Lecture 11: Conversion Cycle Applications

Learning Objectives

1. To review the accounting entries recorded in the conversion cycle.
2. To learn which documents, reports and records are used in the conversion cycle.
3. To understand how accounting transactions are processed by the application systems in the conversion cycle.

The conversion cycle is one of the four transactions cycle used by accounting systems that records one economic event – the consumption of labor, material and overhead to produce a product or service.

The type of accounting system used differs, depending on whether the organization is a service, merchandising or manufacturing firm:

Illustration 11.1: Accounting systems in the Conversion Cycle

Type of organization	Accounting system
Service	Payroll Cost accounting
Merchandising	Payroll Inventory
Manufacturing	Payroll Cost accounting Inventory

Source: Own modification based on: BOCKHOLDT, J. L. *Accounting Information Systems: transaction processing and controls.* 5th edition, Boston: McGraw Hill Education 1999, ISBN 0-07-116098-1

Inventory Systems

The inventory system maintains inventory records. Manufacturing companies use them to control the levels of materials and finished goods inventories. Merchandising companies use them to ensure that goods are available for resale. The inventory system process two types of transactions originated in the revenue and expenditure cycles – *purchase* and *sale of inventory*.

1) Purchase of inventory

The entry made to record this transaction in expenditure cycle depends on the method used for inventory accounting:

- **Periodic method** – It relies on a periodic physical inventory count to determine Cost of Goods Sold and ending inventories.

- **Perpetual method** – An organization maintains an ongoing count of each inventory item on hand.

2) Sale of inventory

A company records the cost of inventory sold in the general ledger account entitled Cost of Goods Sold. How the company determines this amount depends on the inventory method used.

Inventory system reports

Inventory system produces control reports and registers like other applications. In addition, there are four special purposes reports:

- **Inventory Status Report** – it lists all items normally keep in inventory, the quantity on hand of each item and costs.

- **Query Inventory Items Report** – on-line real-time systems allow an employee to determine quantities on hand at the time of inquiry.

- **Reorder Report** – it identifies inventory items that should be replenished.

- **Physical Inventory Report** – it helps by periodically computation the number of each inventory item on hand.

Cost Accounting Systems

The purpose of a cost accounting system is to determine the cost of products or services and to record those costs in the accounting records. In a manufacturing company, the cost accounting system records two transactions in addition to those recorded in the inventory system:

1) Transfer of material, labor and overheads

A manufacturing company purchases raw material inventory and adds labor and overhead to it. This produces units of product that are in process. After the units are completed, the company sells the finished products. The entry recording this transaction is:

Debit		Credit	
		Raw Material Inventory	$xxx
Work in Process Inventory	$xxx	Direct Labor	$xxx
		Factory Overhead	$xxx

2) Transfer of Completed Goods

When the production process is completed, the products are transferred to inventory warehouse. The cost of completed goods is transferred out of the Work in Process account with this entry:

Debit		Credit	
Finished Goods Inventory	$xxx	Work in Process Inventory	$xxx

Cost Accounting system reports

Cost accounting systems produce **control reports** and various **production cost reports**.

Payroll Systems

The purposes of payroll application are to calculate the pay due to employees and maintain cumulative earnings records. The organization could process payroll transactions by the cash disbursements application in the expenditure cycle. But there are two main reasons for separated payroll system:

1. Payroll systems must withhold amounts for deductions and taxes and summarize these in cumulative earnings reports. Such withholding is unnecessary for processing purchases transactions in the expenditure cycle.

2. Payroll systems produce paycheck made out to employees. This makes fraud in payroll systems easier to conceal than in those systems that produce checks for vendors.

Payroll system reports

The payroll systems produce three reports:

- **Payroll Register** – it lists all employees for whom paychecks are due, their gross pay and list of deductions.

- **Print Checks Control Report** – it aids in detecting missing or unauthorized checks.

- **Cumulative Earnings Report** – it summarizes the gross pay and tax withheld for an employee during each quarter of the year for the purposes of government control.

Lecture 11 - Questions and exercises

Q 11-1: Which economic events produce transaction in the conversion cycle?

Q 11-2: What is the purpose of each of the following documents?

a) Materials requisition

b) Timecard

c) Production order

Q 11-3: What are two ways of calculating the cost of finished goods inventory?

Q 11-4: Describe at least three special purpose reports produced in the conversion cycle.

E 11-1: Transactions and documents

The column on the left lists accounting transactions processed in the expenditure cycle. In the right column is a list of documents and reports. Identify the document(s) and report(s) associated with each transaction.

a) Sale of inventory.	1. Timecard.
b) Payroll.	2. Journal Sales order.
c) Purchase inventory.	3. Journal voucher.
d) Transfer of completed goods.	4. Completed production order.
e) Transfer of material and labor.	5. Material requisition.
	6. Sales order.
	7. Purchase requisition.

The main source:

BOCKHOLDT, J. L. *Accounting Information Systems: transaction processing and controls.* 5th edition, Boston: McGraw Hill Education 1999, ISBN 0-07-116098-1

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