frequency identification (RFID) technology helps companies identify and manage large lots of goods, typically received and stored in cartons or on skids. The cartons or skids include tags that are encoded with identifying information about the items, their supplier, and their purchase transaction. These tags can be instantly read and recorded by the company through the use of antennae or battery-operated transmitters and radio waves.
b. *How is RFID related to the supply chain?* RFID enhances supply chain management by significantly reducing the time required to record purchases and inventory tracking. The instantaneous reading of RFID tags allows the items to move swiftly through the logistics process with increased speed and accuracy of the underlying records.
c. *How will RFID improve the accuracy of data from the supply chain?* Accuracy is increased by the use of tags containing company and product identifiers. These tags reduce the risk of recording items in duplicate. They also aid in inventory tracking through enhanced security of products being moved between locations.

52. (SO 7) *Go to the COSO web site and locate the guidance on enterprise risk management. The executive summary of the article "Enterprise Risk Management – Integrated Framework" can be downloaded at no cost. Read the sections titled "Roles and Responsibilities" and "Use of this Report." Describe the roles that various parties should play in enterprise risk management*. Although everyone within a business entity has responsibility for its ERM processes, the chief executive officer is ultimately responsible and must assume ownership of the process. Accordingly, the CEO should bring together key managers from each functional area to plan, implement, and monitor the process. The board of directors should provide necessary oversight and maintain contact with top management, internal auditors, and external auditors regarding the ERM process. Other managers should support the organization's philosophy, promote compliance with its risk appetite, and manage risks within their areas of responsibility. The CFO and internal auditors typically have a support role.

External to the business organization, three groups are key to the effective use of ERM: regulators, professional organizations, and educators. Regulators are expected to refer to the COSO framework in the development of expectations as well as the conduct of their examinations for business organizations they oversee. Professional organizations should consider the COSO framework in the development of guidelines for financial management, auditing, and related topics. Educators are urged to incorporate the framework into university curricula, as well as to conduct research and analysis on potential enhancements to the ERM process.

53. (SO 9) *Using an internet search engine, search for the term (in quotations) "earnings management." From the items you read, answer the following questions*:
a. *Is earnings management always criminal?* No, earnings management is not always illegal. Since accounting principles allow for some flexibility, accountants may use the discretion at their disposal in preparing financial statements.

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b. *Is earnings management always unethical?* No, earnings management is not always unethical, due to the materiality constraint. Yet earnings management becomes unethical when it "crosses the line" to reflect management's desires rather than an accurate representation of the company's financial performance. If earnings management deceives or distracts investors, it is unethical.

54. (SO 9) *Using an internet search engine, search for "HealthSouth" and "fraud" or "Scrushy" (the name of the company's CEO). Explain the fraud that occurred at HealthSouth Corporation. What was the ultimate result of the prosecution of HealthSouth officials?* HealthSouth's fraud was an elaborate earnings management scheme whereby earnings were overstated by at least $1.4 billion. False revenues were recorded with corresponding decreases in contra-revenue accounts, expenses, and/or liabilities and increases in assets. Ultimately, after a long and dramatic trial, Scrushy was acquitted of all criminal charges due to lack of evidence tying him to the fraud.

Cases

55. *Gas and Java Mart and the accounting information system.*
    1. Accounting data is likely to be captured at Gas and Java Mart at the gas pump if the customer uses a debit card or credit card to pay for a gas purchase at the pump. Even if the customer chooses to pay inside, the information pertaining to the sale of gasoline is recorded at the pump. The snacks must be purchased inside the store, but can be added to the gasoline charge. The accounting effect is that the sale and the payment collected should increase the Sales account and Cash or Accounts Receivable, respectively.
    2. The records that capture the accounting data would be maintained within the computer system. Although a manual process is required to operate the gas pump and cash register, the remainder of the system is computer-based, so the system records the sale and all related data.
    3. Internal controls would include the security cameras in the store and gas filling area, as well as reconciliation procedures. Like the McDonalds' example, a manager is likely to close and reconcile the cash register and gas pump sales at the end of the day.
    4. The summarization of accounting data is likely to occur at the end of the period when financial reports are prepared. These steps are probably accomplished by the computer software.
    5. Financial reporting occurs at the end of the period, as data are summarized into reports used for internal and external purposes. This likely includes a combination of manual and computerized processes. There are likely to be separate classifications for the sales of gasoline versus snack items.

56. *Business processes and IT enablement at fast food restaurants.* Student responses may vary, but are likely to consistent with the following:
    a. *List and describe four different activities that are manual parts of business processes at a restaurant such as Wendy's.* Manual processes are required to:

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- greet customers at the drive-through window or counter
- enter customer orders on the cash register touch-screens
- prepare the food
- gather the customer's order
- collect payment from the customer
- clean the dining area
- refill the condiment dispensers, etc.
- reconcile the cash in the cash register to amounts included in the sales summaries

b. *List and describe four different activities that are IT enabled parts of business processes at a restaurant such as Wendy's.* IT enables processes are used to:
- record customer orders input in the cash registers. The system accumulates sales data based on the orders transacted
- prepare sales amounts based upon the pre-programmed prices of items ordered and applicable tax rates
- determine the amount of change due to customers based on the amount of cash collected
- prepare a sales receipt upon completion of a sales transaction
- transfer order details to the food preparation stations so that the items can be prepared and assembled
- prepare a daily summary for each cash register at the end of the shift

57. *Business processes at department stores.*
a. *Describe any necessary supporting processes that precede the sale of a product to you.* Some of the supporting processes that precede a sale to a customer include acquiring, pricing and display of the merchandise, hiring and training sales personnel and cashiers, preparation of cash register drawers with adequate change, and programming the system to recognize the items when they are read by a bar code scanner.
b. *Describe any necessary supporting processes that occur after a sale to you.* Some of the supporting processes that occur after a sale to a customer include handling customer returns, summarization of the sales data, reconciling the cash registers with the computerized data from the registers, preparation of a bank deposit, periodic sales reporting, and reconciliation of the bank statements.

58. *Business processes at Cooper's Cues Co.*
a. *What are the business processes that apply to this business?* The business processes described include the expenditure process involved in purchasing materials needed to manufacture pool cues and disbursing cash to suppliers for materials purchased. The case also describes revenues processes for sales of pool cues over the internet, customer collections, and sales returns (replacements). This business would also include subprocesses for payroll expenditures to pay Rob and Stacy Cooper for their time worked, and fixed asset processes to handle any capital assets acquired (such the workshop, office space, furniture and computers, tools and equipment, delivery vehicle, etc.). In addition, conversion processes would involve planning of the manufacturing

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process, planning and managing materials and resources needed for production, and logistics (movement of the manufactured goods through the production process through delivery to a customer).

b. *How would the business processes change if Cooper's Cues expanded to a regional focus?* If Cooper's Cues expanded to a regional focus, it is likely that its business would grow. Rob and Stacy Cooper may have difficulty managing a regional business on their own, so they would likely need to hire and train employees to join their business. As more people became involved in the business processes, they would need to determine how responsibilities would be divided and how to implement internal controls in the processes. Rob Cooper may no longer be able to personally handle all deliveries. The company's website may also need to be enhanced to handle the additional volume anticipated in connection with the business expansion.

c. *How would the business processes change if Cooper's Cues began selling pool balls and other billiard equipment in addition to cues?* If Cooper's Cues began selling pool balls and other billiard equipment in addition to its pool cues, its business processes would change. If Cooper's acquired this type of merchandise, it would have to enhance its expenditures processes to include the types of suppliers of these billiard accessories. It would also need to consider the logistics of inventory storage. In addition, its revenue processes would need to be enhanced to differentiate sales of manufactured cues versus other billiard merchandise. Its website would need to be updated to handle the additional product lines.

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