TIM820 Lecture 14 (5/15/14)

Agenda

1) Project Phase II

2) Financial Strategy: Accounting

3) Homework 4

4) Return graded Midterm Exam

5) Work on the project
① Project Phase III

Each project group must meet with the instructor (Tyler) on Tuesday (5/20/14) during office hours (E2 553 4-7pm) to review the work on Phase III.

Two options for turning in Phase III:

1) In class today (5/15/14)

2) At the project meeting on Tuesday (5/20/14)
2. Financial Strategy: Accounting

Financial accounting is the process of recording, summarizing, and reporting the company's financial transactions (costs, revenue).

Financial accounting is important because:
1. Enables financial planning
2. Communicate performance to investors
3. Required by the government (Taxes)

Simplified version of the financial accounting process:

```
+------------------+         +------------------+
| Company           |         | Rest of the World|
|                   |         |                  |
| +------------------+         +------------------+
| Revenue ($)        |         |                  |
|                   |         |                  |
| +------------------+         +------------------+
| Financial Accounting|     |                  |
|                   |         |                  |
| +------------------+         +------------------+
| Balance Sheet      |         | Cash Flow Statement|
|                   |         |                  |
```

Balance Sheet

The Balance Sheet is a record of the Company's assets and liabilities at a specific point in time (e.g. Dec 31, 2023).

1) Assets: equipment, facilities, inventory of product, cash, etc.

2) Liabilities: money that the Company (debt) owes to the bank and other sources, money owed to suppliers, etc.

The owner's (shareholder) equity is the difference between assets and liabilities.

Equity = Assets - Liabilities
Example
(All numbers are $1000s)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash: $500</td>
<td>Short-term loans: $200</td>
</tr>
<tr>
<td>Fixed Assets: $500</td>
<td>(to pay suppliers)</td>
</tr>
<tr>
<td>(facilities, equipment, etc)</td>
<td>Long-term loans: $500</td>
</tr>
<tr>
<td></td>
<td>(product development, equipment, etc)</td>
</tr>
</tbody>
</table>

Total Assets: $1000  Total Liabilities: $700

Owner's Equity = $1000 - $700 = $300

Book Value of the Company
**Income Statement**

The Income Statement is a record of the revenues and expenses over a period of time (e.g. Q4 Y2018) that illustrates the profitability of the company.

**Example**

<table>
<thead>
<tr>
<th>Revenue / Expenses</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Revenue</td>
<td>$1,000</td>
</tr>
<tr>
<td>Operating Expenses (Salaries, purchasing, facilities, etc.)</td>
<td>-$500</td>
</tr>
<tr>
<td>Earnings before Interest and Taxes (EBIT)</td>
<td>$500</td>
</tr>
<tr>
<td>Interest</td>
<td>-$50</td>
</tr>
<tr>
<td>Earnings before Taxes</td>
<td>$450</td>
</tr>
<tr>
<td><strong>TAXES (≈ 50%)</strong></td>
<td>-$225</td>
</tr>
<tr>
<td><strong>Net Profit</strong></td>
<td>$225</td>
</tr>
<tr>
<td><strong>Profit Margin</strong></td>
<td>22.5% ((\frac{225}{1000}))</td>
</tr>
</tbody>
</table>
Cash Flow Statement

The Cash Flow Statement provides a summary of the company's cash flows over a period of time (e.g., Q4 2013) that shows where the company is spending the money.

Example

See Lecture 12
Question: How do you find financial information for a public (publicly traded) company?

Answer: The SEC requires that companies make this information publicly available.

- Company website
- Financial Information Websites (e.g. Google Finance, Yahoo Finance, MSN Finance)

Apple (5/14/14)

Price per Share: $593.87
Total Number of Shares: 8.6138 M
Market Capitalization: $511,555 B

Price to Earnings (PE): 14.19
Price to Earning per Share (P/E): 14.14

Google: 28.39
Facebook: 74.88
Amazon: $466.11
Twitter: —
To get detailed financial information (e.g., Income Statement, Balance Sheet, Cash Flows) go to Financials.
Midterm Exam

Overall the class performance on the midterm was good.

Average Score: 77/100

91-100: 13
81-90: 11
71-80: 5
70-7: 13

Corrections will be due next Thursday (5/22/14).

Final Score: 0.4 X original + 0.6 X corrections
= 0.4 X 77 + 0.6 X 100
= 91

You need to turn in the original exam and the corrections.

Use Structured Problem Solving on the corrections:
- Define the Problem
- Plan the Approach
- Execute the Plan
- Check your Work
- Conclusion S