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

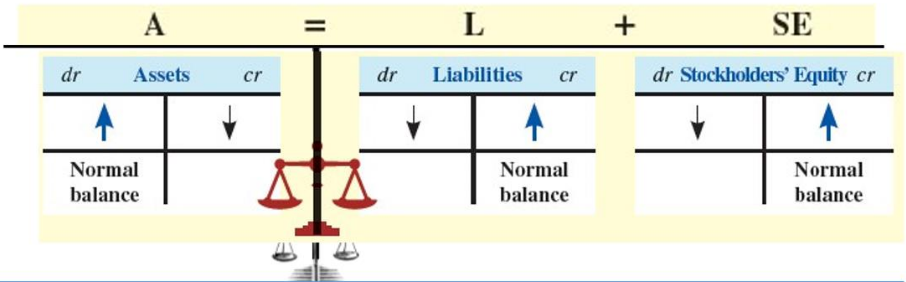
### Learning Objective 2-3

Use journal entries and T-accounts to show how transactions affect the balance sheet.

Learning objective 2-3 is to use journal entries and T-accounts to show how transactions affect the balance sheet.

## Double entry frame and the balance sheet

### The Debit/Credit Framework




**Take special note of three important rules:**

1. Accounts increase on the same side as they appear in A = L + SE.
2. Left is debit ( dr ), right is credit ( cr ).
3. The normal balance for an account is the side on which it increases.

Part I

Think of the accounting equation (A + L = SE) as an old-fashioned weight scale that tips at the equals sign. Assets—like Cash and Equipment—are put on the left side of the scale and liabilities and stockholders' equity accounts are put on the right.

Part II

Likewise, each individual account has two sides, with one side used for increases and the other for decreases.

Part III

Take special note of three important rules illustrated on this slide:

Part IV

1. Accounts increase on the same side as they appear in A = L + SE.

Accounts on the left side of the accounting equation increase on the left side of the account and accounts on the right side of the equation increase on the right. So

• Assets increase on the left side of the account.

• Liabilities increase on the right side of the account.

• Stockholders' equity accounts increase on the right side of the account.

• Decreases are the opposite, as shown in this slide.

Part V

2. Left is debit ( dr ), right is credit ( cr ).

The terms (and abbreviations) debit ( dr ) and credit ( cr ) come from Latin words that had meaning back in the day, but today they just mean left and right. When combined with how increases and decreases are entered into accounts, the following rules emerge:

- Use debits for increases in assets (and for decreases in liabilities and stockholders' equity accounts).
- Use credits for increases in liabilities and stockholders' equity accounts (and for decreases in assets).

Part VI

3. The normal balance for an account is the side on which it increases.

Assets normally have debit balances, whereas liabilities and stockholders' equity accounts normally have credit balances.

## Step 2: Recording Journal Entries

| General Journal | | | | Page G1 |
|---|---|---|---|---|
| Date | Account Titles and Explanation | Ref. | Debit | Credit |
| | | | | |
| Aug. 1 | Cash | | 10,000 | |
| | Common Stock | | | 10,000 |
| | (Financing from stockholders.) | | | |
| | | | | |
| Aug. 2 | Logo and Trademarks | | 300 | |
| | Cash | | | 300 |
| | (Bought logo using cash.) | | | |
| Aug. 29 | **Software** | | **9,000** | |
| | **Cash** | | | **4,000** |
| | **Accounts Payable** | | | **5,000** |
| | (Bought app using cash and credit.) | | | |
| | | | | |

As we saw earlier, first transactions are analyzed to determine their financial effects. In step 2, these financial effects are recorded in a journal using a debits-equal-credits format as shown here on this slide. When looking at these journal entries, as they are called, notice the following:

• A date is included for each transaction.

• Debits appear first (on top). Credits are shown below the debits and are indented to the right (both the words and the amounts). If more than one account is debited or credited, their order doesn't matter as long as for each journal entry debits are on top and credits are on the bottom and indented.

• Total debits equal total credits for each transaction (for example, see the entry on August 29 where $9,000 = $4,000 + $5,000).

• Dollar signs are not used because the journal is understood to be a record of financial effects.

• The reference column (Ref.) will be used later (in step 3) to indicate when the journal entry has been summarized in the ledger accounts.

• A brief explanation of the transaction is shown below the debits and credits.

• The line after the explanation is left blank before showing the next journal entry.

## Step 2: Recording Journal Entries

| General Journal | | | | Page G1 |
|---|---|---|---|---|
| Date | Account Titles and Explanation | Ref. | Debit | Credit |
| Aug. 1 | Cash | | 10,000 | |
| | Common Stock | | | 10,000 |
| | (Financing from stockholders.) | | | |
| Aug. 2 | Logo and Trademarks | | 300 | |
| | Cash | | | 300 |
| | (Bought logo using cash.) | | | |
| Aug. 29 | **Software** | | **9,000** | |
| | **Cash** | | | **4,000** |
| | **Accounts Payable** | | | **5,000** |
| | (Bought app using cash and credit.) | | | |

| | | Debit | Credit |
|---|---|---|---|
| (d) | Software (+A) | 9,000 | |
| | Cash (−A) | | 4,000 |
| | Accounts Payable (+L) | | 5,000 |

Part I

For classroom purposes, we use a simplified version of a journal entry which should make it easier for you to learn the most important aspects of recording journal entries. The way you would show the journal entry for August 29 is:

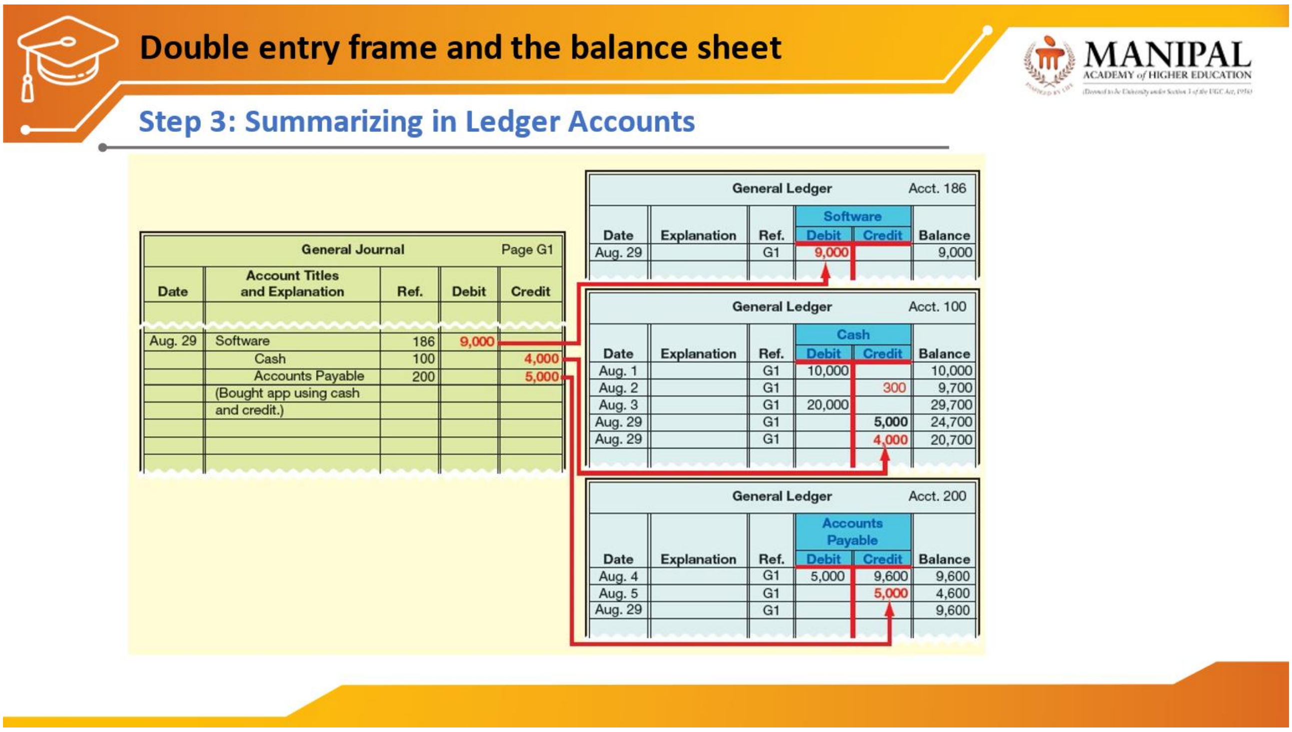
Part II

The main differences between your simplified format and a formal journal entry are:

• When a date is not given, use some form of reference for each transaction, such as ( *d* ),to identify the event.

• Omit the reference column and transaction explanation to simplify the entry.

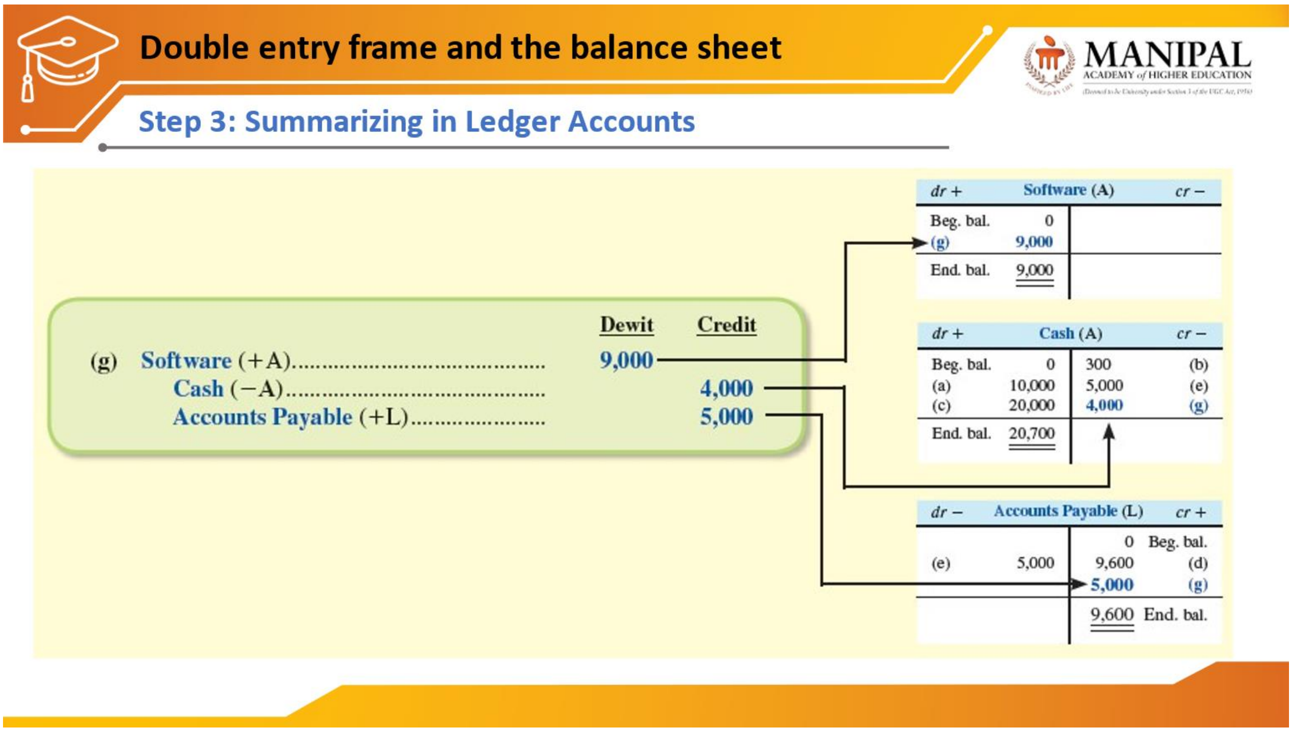
• Include the appropriate account type (A, L, or SE) along with the direction of the effect ( + or - ) next to each account title to clarify the effects of the transaction on each account. This parenthetical note will reinforce the debit/credit framework and help you ensure the accounting equation remains in balance.




By themselves, journal entries show the effects of transactions, but they do not provide account balances. That's why ledger accounts are needed.

After journal entries have been recorded (in step 2), their dollar amounts are copied ("posted") in each ledger account affected by the transaction so that account balances can be computed. This step 3 involves copying the debit part of the journal entry into the debit column of the applicable ledger account and the credit part of the journal entry into the credit column of the other applicable ledger account.

The updated balance for each ledger account at the end of the accounting period will be used to prepare financial statements.



For classroom purposes we will use a simplified format for ledger accounts to make it easier to focus on their main features. The simplified version of a ledger account is called a T-account. Each T-account represents the debit and credit columns of a ledger account. This slide shows the T-accounts for SonicGateway 's Software, Cash, and Accounts Payable, based on transactions (a) through (g) that we looked at on the previous slides. It also shows how an individual journal entry's effects would be summarized in these T-accounts. The debit to Software in the journal entry is copied into the debit (left) side of its T-account. The credits to Cash and Accounts Payable are copied into the credit (right) side of those T-accounts.

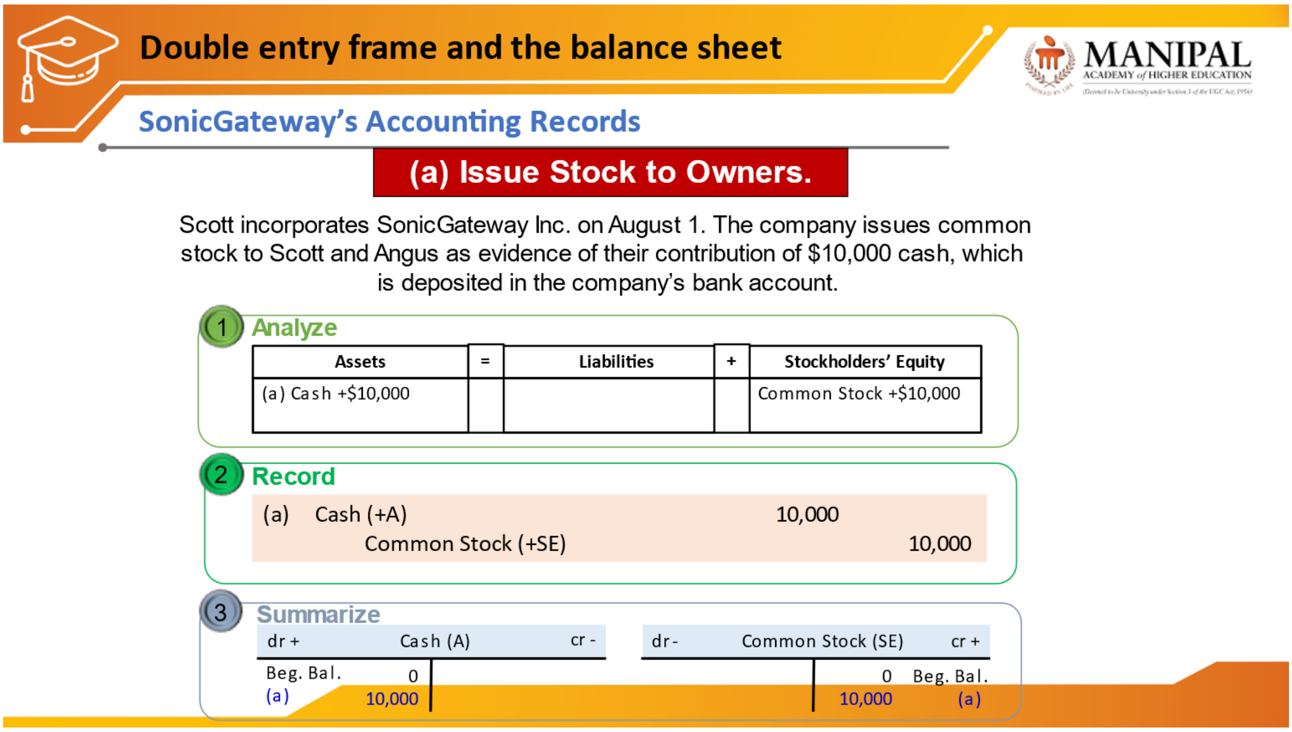
Notice the following in this slide:

1. Every account starts with a beginning balance, normally on the side where increases are summarized. For balance sheet accounts, the ending balance from the prior period is the beginning balance for the current period. Because SonicGateway is in its first month of business, the beginning balance in each account is zero in this example.

2. Each amount is accompanied by a reference to the related journal entry, which makes it easy to trace back to the original transaction should errors occur.

3. To calculate the ending balance in each account, you must start with the beginning balance, add the amounts on the "+" side of the T-account, and then subtract the amounts on the "-" side of the T-account. The ending balance is double underlined to distinguish it from transactions and symbolize the final result of a computation. The ending balance is shown on the side that has the greater total dollar amount.

Now let's practice following these steps, with the transactions we previously analyzed for SonicGateway.



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

Analyze the transaction. In this case Cash, an asset, increased by $10,000, and Common Stock, a stockholders’ equity account increase by the same amount. The basic accounting equation is in balance.

Part III

The general journal entry is to debit, or increase the asset Cash for $10,000, and credit, or increase, the stockholders’ equity account, Common Stock for the same amount.

Part IV

We summarize the transaction by posting the amount to the general ledger accounts. The Cash account will increase by $10,000, and the Common Stock account will also increase by the same amount. After the transaction is posted, the balance in the Cash account is $10,000.

**Double entry frame and the balance sheet**

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**SonicGateway’s Accounting Records**

**(b) Invest in Logo and Trademarks.**

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

1 Analyze

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

2 Record

| | | | |
|---|---|---|---|
| (b) | Logo and Trademarks (+A) | 300 | |
| | Cash (- A) | | 300 |

3 Summarize

| dr + | Cash (A) | | cr - |
|---|---|---|---|
| Beg. Bal. | 0 | | |
| (a) | 10,000 | 300 | (b) |

| dr + | Logo and Trademarks (A) | | cr - |
|---|---|---|---|
| Beg. Bal. | 0 | | |
| (b) | 300 | | |

Part I

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

Part II

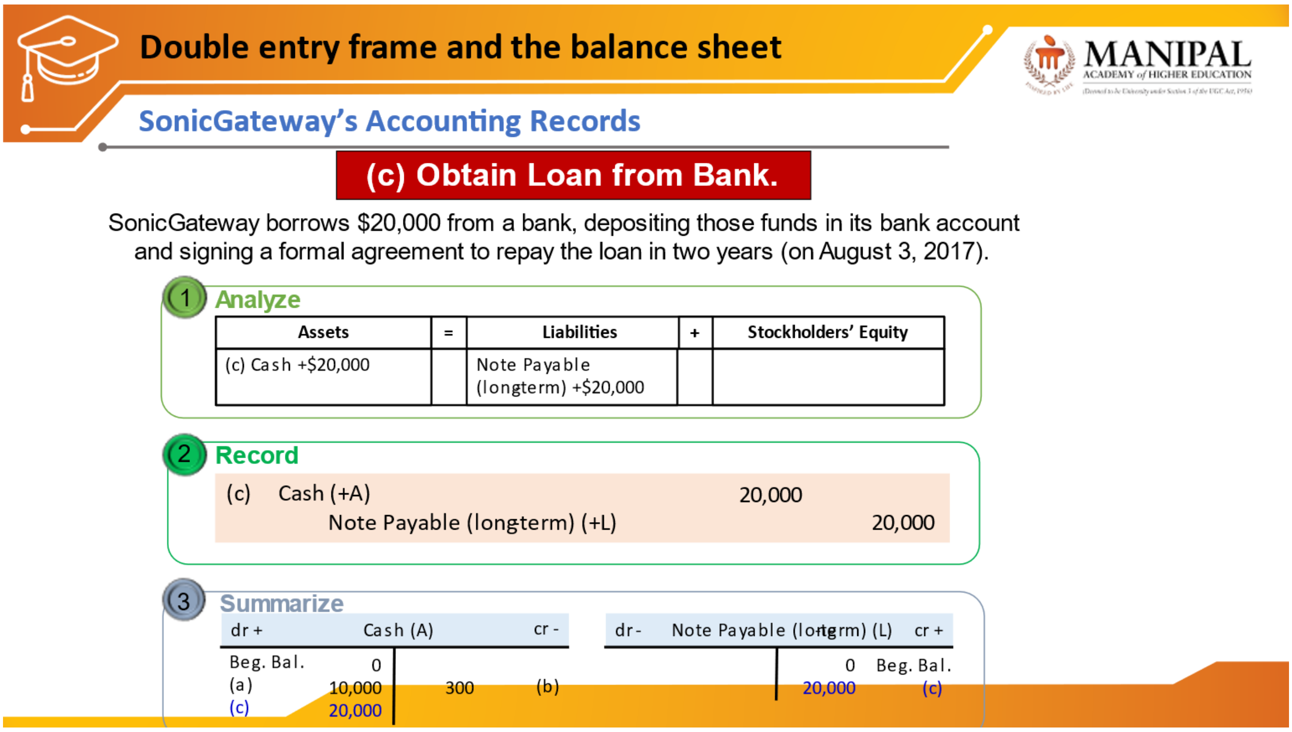
Our analysis of this transaction indicates that the asset account Cash decreased by $300 and the asset account Logo and Trademarks increased by $300. The basic accounting equation is in balance.

Part III

The general journal entry to record the transaction is to debit, or increase, the Logo and Trademarks account by $300, and credit, or decrease, the asset account Cash for $300.

Part IV

Finally, we summarize the transaction by posting it to the general ledger. The credit to cash reduces the asset account by $300, and the asset account Logo and Trademarks is increased by a debit of $300.




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

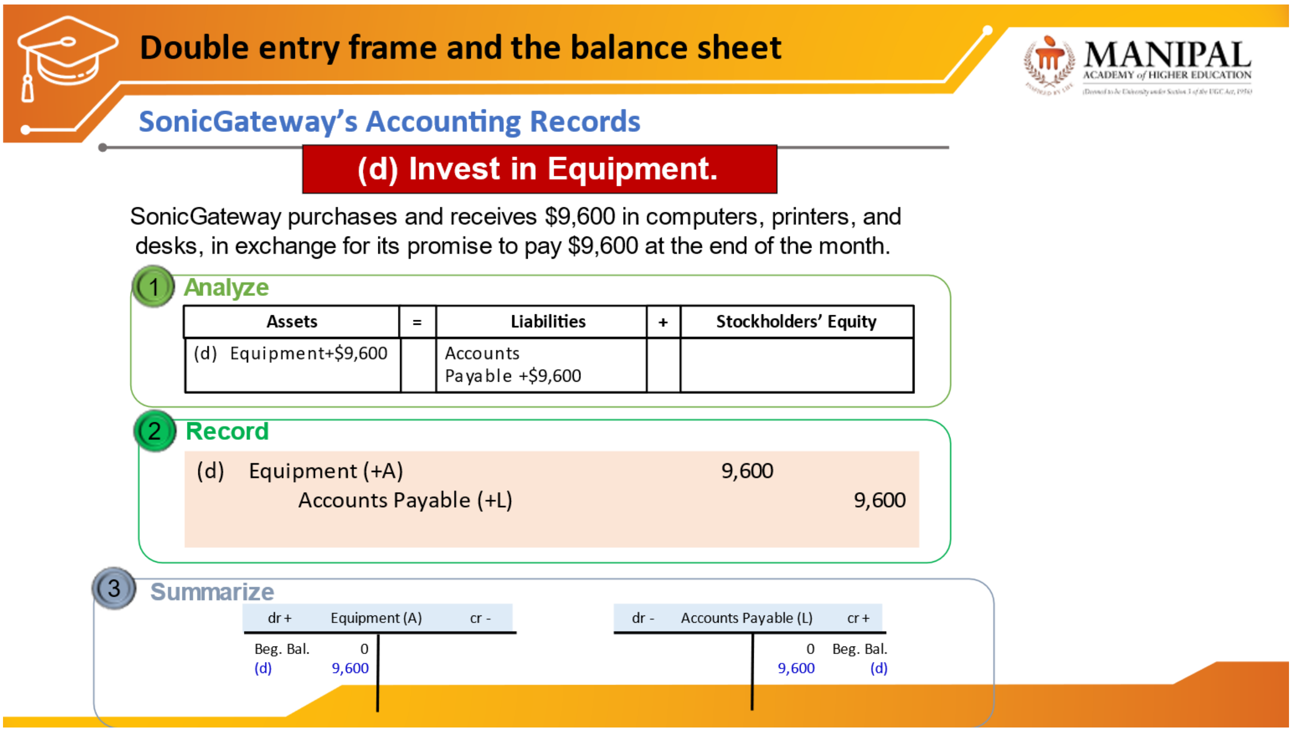
An analysis of this transaction shows that the asset account Cash increased by $20,000, and the liability account, Note Payable (long-term), increased by $20,000. The basic accounting equation is in balance.

Part III

To record this transaction in the general journal we debit, or increase, the Cash account for $20,000, and credit, or increase, the liability account, Note Payable (long-term) for the same amount. The basic accounting equation is in balance.

Part IV

We summarize by posting the $20,000 to the debit, or left side, of the asset account Cash, and credit, or post on the right side of the liability account, Note Payable (long-term) for $20,000.




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

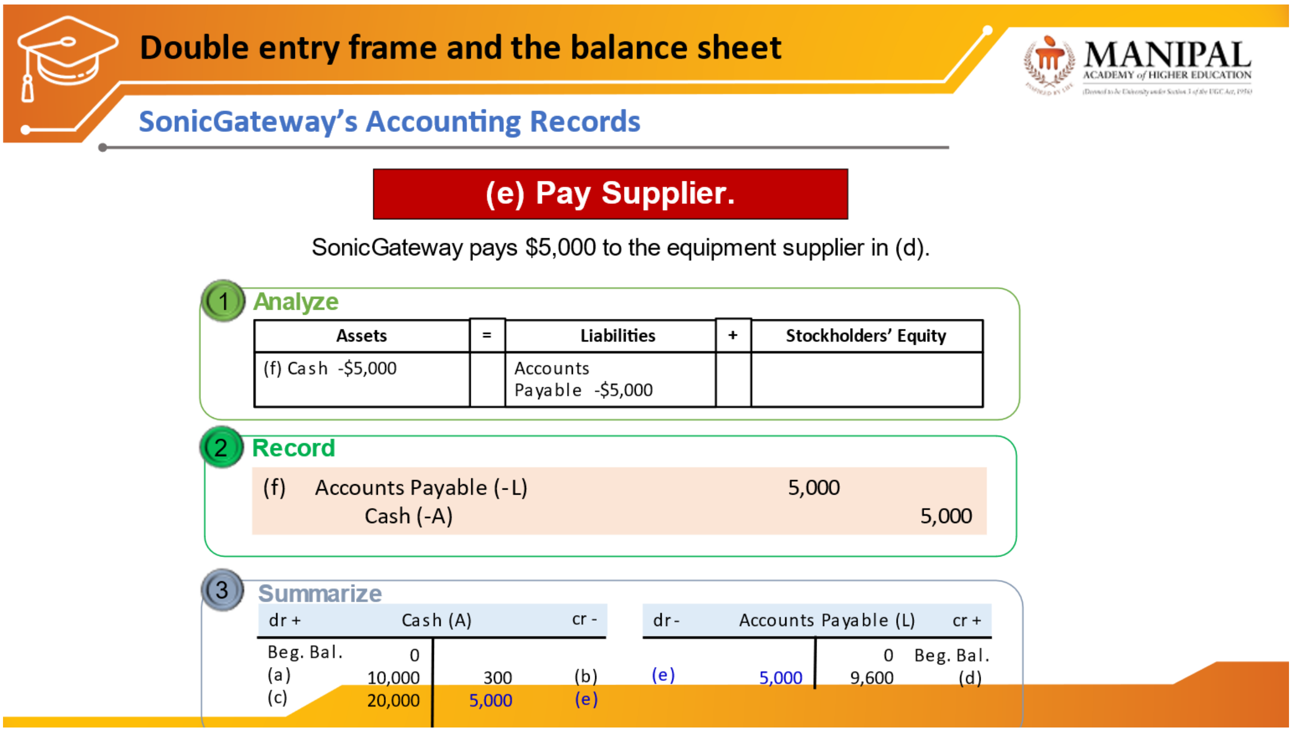
In analyzing this transaction we see that the asset account Equipment is increased by $9,600. Accounts payable, a liability account, is increased by $9,600. The basic accounting equation is in balance.

Part III

Next, we record this transaction in the general journal with a debit, or increase, to the asset account Equipment for $9,600 and we credit, or increase, the liability account Accounts Payable for $9,600.

Part IV

We summarize by posting the $9,600 to the debit, or left side, of the asset account Equipment, and credit, or post on the right side of the liability account, Accounts Payable for $9,600.




Part I

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

Part II

In analyzing this transaction we determine that the asset account Cash decreased by $5,000, and the liability account, Accounts Payable, decreased by the same amount. The basic accounting equation is in balance.

Part III

To record the transaction in the general journal we debit, or decrease, the liability account Accounts Payable for $5,000, and credit, or decrease, the asset account Cash for the same amount.

Part IV

As you can see after we post the transaction for the payment to supplier the balance in the Accounts Payable account is $4,600 which is the remaining amount owing to the supplier, and the Cash account houses many transactions.

## Double entry frame and the balance sheet

### SonicGateway's Accounting Records

**(f) Order Software.**

SonicGateway signs a contract for program code for a game app for $9,000. No code has been received yet.

1 Analyze

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

2 Record

Because this event involves the exchange of only promises, it is not considered a transaction. No journal entry is needed.

Part I

SonicGateway signs a contract for program code for a game app for $9,000. No code has been received yet.

Part II

Because this event involves the exchange of only promises, it is not considered a transaction. No journal entry is needed.

## Double entry frame and the balance sheet

### SonicGateway's Accounting Records

**(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 Analyze

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

2 Record

| | | | |
|---|---|---|---|
| (d) | Software (+A) | 9,000 | |
| | Cash (-A) | | 4,000 |
| | Accounts Payable (+L) | | 5,000 |

3 Summarize

| dr + | Cash (A) | | cr - |
|---|---|---|---|
| Beg. Bal. | 0 | | |
| (a) | 10,000 | 300 | (b) |
| (c) | 20,000 | 5,000 | (e) |
| | | 4,000 | (g) |

| dr + | Software (A) | | cr - |
|---|---|---|---|
| Beg. Bal. | 0 | | |
| (g) | 9,000 | | |

| dr - | Accounts Payable (L) | | cr + |
|---|---|---|---|
| | | 0 | Beg. Bal. |
| (e) | 5,000 | 9,600 | (d) |
| | | 5,000 | (g) |

Part I

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.

Part II

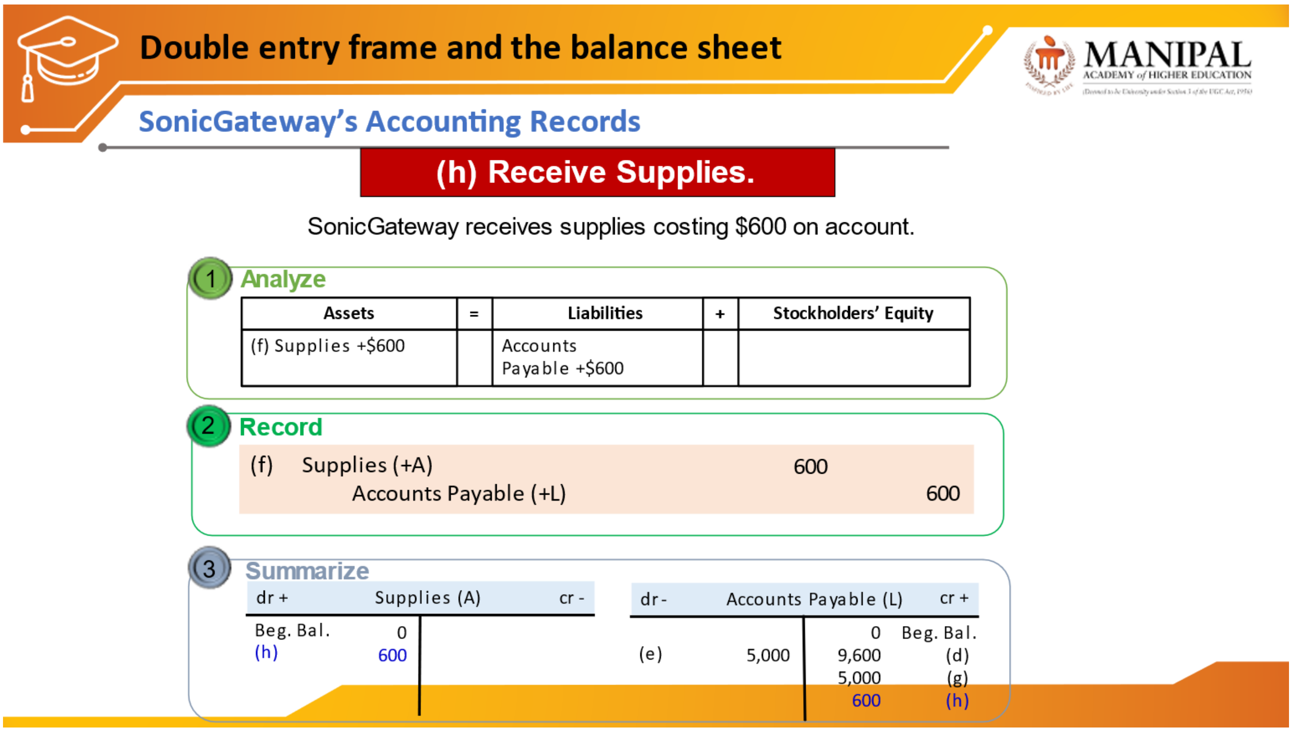
In analyzing this transaction we see that the asset account Cash is decreased by $4,000, and the asset account Software is increased by $9,000. So, there is a net $5,000 increase in the asset side of the equation. Accounts Payable, a liability account, is increased by $5,000. The basic accounting equation is in balance.

Part III

Next, we record this transaction in the general journal with a debit, or increase, to the asset account Software for $9,000. We credit, or decrease, the asset account Cash for $4,000, and credit, or increase, the liability account Accounts Payable for $5,000.

Part IV

We summarize by posting the $9,000 to the debit, or left side, of the asset account Software, we credit, or post on the right side of the asset account, Cash for $4,000, and credit, or post on the right side of the liability account, Accounts Payable for $5,000.




Part I

SonicGateway receives supplies costing $600 on account.

Part II

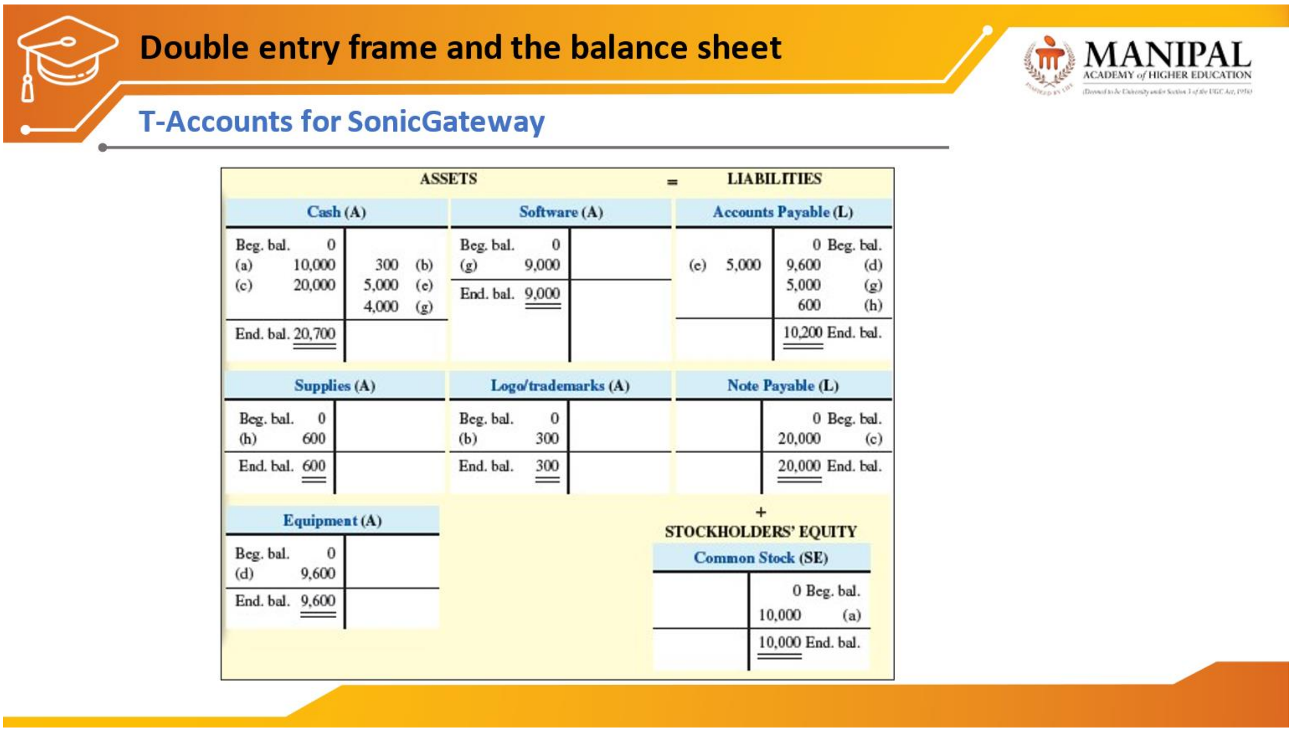
In analyzing this transaction we determine that the asset account Supplies increased by $600, and the liability account, Accounts Payable, increased by the same amount. The basic accounting equation is in balance.

Part III

To record the transaction in the general journal we debit, or increase, the asset account Supplies for $600, and credit, or increase, the liability account Accounts Payable for the same amount.

Part IV

We summarize by posting the $600 to the debit, or left side, of the asset account Supplies, and credit, or post on the right side of the liability account, Accounts Payable for $600.




Here are all the T-accounts with their individual balances. All ending balances are positive so they are shown on the plus side with a double underline.

Now that we have the account balances, we can prepare a trial balance and a balance sheet.

## Double entry frame and the balance sheet

### Learning Objective 2-4

Prepare a trial balance and a classified balance sheet.

Learning objective 2-4 is to prepare a trial balance and a classified balance sheet.

## Double entry frame and the balance sheet

### Preparing a Trial Balance

**SONICGATEWAY INC.**
Trial Balance
At August 31, 2015

| | Debit | Credit |
|---|---|---|
| Cash | 20,700 | |
| Supplies | 600 | |
| Equipment | 9,600 | |
| Software | 9,000 | |
| Logo/trademarks | 300 | |
| Accounts Payable | | 10,200 |
| Note Payable | | 20,000 |
| Common Stock | | 10,000 |
| **Totals** | 40,200 | 40,200 |

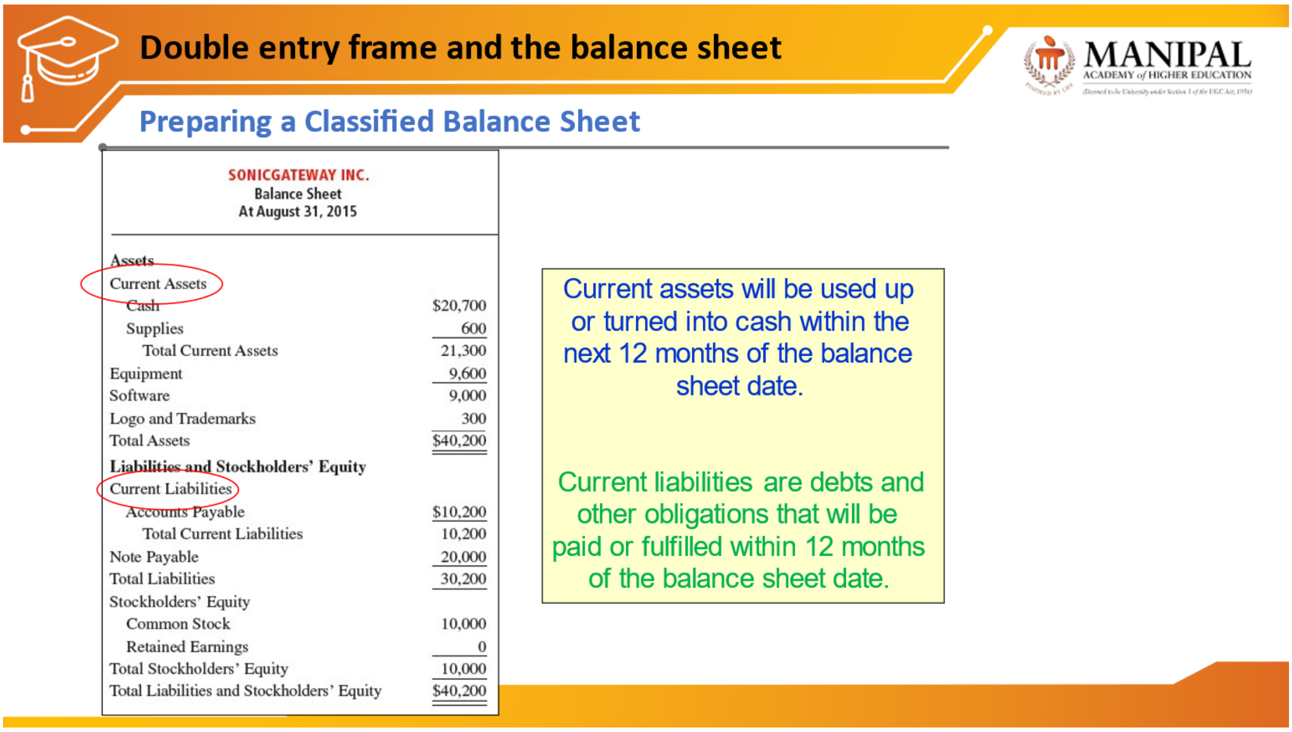
It's a good idea to check that the accounting records are in balance by determining whether debits = credits. We do this by preparing a trial balance.

Part I

The next step in the accounting cycle is to prepare an internal accounting report called a trial balance. It checks that the accounting records are in balance by determining whether debits = credits. If total debits don't equal total credits, the balance sheet will not balance. The trial balance lists the ending balance in every T-account and then computes total debits and total credits, as shown in this slide.

Part II

Because the column totals are equal, SonicGateway’s balance sheet can be prepared.




SONICGATEWAY INC.
Balance Sheet
At August 31, 2015

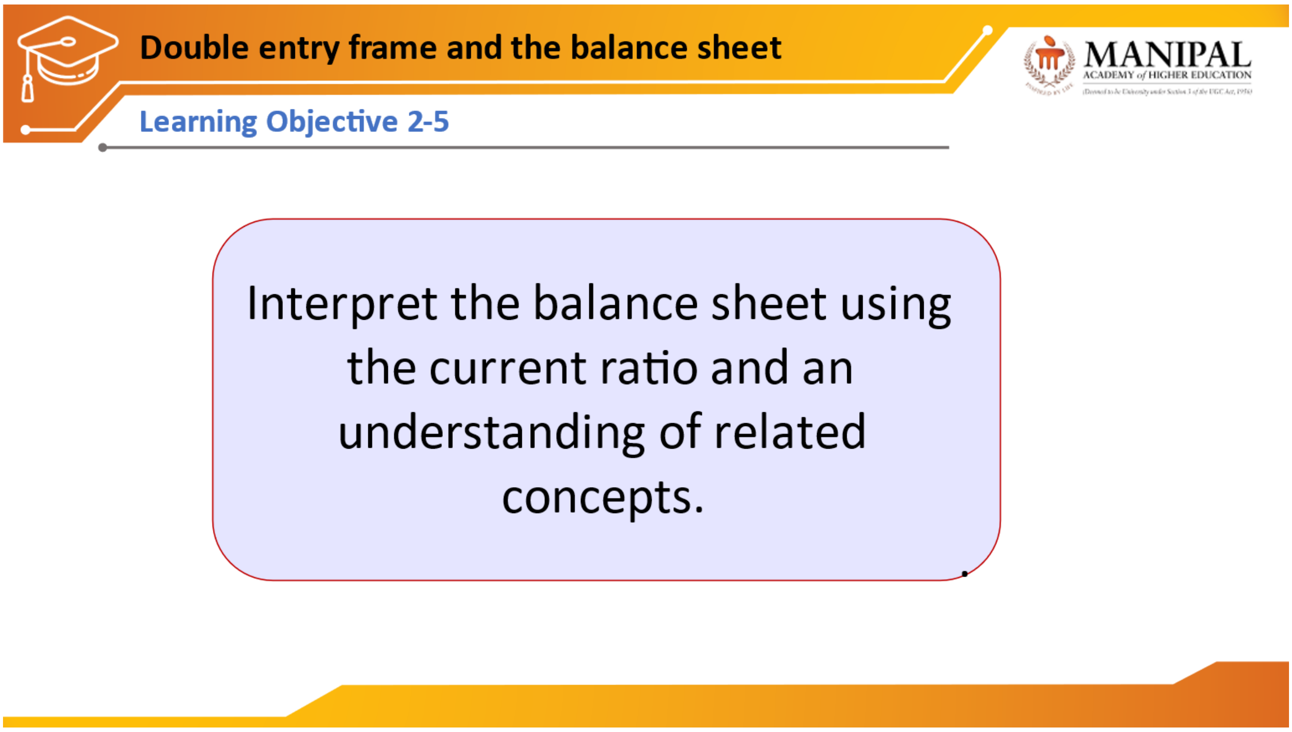
| | |
|---|---|
| **Assets** | |
| Current Assets | |
| Cash | $20,700 |
| Supplies | 600 |
| Total Current Assets | 21,300 |
| Equipment | 9,600 |
| Software | 9,000 |
| Logo and Trademarks | 300 |
| Total Assets | $40,200 |
| **Liabilities and Stockholders’ Equity** | |
| Current Liabilities | |
| Accounts Payable | $10,200 |
| Total Current Liabilities | 10,200 |
| Note Payable | 20,000 |
| Total Liabilities | 30,200 |
| Stockholders’ Equity | |
| Common Stock | 10,000 |
| Retained Earnings | 0 |
| Total Stockholders’ Equity | 10,000 |
| Total Liabilities and Stockholders’ Equity | $40,200 |

Part I

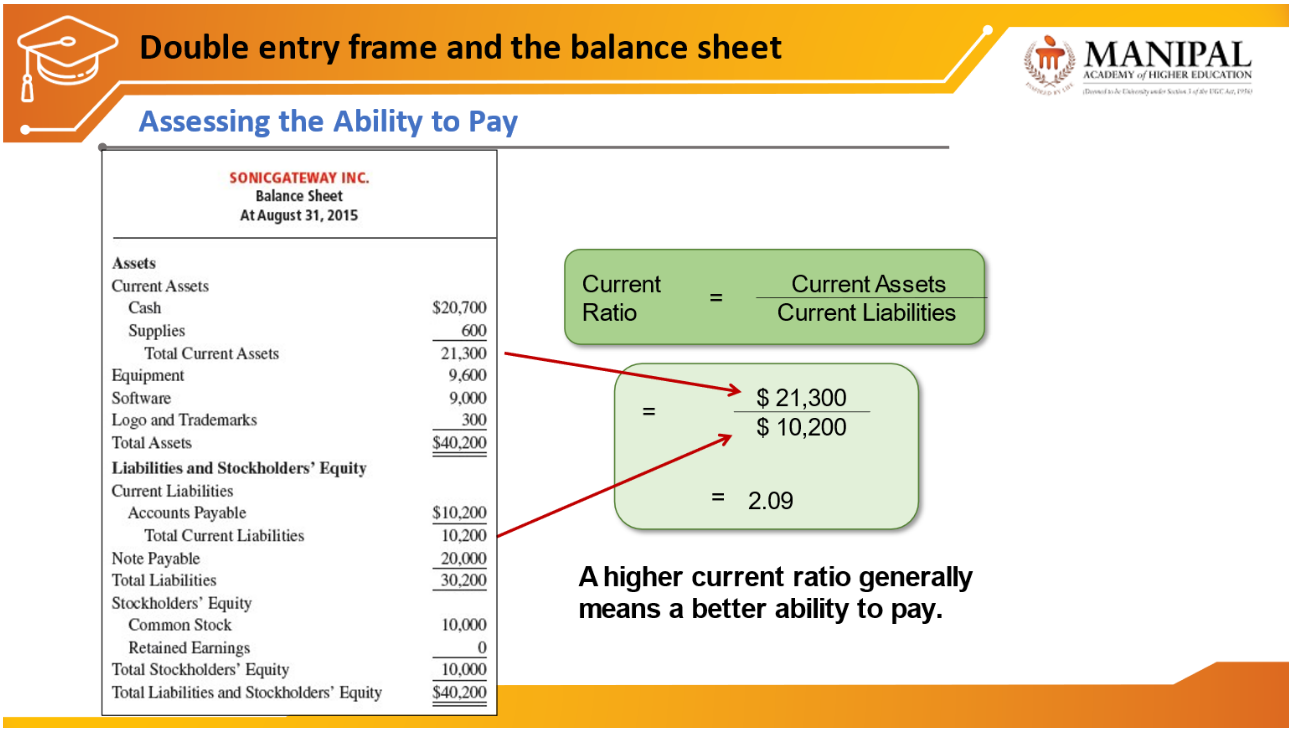
The balance sheet is prepared by taking the ending balances for each account and grouping them as assets, liabilities, and stockholders’ equity in balance sheet format. This slide uses a balance sheet format called the classified balance sheet.

Part II

A classified balance sheet contains subcategories for assets and liabilities labeled *current*. Current assets are assets the business will use up or turn into cash within 12 months of the balance sheet date. Current liabilities are debts and other obligations that will be paid or fulfilled within 12 months of the balance sheet date. In our example, Accounts Payable is the only current liability. The other liability—Note Payable—is expected to be paid in two years, so it is considered noncurrent. Companies list assets in order of liquidity (how soon they will be used up or turned into cash) and liabilities in order of maturity (how soon they will be paid in cash or fulfilled by providing a service).




Learning objective 2-5 is to interpret the balance sheet using the current ratio and an understanding of related concepts.




**SONICGATEWAY INC.**
Balance Sheet
At August 31, 2015

| | |
|---|---|
| **Assets** | |
| Current Assets | |
| Cash | $20,700 |
| Supplies | 600 |
| Total Current Assets | 21,300 |
| Equipment | 9,600 |
| Software | 9,000 |
| Logo and Trademarks | 300 |
| Total Assets | $40,200 |
| **Liabilities and Stockholders' Equity** | |
| Current Liabilities | |
| Accounts Payable | $10,200 |
| Total Current Liabilities | 10,200 |
| Note Payable | 20,000 |
| Total Liabilities | 30,200 |
| Stockholders' Equity | |
| Common Stock | 10,000 |
| Retained Earnings | 0 |
| Total Stockholders' Equity | 10,000 |
| Total Liabilities and Stockholders' Equity | $40,200 |

Part I

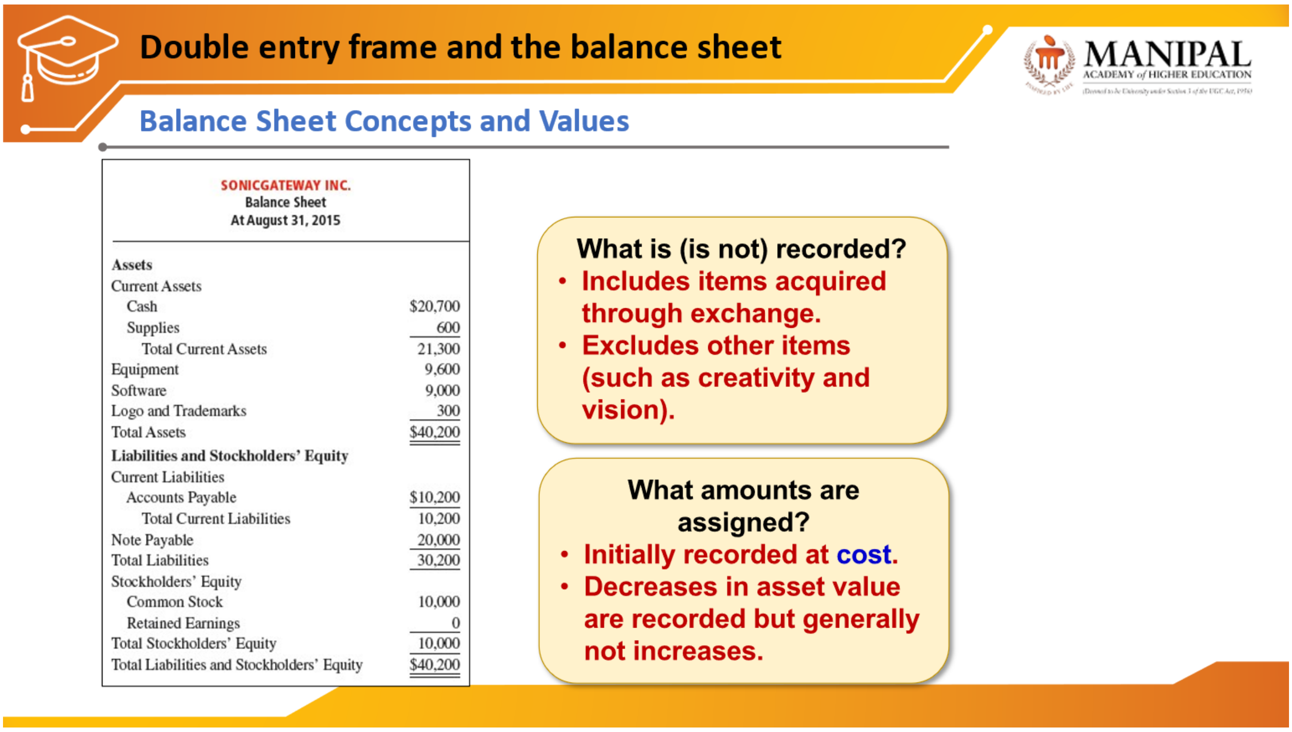
The classified balance sheet format makes it easy to see whether current assets are sufficient to pay current liabilities. In SonicGateway's case, $21,300 of current assets is greater than the $10,200 of current liabilities, making it obvious that the company's current assets are sufficient to cover its current liabilities.

Part II

The only problem with looking at total dollar amounts is the difficulty in comparing across companies. It's far easier to express the relationship as a ratio, by dividing current assets by current liabilities. This calculation is known as the current ratio. It is used to evaluate liquidity, which is the ability to pay liabilities as they come due in the short run. Generally speaking, a high current ratio suggests good liquidity.

Part III

SonicGateway's current ratio ($21,300 /$10,200 = 2.09) is in line with many other tech companies. Current ratios typically vary from 1.0 to 2.0.




SONICGATEWAY INC.
Balance Sheet
At August 31, 2015

| | |
|---|---|
| **Assets** | |
| Current Assets | |
| Cash | $20,700 |
| Supplies | 600 |
| Total Current Assets | 21,300 |
| Equipment | 9,600 |
| Software | 9,000 |
| Logo and Trademarks | 300 |
| Total Assets | $40,200 |
| **Liabilities and Stockholders' Equity** | |
| Current Liabilities | |
| Accounts Payable | $10,200 |
| Total Current Liabilities | 10,200 |
| Note Payable | 20,000 |
| Total Liabilities | 30,200 |
| Stockholders' Equity | |
| Common Stock | 10,000 |
| Retained Earnings | 0 |
| Total Stockholders' Equity | 10,000 |
| Total Liabilities and Stockholders' Equity | $40,200 |

The purpose of a balance sheet is to report what a company owns and owes, but not necessarily what the company is worth. So why is it wrong to think that the balance sheet reports a company's current value? The answer comes from knowing that accounting is based on recording and reporting transactions, which affects (1) what is (and is not) recorded, and (2) the amounts assigned to recorded items. The balance sheet includes items acquired through exchange but items not acquired through exchange, such as Scott's creativity and vision, are not listed on the balance sheet. Later, if an asset's value increases, the increase is generally not recorded under GAAP unless it is a particular Following the cost principle**,** assets and liabilities are first recorded at cost, which is their cash-equivalent value on the date of the transaction. type of financial investment. However, if an asset's value falls, it is generally reported at that lower value. Thus, the amount reported on the balance sheet may not be the asset's current value.