MANIPAL ACADEMY of HIGHER EDUCATION (Deemed to be University under Section 3 of the UGC Act, 1956) | Centre for Online Education


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|---|---|
| **Course** | **Financial Reporting and Statement Analysis** |
| **Topic** | **Double entry frame and the balance sheet** |
| **Faculty** | **Prof. Nandan Prabhu** |

# Double entry frame and the balance sheet

## Learning Objectives

At the end of this session, you will be able to:

- Learning Objective 1: Identify financial effects of common business activities that affect the balance sheet.
- Learning Objective 2: Apply transaction analysis to accounting transactions.
- Learning Objective 3: Use journal entries and T-accounts to show how transactions affect the balance sheet.
- Learning Objective 4: Prepare a trial balance and a classified balance sheet.
- Learning Objective 5: Interpret the balance sheet using the current ratio and an understandingof related concepts.

## Double entry frame and the balance sheet

### Learning Objective 2-1

Identify financial effects of common business activities that affect the balance sheet.

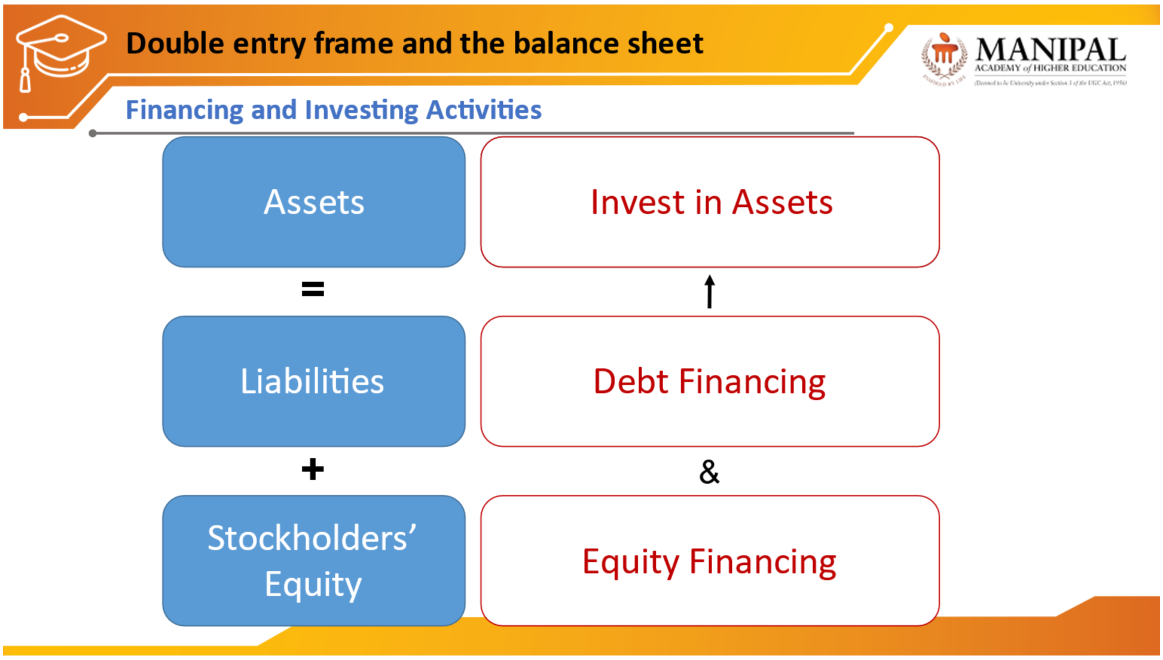
Learning objective 2-1 is to identify financial effects of common business activities that affect the balance sheet.

## Double entry frame and the balance sheet

### Building a Balance Sheet

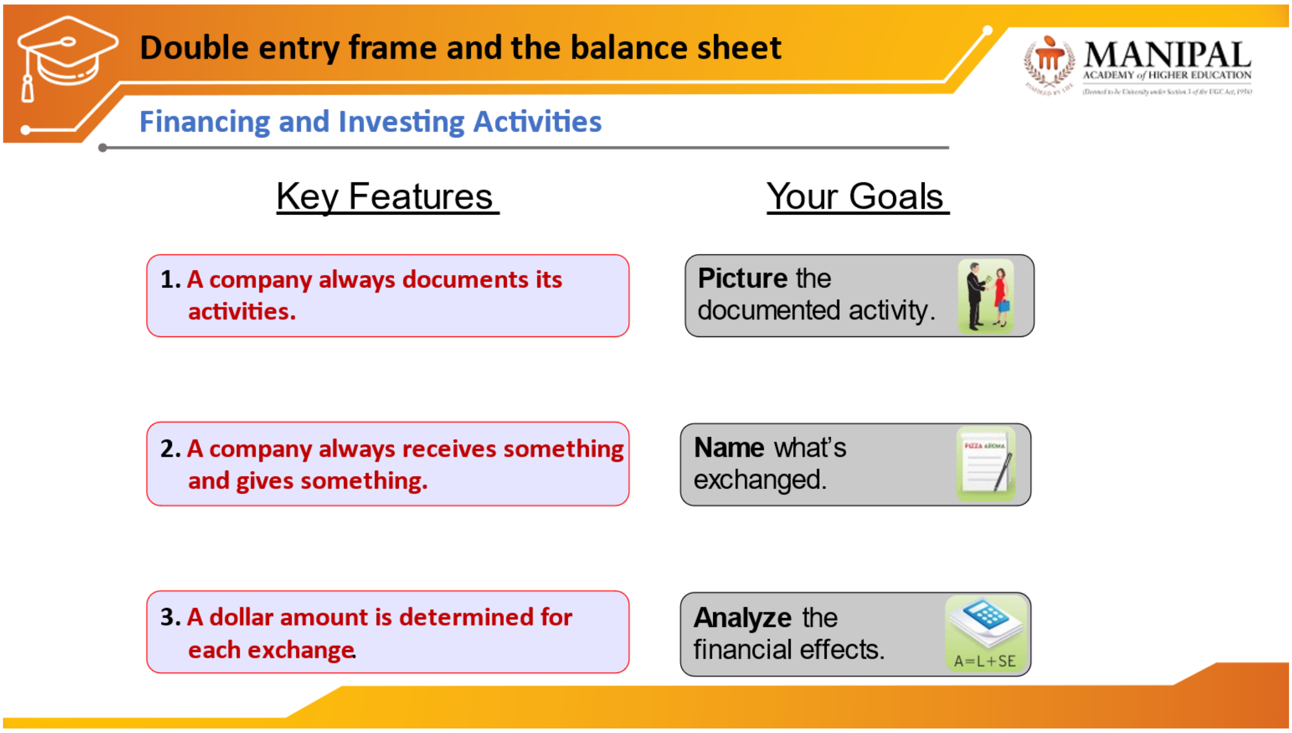
| | |
|---|---|
| Assets | Economic resources presently controlled by the company that have measurable value and are expected to benefit the company by producing cash inflows or reducing cash outflows in the future. |
| = | |
| Liabilities | Measurable amounts that the company owes to creditors. |
| + | |
| Stockholders' Equity | Owners' claim to the business resources. |

The balance sheet is structured like the basic accounting equation: Assets = Liabilities + Stockholders' Equity. Assets are economic resources presently controlled by the company that have measurable value and are expected to benefit the company by producing cash inflows or reducing cash outflows in the future; liabilities are measurable amounts that the company owes to creditors; and stockholders' equity is the owners' claim to the business resources.




Part I: Two sources of financing are available to businesses: debt financing and equity financing. Debt financing refers to money the business obtains through loans, and equity financing refers to money a business obtains through owners' contributions and reinvestments of profit. A business is obligated to repay debt financing, but it is not obligated to repay equity financing.

Part II: Using a combination of debt and equity financing, a company will start investing in business assets, such as buildings, equipment, furniture, and other assets that will be used to generate revenue.



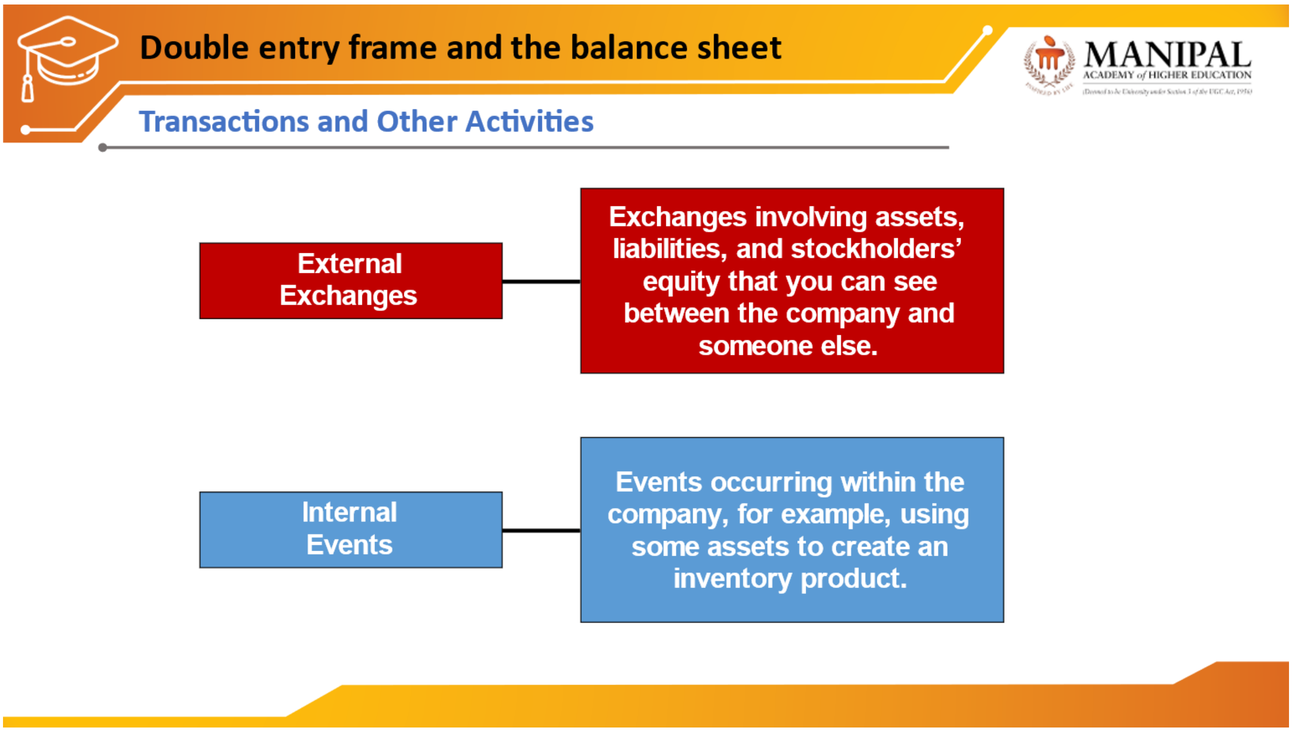

Three key features of these activities provide inputs into the accounting process.

1. A company always documents its activities. Stock certificates, promissory notes, checks, invoices, and other documents indicate the nature of the underlying business activity. Try to picture these in your mind.

2. A company always receives something and gives something. This is a basic feature of all business activities. A business enters into an exchange either to earn a profit immediately or to obtain resources

that will allow it to earn a profit later. This is the fundamental idea of business: to create value through exchange. Any exchange that affects the company's assets, liabilities, or stockholders' equity must be captured in and reported by the accounting system. Because the accounting system captures both what is received and what is given, it is often referred to as a "double-entry" system. You will need to name the items that are received and given for each exchange.

3. A dollar amount is determined for each exchange based on the value of items given and received. This value is called the cost and is used to measure the financial effects of the exchange, as required by the cost principle. These amounts will allow you to analyze the financial effects of each accounting transaction.




Part I
Business activities that affect the basic accounting equation (A = L + SE) are called **transactions**. Transactions are of special importance because they are the only activities that enter the financial accounting system. Transactions include two types of events:

External exchanges involve exchanges in assets, liabilities, and stockholders' equity that you can see between the company and someone else. For example, when Starbucks sells you a Frappucino®, it is exchanging an icy taste of heaven for your cash, so Starbucks would record this in its accounting system.

Part II
Internal events do not involve exchanges with others outside the business, but rather occur within the company itself. For example, when the company Red Bull combines sugar, water, taurine, and caffeine, something magical happens: these ingredients turn into Red Bull Energy Drink.

## Double entry frame and the balance sheet

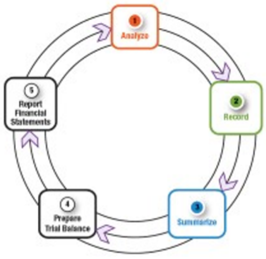
### Learning Objective 2-2

Apply transaction analysis to accounting transactions.

Learning objective 2 is to apply transaction analysis to accounting transactions.

## Double entry frame and the balance sheet

### Study the Accounting Methods




A systematic accounting process is used to capture and report the financial effects of a company's transactions.

1 Analyze → 2 Record → 3 Summarize

**A transaction is a business activity that affects the basic accounting equation.**

**Duality of Effects**

Every transaction has at least two effects on the basic accounting equation.

**A= L+ SE**

Assets must equal liabilities plus stockholders' equity for every accounting transaction.

Part I

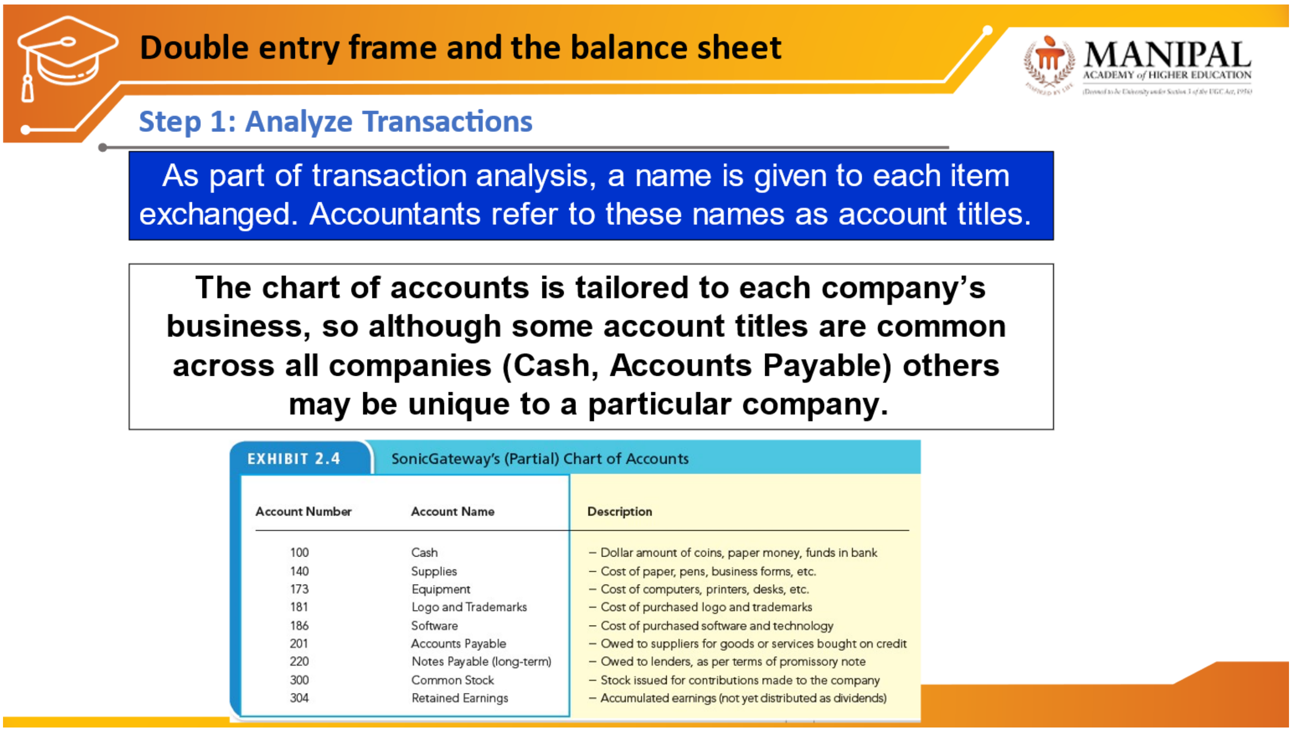
After having analyzed each transaction, a systematic accounting process is used to capture and report its financial effects. This process is called the accounting cycle because it repeats itself over and over. For now, we will focus on the first three steps: Analyze, Record, and Summarize.

Part II

A transaction is an exchange or an event that has a direct economic effect on the assets, liabilities, or stockholders' equity of a business. Business activities that do not have direct or measurable financial effects on the company are not recorded in the accounting system.

When analyzing transactions, two simple ideas are used. The first idea is the duality of effects and the second is the basic accounting equation.

Duality of effects means that every transaaction has a least two effects on the basic accounting equation. You already know the basic accounting equation. Just remember that the dollar amount for assets must always equal the total of liabilities plus stockholders' equity for every accounting transaction.




| Account Number | Account Name | Description |
|---|---|---|
| 100 | Cash | – Dollar amount of coins, paper money, funds in bank |
| 140 | Supplies | – Cost of paper, pens, business forms, etc. |
| 173 | Equipment | – Cost of computers, printers, desks, etc. |
| 181 | Logo and Trademarks | – Cost of purchased logo and trademarks |
| 186 | Software | – Cost of purchased software and technology |
| 201 | Accounts Payable | – Owed to suppliers for goods or services bought on credit |
| 220 | Notes Payable (long-term) | – Owed to lenders, as per terms of promissory note |
| 300 | Common Stock | – Stock issued for contributions made to the company |
| 304 | Retained Earnings | – Accumulated earnings (not yet distributed as dividends) |

Part I

As part of transaction analysis, a name is given to each item exchanged. Accountants refer to these names as account titles.

Part II

To ensure account titles are used consistently, every company establishes a **chart of accounts** —a list that designates a name and reference number that the company will use when accounting for each item it exchanges.

Part III

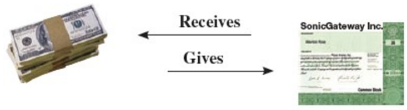
A partial chart of accounts for SonicGateway is shown on this slide. Asset accounts start with the number 1, liability accounts start with the number 2, and Stockholders' Equity accounts start with the number 3.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(a) Issue Stock to Owners.**

Scott incorporates SonicGateway Inc. on August 1. The company issues common stock to Scott and Angus as evidence of their contribution of $10,000 cash, which is deposited in the company's bank account.




1. **SonicGateway receives $10,000 Cash.**
2. **SonicGateway gives $10,000 of Common Stock .**

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (a) Cash +$10,000 | | | | Common Stock +$10,000 |

Part I

Scott incorporates SonicGateway Inc. on August 1. The company issues common stock to Scott and Angus as evidence of their contribution of $10,000 cash, which is deposited in the company's bank account.

Part II

SonicGateway has received $10,000 cash and gave $10,000 of common stock in the transaction.

Part III

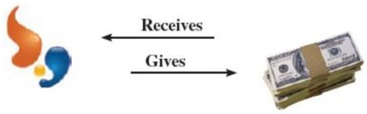
For this transaction, Cash, an asset, increases by $10,000 received from the owners. Common Stock, a stockholders' equity account, increases by $10,000 when the stock was issued to Scott and Angus.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(b) Invest in Logo/Trademark.**

SonicGateway pays $300 cash to create the company’s logo.




1. SonicGateway receives a logo costing $300.
2. Sonic Gateway gives $300 Cash .

| Assets | = | Liabilities | + | Stockholders’ Equity |
|---|---|---|---|---|
| (b) Logo/<br>Trademark +$300<br>Cash -$300 | | | | |

Part I

Next, SonicGateway pays $300 cash to create the company’s logo.

Part II

SonicGateway has received a logo costing $300 and gave $300 cash.

Part III

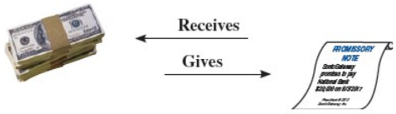
For this transaction, the asset, Logo/Trademarks, is increased by $300 and the asset, Cash, is decreased by $300. Notice that even though this transaction did not affect liabilities or stockholders’ equity, the accounting equation remained in balance because the decrease in one asset was offset by the increase in another asset.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(c) Obtain Loan from Bank.**

SonicGateway borrows $20,000 from a bank, depositing those funds in its bank account and signing a formal agreement to repay the loan in two years (on August 3, 2017).




1. **SonicGateway receives $20,000 Cash.**
2. **SonicGateway gives a note, payable to the bank for $20,000.**

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (c) Cash +$20,000 | | Note Payable +$20,000 | | |

Part I

SonicGateway borrows $20,000 from a bank, depositing those funds in its bank account and signing a formal agreement to repay the loan in two years (on August 3, 2017).

Part II

SonicGateway has received $20,000 cash that is deposited into its checking account at the bank and in return SonicGateway gave a note, payable to the bank for $20,000.

Part III

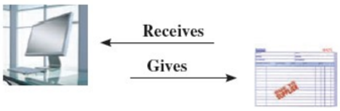
For this transaction, Cash, an asset account, increases by $20,000 and Note Payable, a liability, increases by the same amount. The basic accounting equation is in balance because the same amount was added to the asset side of the equation and the liability side of the equation.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(d) Invest in Equipment.**

SonicGateway purchases and receives $9,600 in computers, printers, and desks, in exchange for its promise to pay $9,600 at the end of the month.




1. **SonicGateway receives $9,600 in equipment.**
2. **SonicGateway gives a promise to pay $9,600 on account .**

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (d) Equipment +$9,600 | | Accounts Payable +$9,600 | | |

Part I

SonicGateway purchases and receives $9,600 in computers, printers, and desks, in exchange for its promise to pay $9,600 at the end of the month.

Part II

In this transaction SonicGateway has received $9,600 of equipment and gave a promise to pay $9,600 on account.

Part III

For this transaction, Equipment, an asset account, increases by $9,600, and Accounts Payable, a liability, increases by $9,600. SonicGateway would typically wait until the end of the month to pay the amount owed to the supplier. But to show you how the payment is accounted for, we will present it on the next slide.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(e) Pay Supplier.**

SonicGateway pays $5,000 to the equipment supplier in (d).

1. **SonicGateway receives a release from $5,000 of its promise to pay on account.**
2. **SonicGateway gives $5,000 cash.**

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (e) Cash -$5,000 | | Accounts Payable -$5,000 | | |

Part I

SonicGateway pays $5,000 to the equipment supplier from the previous slide in transaction (d).

Part II

In this transaction, SonicGateway has received a release from $5,000 of its promise to pay on account and gave $5,000 cash.

Part III

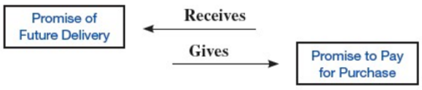
For this transaction, Cash, an asset account, decreases by $5,000, and Accounts Payable, a liability, decreases by $5,000.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(f) Order Software for App.**

SonicGateway signs a contract with a programmer for program code for the Static Charge game app for $9,000. No code has been received yet.




1. An exchange of only promises is not a transaction.
2. There is no impact on the accounting equation.

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (f) No Change | | No Change | | No Change |

Part I

SonicGateway signs a contract with a programmer for program code for the Static Charge game app for $9,000. No code has been received yet.

Part II

Not all documented business activities are considered accounting transactions. As shown in this example, SonicGateway and the app programmer have documented the order, but it involves an exchange of only promises, so it is not an accounting transaction.

Part III

Seeing this is not an accounting transaction, there is no impact to the accounting equation.

## Double entry frame and the balance sheet

### Step 1: Analyze Transactions

**(g) Receive Software.**

SonicGateway receives the $9,000 of app game code ordered in (f), pays $4,000 cash, and promises to pay the remaining $5,000 next month.


1. SonicGateway receives software with a cost of $9,000.
2. SonicGateway gives Cash of $4,000 and gives a promise to pay $5,000 on account.

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (g) Cash -$4,000<br>Software +$9,000 | | Accounts<br>Payable +$5,000 | | |

Part I

SonicGateway receives the $9,000 of app game code ordered in(f) on the previous slide, pays $4,000 cash, and promises to pay the remaining $5,000 next month.

Part II

SonicGateway has received software costing $9,000, gave $4,000 cash and a promise to pay $5,000 on account.

Part III

For this transaction, Cash, an asset account, decreased by $4,000, Software, also an asset, increases by $9,000, and Accounts Payable, a liability, increased by $5,000. The asset side of the basic accounting equation increases by a net amount of $5,000, and the liabilities and stockholders' equity side of the equation increases by the same amount. The basic accounting equation stays in balance.

## Double entry frame and the balance sheet

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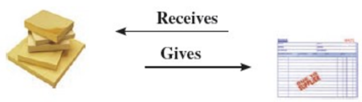
### Step 1: Analyze Transactions

**(h) Receive Supplies.**

SonicGateway receives supplies costing $600 on account.




1. **SonicGateway receives supplies with a cost of $600.**
2. **SonicGateway gives a promise to pay $600 on account.**

| Assets | = | Liabilities | + | Stockholders' Equity |
|---|---|---|---|---|
| (g) Supplies +$600 | | Accounts Payable +$600 | | |

Part I

SonicGateway receives supplies costing $600 on account.

Part II

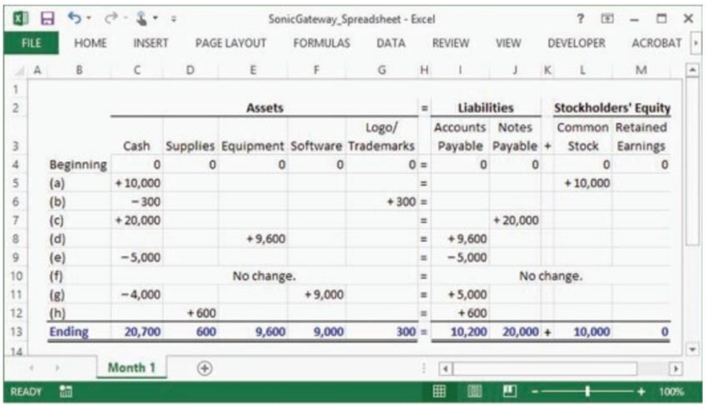
SonicGateway has received supplies costing $600 and gave a promise to pay $600 on account.

Part III

For this transaction, Supplies, an asset account, increases by $600, and Accounts Payable, a liability, increased by $600. The basic accounting equation stays in balance.

## Double entry frame and the balance sheet

### Step 2 and 3: Record and Summarize



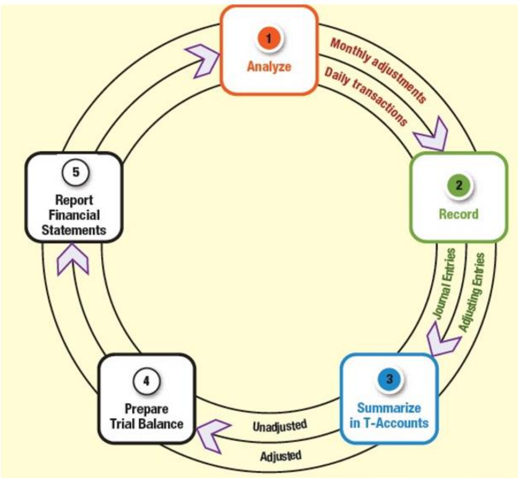
| | Assets | | | | | = | Liabilities | | + | Stockholders' Equity | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cash | Supplies | Equipment | Software | Logo/ Trademarks | | Accounts Payable | Notes Payable | + | Common Stock | Retained Earnings |
| Beginning | 0 | 0 | 0 | 0 | 0 | = | 0 | 0 | | 0 | 0 |
| (a) | +10,000 | | | | | = | | | | +10,000 | |
| (b) | −300 | | | | +300 | = | | | | | |
| (c) | +20,000 | | | | | = | | +20,000 | | | |
| (d) | | | +9,600 | | | = | +9,600 | | | | |
| (e) | −5,000 | | | | | = | −5,000 | | | | |
| (f) | | | No change. | | | = | | | No change. | | |
| (g) | −4,000 | | | +9,000 | | = | +5,000 | | | | |
| (h) | | +600 | | | | = | +600 | | | | |
| Ending | 20,700 | 600 | 9,600 | 9,000 | 300 | = | 10,200 | 20,000 | + | 10,000 | 0 |

One way to record and summarize the financial effects of transactions would be to enter your understanding of their effects into a spreadsheet

One way to record and summarize the financial effects of transactions would be to enter your understanding of their effects into a spreadsheet like the one shown in this slide. By summing each spreadsheet column, you could compute new balances at the end of each month and report them on a balance sheet. A spreadsheet makes it easy to see the individual impact of each transaction and how transactions combine with beginning balances to yield ending balances, but it is impractical for most large organizations to use.

## Double entry frame and the balance sheet

### Step 2 and 3: Record and Summarize




**Most companies use computerized accounting systems, which can handle a large number of transactions. These systems follow a cycle, called the accounting cycle, which is repeated day-after-day, month-after-month, and year-after-year.**

Most companies use computerized accounting systems, which can handle a large number of transactions. These systems follow a cycle, called the accounting cycle, which is repeated day-after-day, month-after-month, and year-after-year.

The three-step analyze-record-summarize process is applied to **daily transactions,** as well as adjustments at the end of each month, before preparing a trial balance and the financial statements. The same three steps also are part of the closing process that occurs at the end of each year. Our focus in this chapter is on applying the three-step process during the period to activities that affect only balance sheet accounts.

The analyze step involves determining the financial effects of each transaction; the record step captures these effects and enters them into an accounting record called a journal each day that they occur; and the summarize step accumulates these journal entries in accounting records called ledger accounts or T-accounts.