

Principles of Accounting

**Prepared by
Dr. Hoda Metwally**

MGM 227

Lecture 6



The accounting equation

$$A = L + E \text{ or}$$

$$A - L = L + E - L$$

$$A - L = E$$

'Account' Format $A = L + E$

Assets

=

Liabilities

+

Equity

'Narrative' Format $A - L = E$

Assets

-

Liabilities

=

Equity

Accounting Equation

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

Owner capital contributions +
Profit (Income – Expenses) –
Drawings

We know that:

- Every transaction must have TWO sides.
- Every transaction must be analysed in terms of the accounting equation so that it ALWAYS remains in balance -

Assets – may go up or down

Liabilities – may go up or down

Equity:

Capital contributions – may go up or down

Income – may go up or down

Expenses – may go up or down

Drawings – may go up or down

Changes in the Accounting Equation/Debits and Credits

Assets = Liabilities + Equity



Debits

=



Credits

WHICH BECOMES:

Assets + Expenses + Drawings = Liabilities + (Capital contributions + Income)



All Debits

=



All Credits

Comprehensive Problem

On 1 July 2018 Nicole Andreou opened a beauty parlour. The following transactions occurred during the first month of operations.

July	2	Andreou invested \$120 000 in the business by depositing cash into a business cheque account with the Eastpac Bank.
	2	Paid \$1800 for the first month's rent.
	3	Purchased equipment by an online bank transfer for \$32 000 and signed a commercial loan agreement for \$38 000.
	4	Purchased supplies for \$8400.
	6	Paid advertising expense of \$890.
	16	Recorded beauty services revenue for the first half of the month of \$3250 in cash and \$620 on credit.
	20	Paid insurance expense for July of \$480 using an online bank transfer.
	23	Received a \$140 payment from customers who paid on credit in the first half of the month.
	28	Andreou withdrew \$560 cash for personal living expenses.
	31	Recorded revenue for the second half of the month of \$3680 in cash and \$580 on credit.
	31	Paid telephone account of \$330 by electronic transfer.

Use the following account titles and numbers:

Cash at Bank, 100; Accounts Receivable, 101; Supplies, 102; Equipment, 103; Loan Payable, 200; Nicole Andreou, Capital, 300; Nicole Andreou, Drawings, 301; Revenue, 400; Rent Expense, 500; Advertising Expense, 501; Insurance Expense, 502; Telephone Expense, 503.

Required:

a) Prepare the general journal entries to record the transactions.

- **General Journal**

• <u>Date</u>	<u>Details</u>	<u>Debit (\$)</u>	<u>Credit (\$)</u>
• 2 July	Cash at Bank	120 000	
•	Nicole Andreou, Capital		120 000
-----**Cash invested by the owner-----			
• 2 July	Rent expense	1 800	
•	Cash at Bank		1 800
-----**Rent paid-----			
• 3 July	Equipment	70 000	
•	Cash at Bank		32 000
	Loan payable		38 000
-----**Equipment purchased for cash and loan payable-----			

- 4 July Supplies 8 400

Cash at Bank 8 400

-----***Supplies purchased*-----
- 6 July Advertising expense 890

Cash at Bank 890

-----***Cash paid for advertising*-----
- 16 July Cash at Bank 3250

Accounts Receivable 620

Revenue 3 870

-----***Revenue for first half of month*-----

• 31 July	Cash at Bank	3 680	
	Accounts Receivable	580	
		Revenue	4 260

-----***Revenue for second part of the month*-----

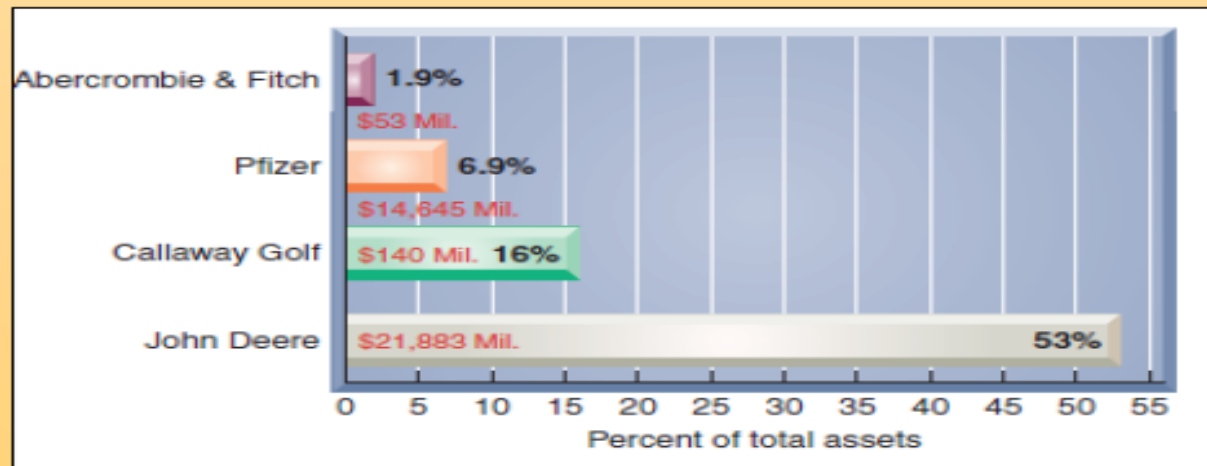
• 31 July	Telephone expense	330	
	Cash at Bank		330

-----***Telephone expenses paid*-----

ACCOUNTING FOR RECEIVABLES

C1 Accounts Receivable

A receivable is an amount due from another party.



This graph shows recent dollar amounts of receivables and their percent of total assets for four well-known companies.

A company must also maintain a separate account for each customer that tracks how much that customer purchases, has already paid, and still owes.

C1

Sales on Credit

On July 1, TechCom had a credit sale of \$950 to CompStore and a collection of \$720 from RDA Electronics from a prior credit sale.

July 1	Accounts Receivable—CompStore	950	
	Sales		950
	<i>To record credit sales*</i>		
July 1	Cash	720	
	Accounts Receivable—RDA Electronics		720
	<i>To record collection of credit sales.</i>		

Sales on Credit

July 1	Accounts Receivable—CompStore	950	
	Sales		950
	<i>To record credit sales*</i>		
July 1	Cash	720	
	Accounts Receivable—RDA Electronics		720
	<i>To record collection of credit sales.</i>		

General Ledger

Accounts Receivable

Date	PR	Debit	Credit	Balance
June 30		3,000		3,000
July 1		950		3,950
July 1			720	3,230

TechCom

Schedule of Accounts Receivable

RDA Electronics.....	\$ 280
CompStore.....	2,950
Total.....	<u>\$3,230</u>

Accounts Receivable Ledger

RDA Electronics

Date	PR	Debit	Credit	Balance
June 30		1,000		1,000
July 1			720	280

CompStore

Date	PR	Debit	Credit	Balance
June 30		2,000		2,000
July 1		950		2,950

Credit Card Sales

Advantages of allowing customers to use credit cards:

Customers' credit is evaluated by the credit card issuer.

Sales increase by providing purchase options to the customer.

The risks of extending credit are transferred to the credit card issuer.

Cash collections are quicker.



Credit Card Sales

On July 15th, TechCom has \$100 of credit card sales with a 4% fee, and its \$96 cash is received immediately on deposit.

July 15	Cash	96	
	Credit Card Expense	4	
	Sales		100
	<i>To record credit card sales less a 4% credit card expense.*</i>		



Credit Card Sales

If instead TechCom must remit electronically the credit card sales receipts to the credit card company and wait for the \$96 cash payment, we will make the first entry on July 15, and the second entry on July 20, when the cash is received.

July 15	Accounts Receivable—Credit Card Co.	96	
	Credit Card Expense	4	
	Sales		100
	<i>To record credit card sales less 4% credit card expense.*</i>		

July 20	Cash	96	
	Accounts Receivable—Credit Card Co.		96
	<i>To record cash receipt.</i>		

Installment Accounts Receivable

Amounts owed by customers from credit sales for which payment is required in periodic amounts over an extended time period. The customer is usually charged interest.



Ford Motor Company reports more than \$75 billion in installment receivables.

Valuing Accounts Receivable

Some customers may not pay their account.
Uncollectible amounts are referred to as bad debts.

There are two methods of
accounting for bad debts:

- Direct Write-Off Method
- Allowance Method



Direct Write-Off Method

TechCom determines on January 23 that it cannot collect \$520 owed to it by its customer J. Kent.

Jan. 23	Bad Debts Expense	520	
	Accounts Receivable—J. Kent		520
	<i>To write off an uncollectible account.</i>		

Notice that the specific customer is noted in the transaction so we can make the proper entry in the customer's Accounts Receivable subsidiary ledger.

P1

Direct Write-Off Method – Recovering a Bad Debt

On March 11, J. Kent was able to make full payment to TechCom for the amount previously written-off.

Mar. 11	Accounts Receivable—J. Kent.....	520	
	Bad Debts Expense		520
	<i>To reinstate account previously written off.</i>		
Mar. 11	Cash	520	
	Accounts Receivable—J. Kent		520
	<i>To record full payment of account.</i>		

Matching vs. Materiality

The matching (expense recognition) principle requires expenses to be reported in the same accounting period as the sales they helped produce.



Materiality states that an amount can be ignored if its effect on the financial statements is unimportant to users' business decisions.

The direct write-off method usually does not best match sales and expenses.

Allowance Method

At the end of each period, **estimate** total bad debts expected to be realized from that period's sales.



Two advantages to the allowance method:

1. It records estimated bad debts expense in the period when the related sales are recorded.
2. It reports accounts receivable on the balance sheet at the estimated amount of cash to be collected.

P1

Recording Bad Debts Expense

TechCom had credit sales of \$300,000 during its first year of operations. At the end of the first year, \$20,000 of credit sales remained uncollected. Based on the experience of similar businesses, TechCom estimated that \$1,500 of its accounts receivable would be uncollectible.

Dec. 31	Bad Debts Expense	1,500	
	Allowance for Doubtful Accounts		1,500
	<i>To record estimated bad debts.</i>		

Accounts Receivable			Allowance for Doubtful Accounts		
Dec. 31	20,000			Dec. 31	1,500

Balance Sheet Presentation

TechCom had credit sales of \$300,000 during its first year of operations. At the end of the first year, \$20,000 of credit sales remained uncollected. Based on the experience of similar businesses, TechCom estimated that \$1,500 of its accounts receivable would be uncollectible.

Current assets

Accounts receivable	\$20,000	
Less allowance for doubtful accounts	<u>1,500</u>	\$18,500

Recovering a Bad Debt

To help restore credit standing, a customer sometimes volunteers to pay all or part of the amount owed on an account even after it has been written off.

On March 11, Kent pays in full his \$520 account previously written off.

Mar. 11	Accounts Receivable—J. Kent	520	
	Allowance for Doubtful Accounts		520
	<i>To reinstate account previously written off.</i>		
Mar. 11	Cash	520	
	Accounts Receivable—J. Kent		520
	<i>To record full payment of account.</i>		

Estimating Bad Debts Expense

Two Methods

1. Percent of Sales Method
2. Accounts Receivable Methods
 - Percent of Accounts Receivable
 - Aging of Accounts Receivable



Percent of Sales Method

Bad debts expense is computed as follows:

	Current Period Sales
×	Bad Debt %
=	Estimated Bad Debts Expense

Percent of Sales Method

Musicland has credit sales of \$400,000 in 2011. It is estimated that 0.6% of credit sales will eventually prove uncollectible.

Let's look at recording Bad Debts Expense for 2011.

$$\begin{array}{r}
 \$ \quad 400,000 \\
 \times \quad \quad 0.6\% \\
 \hline
 = \quad \$ \quad 2,400
 \end{array}$$

**Musicland's accountant
computes estimated
Bad Debts Expense of
\$2,400.**

Dec. 31	Bad Debts Expense	2,400	
	Allowance for Doubtful Accounts		2,400
	<i>To record estimated bad debts.</i>		

Percent of Receivables Method

- 1. Compute the estimate of the Allowance for Doubtful Accounts.**

$$\text{Year-end Accounts Receivable} \times \text{Bad Debt \%}$$

- 2. Bad Debts Expense is computed as:**

Total Estimated Bad Debts Expense
– Previous Balance in Allowance Account
= Current Bad Debts Expense

Percent of Receivables Metho

Musicland has \$50,000 in accounts receivable and a \$200 credit balance in Allowance for Doubtful Accounts on December 31, 2011. Past experience suggests that 5% of receivables are uncollectible.

Desired balance in Allowance for Doubtful Accounts.

$$\begin{array}{r}
 \$ \quad 50,000 \\
 \times \quad 5.00\% \\
 \hline
 = \quad \$ \quad 2,500
 \end{array}$$

Allowance for Doubtful Accounts			
Feb. 6	800	Dec. 31, 2010, bal.	2,200
July 10	700		
Nov. 20	500		
		Unadjusted bal.	200
		Dec. 31 adjustment	2,300
		Dec. 31, 2011, bal.	2,500

Dec. 31	Bad Debts Expense	2,300	
	Allowance for Doubtful Accounts		2,300
	<i>To record estimated bad debts.</i>		

Aging of Receivables Method

Classify each receivable by how long it is past due.

Each age group is multiplied by its estimated bad debts percentage.

Estimated bad debts for each group are totaled.



Aging of Accounts Receivable

MUSICLAND Schedule of Accounts Receivable by Age December 31, 2011						
Customer	Totals	Not Yet Due	1 to 30 Days Past Due	31 to 60 Days Past Due	61 to 90 Days Past Due	Over 90 Days Past Due
Carlie Abbott.....	\$ 450	\$ 450				
Jamie Allen.....	710			\$ 710		
Chavez Andres.....	500	300	\$ 200			
Balicia Company.....	740				\$ 100	\$ 640
Zamora Services.....	<u>1,000</u>	<u>810</u>	<u>190</u>			
Total receivables.....	\$50,000	\$37,000	\$6,500	\$3,700	\$1,900	\$ 900
Percent uncollectible.....		× 2%	× 5%	× 10%	× 25%	× 40%
Estimated uncollectible..	\$ 2,270	<u>\$ 740</u>	<u>\$ 325</u>	<u>\$ 370</u>	<u>\$ 475</u>	<u>\$ 360</u>

P2

Aging of Accounts Receivable

Musicland has an unadjusted credit balance in the allowance account is \$200.

We estimated the proper balance to be \$2,270.

Allowance for Doubtful Accounts

	200
	2,070
	2,270

Dec. 31	Bad Debts Expense	2,070	
	Allowance for Doubtful Accounts		2,070
	To record estimated bad debts.		

C2

Notes Receivable

A promissory note is a written promise to pay a specified amount of money, usually with interest, either on demand or at a definite future date.

Promissory Note

Amount: \$1,000 **Date:** July 10, 2011

Ninety days after date I promise to pay to the order of

TechCom Company
Los Angeles, CA

One thousand and no/100 _____ Dollars

for value received with interest at the annual rate of 12%

payable at First National Bank of Los Angeles, CA

Julia Browne

Principal

Date of note

Due date

Payee

Interest rate

Maker

C2

Computing Maturity and Interest

The maturity date of a note is the day the note (principal and interest) must be repaid.

On July 10, 2011, TechCom received a \$1,000, 90-day, 12% promissory note as a result of a sale to Julia Browne.

Days in July	31		
Minus the date of the note	<u>10</u>		
Days remaining in July	21	←	July 11–31
Add days in August	31	←	Aug. 1–31
Add days in September	30	←	Sept. 1–30
Days to equal 90 days, or maturity date of October 8	<u>8</u>	←	Oct. 1–8
Period of the note in days	<u>90</u>		

The note is due and payable on October 8, 2011.

C2

Interest Computation

$$\text{Principal of the note} \times \text{Annual interest rate} \times \text{Time expressed in fraction of year} = \text{Interest}$$

Even for maturities less than one year, the rate is annualized.

If the note is expressed in days, base a year on 360 days.

$$\$1,000 \times 12\% \times \frac{90}{360} = \$1,000 \times 0.12 \times 0.25 = \$30$$

C2

Recognizing Notes Receivable

Notes receivable are usually recorded in a single Notes Receivable account to simplify recordkeeping. The original notes are kept on file, including information on the maker, rate of interest, and due date.

To illustrate the recording for the receipt of a note, we use the \$1,000, 90-day, 12% promissory note from Julia Browne to TechCom. TechCom received this note at the time of a product sale to Julia Browne.

July 10*	Notes Receivable	1,000	
	Sales		1,000
	<i>Sold goods in exchange for a 90-day, 12% note.</i>		

* We omit the entry to Dr. Cost of Sales and Cr. Merchandise Inventory to focus on sales and receivables.

Recording an Honored Note

The principal and interest of a note are due on its maturity date.



J. Cook has a \$600, 15%, 60-day note receivable due to TechCom on December 4.

Dec. 4	Cash	615	
	Notes Receivable		600
	Interest Revenue		15
	<i>Collect note with interest of $\\$600 \times 15\% \times 60/360$.</i>		

Recording a Dishonored Note

The act of dishonoring a note does not relieve the maker of the obligation to repay the principal and interest due.

TechCom holds an \$800, 12%, 60-day note of Greg Hart. At maturity, October 14, Hart dishonors the note.

Oct. 14	Accounts Receivable—G. Hart Interest Revenue Notes Receivable <i>To charge account of G. Hart for a dishonored note and interest of $\\$800 \times 12\% \times 60/360$.</i>	816 16 800
---------	--	--------------------------

Recording End-of-Period Interest Adjustments

On December 16, TechCom accepts a \$3,000, 60-day, 12% note from a customer in granting an extension on a past-due account. When TechCom's accounting period ends on December 31, \$15 of interest has accrued on the note.

$$\$3,000 \times 12\% \times 15/360 = \$15$$

Dec. 31	Interest Receivable	15	
	Interest Revenue		15
	<i>To record accrued interest earned.</i>		

Step 3 Recording End-of-Period Interest Adjustments

Days in December	31	
Minus the date of the note	<u>16</u>	
Day remaining in December		15
Days in January		31
Days in February		<u>14</u>
Period of the note in days		<u>60</u>



Recording collection on note at maturity.

Feb. 14	Cash	3,060	
	Interest Revenue		45
	Interest Receivable		15
	Notes Receivable		3,000
	<i>Received payment of note and its interest.</i>		

$$\$3,000 \times 12\% \times 60/360 = \$60$$

Disposal of Receivables

Companies can convert receivables to cash before they are due.

**Selling
Receivables**

**Pledging
Receivables**

Accounts Receivable Turnover

This ratio provides useful information for evaluating how efficient management has been in granting credit to produce revenue.

$$\frac{\text{Net sales}}{\text{Average accounts receivable, net}}$$

Company	Figure (\$ millions)	2008	2007	2006	2005
Dell	Net sales	\$61,101	\$61,133	\$57,420	\$55,788
	Average accounts receivable, net	\$ 5,346	\$ 5,292	\$ 4,352	\$ 3,826
	Accounts receivable turnover	11.4	11.6	13.2	14.6
Apple	Net sales	\$32,479	\$24,006	\$19,315	\$13,931
	Average accounts receivable, net	\$ 2,030	\$ 1,445	\$ 1,074	\$ 835
	Accounts receivable turnover	16.0	16.6	18.0	16.7



Thank You