Accounting

Intro to Business and Technology

Overview

- Required Assignments
- Introduction
- Essential Questions
- Assignment – Key Terms
- Think About This
- Assignment – Discussion 6
- Language of Business
- Financial Statements
- Accounting Cycle
- Assignment – Mapping the Account Cycle
- Calculating and Interpreting Financial Ratios
- Ratios
- Assignment – Calculating and Interpreting Financial Ratios Project

Required Assignments

- Key Terms/Definitions – due Thursday, Feb. 14 at the end of class
- The Language of Business Discussion – due Friday, Feb. 22 at the end of class
- Mapping the Accounting Cycle Assignment – due Thursday, Feb. 28 at the end of class
- Calculating and Interpreting Financial Ratios Project – due Friday, March 8 at the end of class

Introduction

- The only way to know whether a business is succeeding or failing is by looking at the data
- The data is provided to a business owner or manager through the accounting system
- The accounting system for a business consists of a cycle of steps that recur each fiscal period ending with the production of financial statements
- The financial statements, a summary of all activity for a fiscal period, can be compared from fiscal period to fiscal period, from company to company, and across industries
- Accounting information is used internally by managers, owners, and employees, and externally by creditors, tax authorities, investor, customers, and regulatory authorities.

Essential Questions

- What are the financial statements of a business and what do they tell me?
- What does each step in the accounting cycle accomplish?
- What are debits and credits?
- What are the possible sources of income for a business?
- How can spreadsheet software help me prepare and analyze financial statements for a business?

Key Terms

- Using a Word doc or Google doc, save the file as Accounting Terms
- Type each term and it's definition in your own words. Do not copy and paste.
- A good website to use for definitions is www.businessdictionary.com
- When finished, upload your completed doc to Google Classroom
- All key terms are on the next slide
- Upload your terms and definitions to Google Classroom
- Due Thursday, Feb. 14 at the end of class

Key Terms

1. Accounting
2. Accounting cycle
3. Accounting equation
4. Assets
5. Liabilities
6. Owner's equity
7. Capital
8. Debit
9. Credit
10. Revenue
11. Expenses
12. Income statement
13. Balance sheet
14. Statement of owner's equity
15. Cash flow statement
16. Vertical analysis
17. Horizontal analysis
18. Liquidity ratios
19. Profitability ratios
20. Solvency ratios

Think About This…

- Debit, credit, asset, liability, equity, revenue, expense, net income…accounting is often called the language of business.
- Are you ready to speak it?
- As with any language words have meaning that everyone must understand and people in the business world need to speak the jargon of accounting.
- After all, accounting does address the financial state of a business.
- Since profit is the reason people go into business in the first place, understanding accounting helps business owners and managers assess the state of the business and make decisions based on that assessment.
- If you went to a foreign country and did not understand the language, you would have a hard time accomplishing even the smallest task.
- The same principle is true in business.
- Without knowing the language of accounting, you will have a hard time accomplishing anything in business.

Assignment – Discussion 6 (complete in Google Classroom)

- Since accounting is the language of business, why do you think it will be important as a business person to be able to speak the language fluently? What would be the consequence of not knowing the language very well?
- Your response should be at least 300 words and contain no spelling or grammatical errors.
- Once you have posted your original response, please respond to two classmates. Each response should be at least 125 words and contain no spelling or grammatical errors.
- Complete Discussion 6 in Google Classroom
- Due Friday, Feb. 22 at the end of class

The Language of Business

- Think about what it takes to learn another language.
- You have to learn the vocabulary, of course, but you also have to learn sentence structure, the parts of speech and how they fit in the sentence structure, punctuation, and idioms.
- The same is true in accounting.
- You need to learn the vocabulary of accounting, how the parts fit together, and how to present it. Begin to learn the language of business by using the flash cards below to learn some of the vocabulary.
- Use this link to practice your vocabulary

The Language of Business Continued

- Knowing the words alone is not enough. You need to be able to put the words together into a format that other speakers of the language understand. Here are some tips that will help you improve your fluency in accounting, or any other language:
- Immerse yourself in the language - Reading business articles, especially those that deal with accounting and finance, will help you get a feel for the language and how it is used.
- Pay attention to how information is presented - Other than vocabulary this is the most important part of accounting. The structure of reports and records was created so that everyone who understood the structure would understand the report. Deviating from the standard structure would be confusing for those who understood accounting.
- Practice! - Accounting is best learned through practice. Begin with the basics, work through the accounting cycle, create financial statements, and analyze them.

Financial Statements

- Financial statements are the end product of the accounting cycle.
- Each of the four statements offers important information to owners, investors, creditors, and employees of a business.
- View the short presentation below to find out about the information included in each of the four financial statements and how the statements are related to each other.
- Short Presentation Link

The Accounting Cycle

- **When you are an accountant, you really do work in a cycle, that is, once you have finished the cycle, you start all over again. Please review these steps in the Accounting Cycle:**
- **Analyze Transactions** - In this step you will decide which accounts are being affected by a transaction, whether an account is increasing or decreasing, and whether to put the transaction on the left (debit) side of an account or the right (credit) side.
- **Journalize Transactions** - Once you have analyzed a transaction, you are ready to put the transaction in the journal. The journal is called the "book of original entry" because this is the first place a transaction shows up in the accounting system. The journal is kept in date order and all of the debits and credits associated with the transaction are recorded together
- **Post Transactions** - From the journal, each part of the transaction is moved from the journal to the individual accounts so that all similar transactions can be summarized. This collection of accounts is known as the general ledger.
- **Create a Trial Balance** - At the end of each accounting period, the totals from each general ledger account is placed on the trial balance so that the accountant can check to make sure that the total of all debits equal the total of all credits.
- **Gather Adjusting Entries** - Not all information about a business comes from the source documents. For instance, you may need to know how much you used in supplies. Once you have accounted physically for how much you had used up, you will need to enter that into accounting records through the adjusting entries
- **Prepare Financial Statements** - Beginning with the income statement, you will use the trial balance to prepare the financial statements mentioned in the previous lesson.
- **Journalize and Post the Adjusting Entries and the Closing Entries.** Closing entries serve to close the income statement accounts so that they will be ready for the new accounting period.
- **Prepare a Post-Closing Trial Balance** - This serves to make sure that debits = credits and that you have balances to bring forward to the next accounting period on your permanent (balance sheet) accounts.

Complete Order of Accounting Cycle Activity

Assignment – Mapping the Accounting Cycle

- Now that you know a little more about the accounting cycle, prepare an infographic describing the accounting cycle.
- This assignment should demonstrate not only your knowledge of the accounting cycle, but also show the relationship and circular flow of the cycle.
- Turn your work in through Google Classroom when you are finished.
- Due Thursday, Feb. 28 at the end of class
- What's an Infographic? An i*nfographic* (a clipped compound of "information" and "graphics") is a graphic visual representations of information, data or knowledge intended to present information quickly and clearly.
- Use the link below if you choose or create your assignment in Word or Google Doc
- https://piktochart.com/formats/infographics/

Calculating and Interpreting Financial Ratios

- Data contained in financial statements is analyzed and used by owners, managers, and investors to make decisions about a company.
- Financial analysis provides a number of tools to assist in decision making. In this lesson we will look at some of the basic ones.

Calculating and Interpreting Financial Ratios

- **Horizontal and Vertical Analysis**
  - Just taking raw numbers from financial statements and comparing them can lead to skewed results.
  - For instance, knowing that a company has operating expenses of $100,000 would be significant if the company had net sales of $200,000, but not so much so if the company had net sales of $1,000,000.
  - In order to make financial statements more comparable, analysts use horizontal and vertical analysis to convert the statements to common size statements that report each item as a percent.

Calculating and Interpreting Financial Ratios

- **Horizontal Analysis**
  - **Horizontal Analysis** is the comparison of dollar amount changes and percentage changes for the same items on a company's financial statements for two or more periods. For instance, suppose the net sales for a company on the comparative income statement looked like this:

	2010	2011
Net Sales	45,343	52,954

The formula for the percentage of change in net sales using horizontal analysis would be:

(Later Year - Earlier Year)/Earlier Year * 100

Calculating:

(52,954-45,343)/45,343 * 100 = 16.79%

  - That is telling us that net sales for this company increased 16.79% from 2010 to 2011. Horizontal analysis can be performed for every line item on the income statement and balance sheet.

Calculating and Interpreting Financial Ratios

- **Vertical Analysis**
  - **Vertical Analysis** is the comparison of financial statements in which every dollar amount reported on a financial statement is also stated as a percentage of a base amount on the same statement. In this case, everything on an income statement is reported as a percentage of net sales, and everything on a balance sheet is reported as a percentage of total assets. Let's start with the income statement and use the information above plus the following information:

	2010	2011
Total Operating Expenses	15,264	19,462

The formula for performing the vertical analysis would be:

(Line item for the year/Net sales for the year)*100

Calculating:

2010	2011
(15,264/45,343)*100 = 33.66%	(19,462/52954)*100=36.75%

  - From this we can tell that while both net sales and operating expenses increased, operating as a percentage of net sales were 3% higher in 2011, showing that maybe costs were not watched as closely as they should have been.

Calculating and Interpreting Financial Ratios

- Vertical Analysis Continued:

With the balance sheet each line item should be calculated as a percentage of total assets. Consider the following information:

	2010	2011
Current Liabilities	5,262	3,622
Total Assets	79,886	85,660

The formula for calculating each line item is

(Line item/Total Assets)*100

Calculating:

2010	2011
(5,262/79,886)*100=6.59%	(3,662/85,660)*100=4.28%

This tells us that the company was able to reduce its current liabilities (i.e. pay off some debt) in 2011.

Ratios

- Many financial ratios exist that can give us information about how well a company is doing.
- We will focus on the basic ratios in three categories: liquidity, profitability, and financial leverage.

Liquidity Ratios

- Focus on the ability of a company to pay its debt in the short-term, that is less than a year.
- Three ratios are basic to this category:
  - Current Ratio
  - Quick Ratio
  - Working Capital

Current Ratio

- Demonstrates the relationship between current assets and current liabilities.
- The formula is: current assets/current liabilities.
- It is reported, not as a percentage, but as a ratio such as 2.2:1 (read 2.2 to 1) meaning 2.2 dollars of current assets for every dollar of current liabilities.
- You would never want to have a ratio of less than 1:1 for your current ratio.

Quick Ratio

- like current ratio, examines the relationship between specific current assets, called quick assets, and current liabilities.
- Quick assets are your most liquid assets (easiest to turn into cash) and include all current assets except for inventory and any prepaid assets.
- The formula is: quick assets/current liabilities.
- It is also reported as a ratio.
- While this ratio may be less than 1:1, the closer to 1:1the ratio is, the better.

Working Capital

- demonstrates the amount of current assets that would be left to run the company on should all of the current liabilities be paid off.
- The formula is: current assets-current liabilities.
- The amount is reported as a whole number, and this number needs to be a positive number.

Profitability Ratios

- Focus on how well the company is doing at making a profit.
- These ratios include:
  - Gross Profit Margin
  - Operating Profit Margin
  - Net Profit Margin
- Each of these ratios are reported as percentages.

Gross Profit Margin

- Compares the gross profit (sometimes called gross margin) to net sales.
- The formula for this ratio is: [gross profit(margin)/net sales]*100.
- Reported as a percentage, companies often have a target percentage that they want their gross profit margin to meet.

Operating Profit Margin

- Compares the income from operations with net sales.
- The formula for this ratio is : [operating profit (also called income from operations)/net sales]*100.
- This ratio is also reported as a percentage so that it can be compared with the same ratio from other periods or within the industry.

Net Profit Margin

- Compares net income to net sales.
- In companies where the only revenues are from the sale of goods and services (there is no income from things like rent or investments) the net profit margin will be the same as the operating profit margin.
- For companies with additional sources of income, the formula for this ratio if (net income/net sales)*100.
- Like the operating profit margin, this percentage can be compared with in the company for other periods or with the industry.

Financial Leverage

- Addresses how a company is using borrowed money or how well a company is able to pay additional debt.
- A high financial leverage ratio puts a company at risk for bankruptcy.
- Common ratios used to measure financial leverage are:
  - Total Debt to Assets Ratio
  - Long-Term Debt to Assets Ratio
  - Total Debt to Equity Ratio

Total Debt to Assets Ratio

- Measures the relationship between the total debt and the assets that back up that debt.
- The formula is: Total Liabilities/Total Assets.
- This ratio is reported as a ratio.
- The optimal ratio is 0.5:1 or less.
- This would indicate that assets were funded mainly through equity (owner investment).

Long-Term Debt to Assets Ratio

- Indicates how much of a company's assets are finances by loans that will take more than a year to repay.
- The formula for this ratio is Long-Term Debt/Total Assets.
- Reported as a ratio, the higher the level of long term debt, the more important it is for the company to have positive revenue and a steady cash flow to meet its long-term obligations.

Total Debt to Equity Ratio

- Is the key financial ratio used to determine a company's financial standing.
- Lenders and investors prefer a company with a low debt to equity ratio because a rising ratio means a company is relying more on borrowing money than on its own resources.
- The formula for the ratio is Total Debt/Owner's (or Shareholder's) Equity.
- **Caution** should be taken in analyzing all ratios. It is important to note that no ratio stands or has value on its own. It is only in comparing ratios with other times or with the industry average can we get a good sense of how a company is doing.

Assignment – Calculating & Interpreting Financial Ratios Project

- Now that you know a little more about analyzing financial statements, you can try your hand at it with your Calculating and Interpreting Financial Ratios Project.
- Here is the link to the project
- Here is the link to the rubric for this project
- Turn it in through Google Classroom when you have completed it.
- Due Friday, March 8 at the end of class
- **Make sure, double check, triple check – that you have completed ALL assignments from this PPT and have submitted them for grading on time. No late work will be accepted.**

Additional Resources for Optional Exploration

- https://www.ajc.com/business/accounting-the-language-business/hK0bjLf8tAjJIQXy1rE3FJ/
- https://www.washingtonpost.com/business/economy/value-added-accounting-is-the-language-of-business--just-ask-alex-castelli/2011/08/18/gIQAsDZtUJ_story.html?utm_term=.9cde7187d1b8
- https://www.investopedia.com/university/ratios/
- https://www.accountingcoach.com/financial-ratios/explanation