

**Business Administration 1220 –**  
**Introduction to Business**

**Final Exam Study Guide**

**University of Western Ontario – Fall 2015**

## **BUSINESS 1220E - Lecture 1- Financial Statements (Chapter 2 in Course Pack)**

### **Why Study Financial Statements?**

- Financial Statements are necessary in business for:
  - Accountants
    - Creates financial statements for company management, investors, creditors, and external auditors
  - Company management teams
    - Determines how the company performed over the last year and if there is enough money to purchase new equipment
  - Investors
    - Uses financial statements to make proper investment decisions
  - Creditors
    - Uses financial statements to determine if a company will be able to pay back their debts to the bank

### **SOE-B/S-SRE**

- **Statement of Earnings-** determines the after tax net profit of an organization over a ***period of time***
  - E.g. How many points did the Blue Jays score in the past year
- **Balance Sheet-** determines the financial position of an organization at a ***specific point in time***
  - E.g. How many points did the Blue Jays score at one game
- **Statement of Retained Earnings-** determines the cumulative after tax profits that have been ***retained over the life of an organization***
  - E.g. How many points did the Blue Jays score from the day the team was formed to present day

### **Statement of Earnings**

- A financial record of the firm's gains and losses
- Over a period of time
- Not necessarily cash
- Also known as the income statement

### **A Closer Look at SOE**

- Net Sales
  - Units sold \* Selling Price (Gross Sales)
  - Less: Sales returns and allowances, Net discounts
  - E.g. the sale price of an Xbox is \$300 and 100 are sold in one year.
  - $\$300 \times 100 - \text{sales returns and allowances, net discounts}$
- Cost of Goods Sold
  - The total cost of buying raw materials, and paying for all the factors that go into producing finished goods

- Units \* Costs
  - $\text{Beg. Inv.} + \text{Purchases} - \text{End Inv.}$

### Solving for COGS

- Formula for solving COGS
  - $\text{Beginning inventory} + \text{Purchases} = \text{COGAFS} - \text{Ending inventory} = \text{COGS}$
  - COGS (cost of goods sold) and COGAFS (cost of goods available for sale)

### COGS

- Example:
  - You have one pencil at the beginning of the school year (Beginning Inventory)
  - You then purchase ten more pencils (Purchases)
  - You now have 11 pencils (COGAFS)
  - At the end of the year you have two pencils remaining (End Inventory)
  - You have used nine pencils (COGS)

### A Closer Look

- Operating Expenses
  - The costs associated with generating revenues such as research and development, selling general and admin, non-recurring, depreciation, advertising, utilities, rent etc.

### A Closer Look Continued

- Other Income, Other Expenses
  - Non related to their primary business
- Tax
  - $\text{Tax rate} * \text{Net Profit before tax}$

### Facts to Remember- SOE

- SOE (statement of earnings) reports on activities during a specific time period
- Company name, statement name, date at top
- Only the sales (revenues) generated and the expenses incurred to generate these sales during a specific period are recorded
- Structure of SOE includes Sales first, expenses, ending with earnings

### Statements Compared

- Statement of Earnings
  - Used for reporting over a period of time e.g. revenues, expenses, and net profit
- Balance Sheet
  - Used for reporting at a specific time
  - Shows what a company owns in assets, liabilities, has accrued in equity over owners' equity or shareholders' equity

- Assets is something one owns whereas liabilities is what someone owes

### Balance Sheet

- There are only two ways to pay for assets:
  - Equity and debt (one's own money or borrowed money)

### A Closer Look at Assets

- Current Assets
  - Assets that can usually be turned into cash within one year

### A Closer Look Continued

- Long Term Assets
  - Held in the company for a period greater than one year

### Depreciation/Amortization

- The reduction in the value of an asset with the passage of time due particularly to wear and tear
- E.g. A million dollar car automatically loses value the second it is purchased and driven out of the car dealership
- This cost is allocated over the asset's useful life through:
  - **Depreciation or amortization expense** is found on the income statement
  - **Accumulated depreciation or amortization** is found on the balance sheet

### A Closer Look Continued

- Intangibles
  - Can't be seen or touched
  - Goodwill
  - Patents

### A Closer Look at Liabilities

- Current Liabilities
  - Items the company should pay within the next year and are listed in order of due dates
  - E.g. Accounts Payable, Current Portion of LTD, Accrued Expenses, Income Taxes Payable, Working Capital Loan

### A Closer Look Continued

- Long Term Liabilities
  - Items the company will take longer than one year to pay and are also listed in order of due dates
  - E.g. Car loan, Mortgage, Long-Term loans

### A Closer Look at Equity

- Equity
  - Represents the financial interest, stake or claim the owners have in the company
  - Includes owner’s original investment plus or minus the accumulation of all incomes or losses that have been retained since the beginning of the company
- Fundamental Accounting Equation
  - $Assets = Liabilities + Owner’s\ Equity$

### A Closer Look Continued (from SRE)

- Retained Earnings
  - Accumulated after tax profits or losses which have not been paid out to the owners as dividends or drawings

### Balance Sheet Equation

- $Assets = Liabilities + Equity$
- Balance sheet must always balance

### Statement of Retained Earnings

- Shows money reinvested into the company since its inception
- Links the statement of earnings and balance sheet together
- Formula to Calculate Retained Earnings (e.g. for 2014-2015 year):
  - $Retained\ earnings\ 2014(2014\ balance\ sheet) + Net\ profit\ (from\ 2015\ SOE) - Dividends\ paid\ (results\ of\ balance\ sheet\ equation\ also\ known\ as\ “plug”) = Retained\ earnings\ 2015$
- Connected to:
  - Retained earnings account on the balance sheet
  - Net profit after tax on the statement of earnings

### Diagrams

#### Preparing the Statements

<u>Statement of Earnings</u>	
Net Sales	
COGS	
Beg. Inv.	
+ Purchases	
- End Inv.	
Operating Expenses	
Gen. & Admin.	
Selling	
Depreciation Exp.	
Other Exp. & Income	
Net Profit before Tax	
Tax Expense	
Net Profit After Tax	

<u>Balance Sheet</u>	
<u>Assets</u>	<u>Liabilities</u>
Current Assets	Current Liabilities
Inventory	
Fixed Assets	LT Liabilities
Accumulated Dep.	
Intangibles	Shareholders’ Equity
Total Assets	Capital
	Retained Earnings
	Total Liabilities

<u>Statement of Retained Earnings</u>	
Retained Earnings, Last year	
+ Net Profit	
-Dividends	
Retained Earnings, This Year	

Same

Same

Same

Same

## **Business 1220E- Lecture 3 – Homework Take-up**

### **Recap from lecture 1**

**Current assets**- cash and other assets that are expected to be converted to cash within a year

**Fixed assets**- investments in property, plant and equipment

**Intangible assets**- non-physical asset that has a useful life of greater than one year e.g. trademarks, customer lists, motion pictures, franchise agreements, computer software etc.

**Current liability**- the amount of money the company owes and must pay within the coming year

**Long-term liability**- debts due after one year from the date of the balance sheet

**Equity account**- the owner's interest in the company assets

**Balance sheet**- presents the financial position of an enterprise as of a particular day

**Income statement**- measures how profitable the corporation was during a particular period of time

**Prepaid Expense** – intended to be used up in the short term, such as property or equipment rental and fire. E.g. magazine subscriptions are paid for the entire year at once but customers receive one issue per month.

### **Depreciation (Amortization)**

Depreciation (amortization) Expense- is found on the income statement (as an operating expense)

Accumulated Depreciation (Amortization) – is found on the balance sheet as a contract account

- Accumulated depreciation is the depreciation expense that has been recorded on the income statement over the life of the fixed asset

### **Depreciation Example**

#### Historical Cost

- Truck costs \$100,000
- Purchased on January 1<sup>st</sup>, 2010
- Expected to last five years (useful life)

#### Fixed Asset

- Truck is recorded as its original cost (never changes)

#### Accumulated Depreciation

- Portion of original cost that has been depreciated (reduced) as an expense over the years

### Depreciation Expense

- $\$100,000 / 5 \text{ years} = \$20,000$  each year for 5 years
- Straight line method of depreciation
  - o Historical cost / useful life

### Additional Facts to Remember

- Historical cost never changes
- Net= historical cost – accumulated depreciation
- Historical cost, accumulated depreciation and net will appear on the balance sheet
- Depreciation expense appears on the income statement
- Gross profit= sales – COGS
- $\text{COGS} = \text{Beg. Inv.} + \text{Purchases} - \text{End. Inv.}$

### Homework Solutions

#### Exercise 2 pg 44

J.Crawford Retail Sales Inc.	
Income Statement	
Three month period ending March 31, 2014	
(In 000s)	
Net Sales	\$2,125
Cost of Goods Sold:	
Beginning Inventory	393
Plus: Purchases	1,664
Cost of Goods Available for Sale	2,057
Less: Ending Inventory	475
Cost of Goods Sold	1,582
Gross Income	543
Operating Expenses:	
General and Administrative Expenses	143
Selling Expenses	160
Total Operating Expenses	303
Net income before tax	240
Estimate income tax expense (25%)	60
Net income after tax	<u>\$180</u>

## Exercise 2 pg. 47 part 2

Thomas Hardware Store LTD.		
Balance Sheet		
As at January 31, 2014		
<b>ASSETS</b>		
Current assets		
Cash		\$4,400
Marketable Securities		18,000
Accounts receivable		60,000
Inventory		182,000
Prepaid expenses		<u>\$12,800</u>
Total Current Assets		\$277,200
Property, Plant and equipment		
Land		\$19,500
Office Equipment		119,000
Net building and equipment		61,800
Less: Accumulated depreciation, building and equipment		57,200
Total Property, plant and equipment (net)		\$81,300
Intangibles:		
Goodwill (net)		<u>\$2,500</u>
Total Intangibles		2,500
<b>TOTAL ASSETS</b>		<b><u>\$361,000</u></b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>LIABILITIES</b>		
Current Liabilities:		
Notes Payable (due in 90 days)		\$34,800
Accounts Payable		73,700
Accrued expenses payable		10,500
Taxes payable		5,200
Long-term debt		54,000
Total Current Liabilities		\$178,200
<b>SHAREHOLDERS' EQUITY</b>		
Capital stock:		
Common stock, authorized, 2,500 Shares, issued 2,052		\$51,300
Retained Earnings		\$131,500
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b>\$182,800</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b><u>\$361,000</u></b>

**Exercise 1 pg.49 Part 2**

Bargain Stores Incorporated		
Income Statement		
For the year ending March 31, 2014		
(in 000's of dollars)		
Revenue:		
Sales		\$3,398
Cost of Goods Sold:		
Inventory, April 1, 2013		\$684
Plus: Net Purchases		2,615
Cost of Goods Available for Sale		3,299
Less: Inventory, March 31, 2014		758
Cost of Goods Sold		\$2,541
Gross income		857
Operating Expenses:		
Selling expenses		\$341
Depreciation expense		\$36
General and Administrative expense		<u>\$432</u>
Total operating expenses		\$809
Net profit before tax		\$48
Income tax expense		\$12
Net income after tax		<u>\$36</u>

**Exercise 1 pg. 49 Part 3**

Bargain Stores Incorporated		
Statement of Retained Earnings		
For the year ended March 31, 2014		
(in 000s of dollars)		
Retained earnings: April 1, 2013		\$540
Net Income		<u>36</u>
		576
Less: Perferred Dividends		<u>\$12</u>
Retained earnings: March 31, 2014		<u>564</u>

**Exercise 1 pg. 49 Part 4**

Bargain Stores Incorporated		
Balance Sheet		
As at March 31, 2014		
(In 000s of dollars)		
<b>ASSETS</b>		
Current assets:		
Cash		\$48
Accounts receivable		324
Inventory		<u>58</u>
Total current assets		\$430
Fixed assets:		
Store fixtures cost		\$180
Less: accumulated amortization		<u>\$36</u>
		\$144
<b>TOTAL ASSETS</b>		<b><u>\$1,274</u></b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>LIABILITIES</b>		
Current liabilities:		
Notes payable		\$252
Accounts payable		\$288
Accrued expenses payable		\$96
Income tax payable		<u>\$7</u>
Total current liabilities		\$643
Long-term liabilities:		
Long-term notes payable		<u>\$31</u>
Total long-term liabilities		\$31
<b>TOTAL LIABILITIES</b>		\$674
<b>SHAREHOLDERS' EQUITY</b>		
Capital stock:		
Common stock		\$36
Retained earnings, March 31, 2014		<u>\$564</u>
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b><u>\$600</u></b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b><u>\$1,274</u></b>

**\*\*MUST BALANCE \*\***

**Business 1220E- Lecture 4- Homework Take-up****Difference between Proprietorship and Incorporated**

Proprietorship	Incorporated
- Owners' equity	- Shareholders' equity
- Drawings	- Dividends
- Capital	- Retained earnings
- Taxed at personal level	- Taxed at corporate level

**Pg. 50 Exercise 2 Part 2**

Oliver Wholesalers- Proprietorship	
Income Statement	
for the year ending April 30, 2014	
( In 000's of dollars)	
Net Sales	\$4,326
Cost of Goods Sold:	
Inventory, April 30, 2013	\$822
Plus: Purchases	\$3,502
Cost of Goods Available for Sale	4,324
Less: Inventory, April 30, 2014	<u>\$1,022</u>
Cost of Goods Sold	\$3,302
Gross Income	\$1,024
Operating Expenses:	
Selling Expenses	\$437
General and Administrative Expenses	\$445
Depreciation Expense	\$52
Total Operating Expenses	<u>\$932</u>
Net Income before Tax	\$92
Estimate Income Tax Expense	<u>\$2</u>
Net Income after Tax	<u>\$90</u>

**Pg. 50 Exercise 2 Part 3**

Oliver Wholesalers-Proprietorship	
Statement of Capital	
for the year ended April 30, 2014	
(In 000's of dollars)	
Capital: Oliver, April 30, 2013	\$600
Net Income for the year 2014	<u>\$90</u>
	\$690
Less: Drawings	\$56
Capital: Oliver, April 30, 2014	<u>\$634</u>

## Pg. 50 Exercise 2 Part 4

Oliver Wholesalers- Proprietorship									
Balance Sheet									
as at April 30, 2014									
( In 000's of dollars)									
<b>ASSETS</b>				<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>					
Current Assets:				<b>LIABILITIES</b>					
Cash		\$44		Current Liabilities:					
Accounts receivable		\$413		Notes payable (bank)		\$520			
Inventory		\$1,022		Accounts payable		\$346			
Prepaid expenses		\$29		Accrued expenses payable		\$34			
Total Current Assets		\$1,508		Total Current Liabilities		\$900			
Fixed Assets:				Long-term liabilities					
Equipment cost		\$520		Long-term bank loan		\$26			
Less: Accumulated amortization		\$468		Total long-term liabilities		\$26			
Net equipment		\$52		<b>OWNERS' EQUITY</b>					
Total Fixed Assets		\$52		Capital Stock:					
<b>TOTAL ASSETS</b>				Capital, Oliver, April 30, 2014					
		\$1,560		Total Shareholders' equity		\$634			
				<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>					
				<u>\$1,560</u>					

## Pg. 55 Case Study Income Statement

Lisa's Waterbed Emporium Inc.			
Income Statement			
for the year ending September 30, 2012			
Net Sales		\$487,000	
Cost of Goods Sold:			
Inventory, 2011		\$82,000	
Plus: Purchases		\$330,000	
Cost of Goods Available for Sale		\$412,000	
Less: Inventory, 2012		\$91,000	
Cost of Goods Sold		\$321,000	
Gross Income		\$166,000	
Operating Expenses:			
General and Administrative Expenses		\$130,000	
Depreciation Expense		\$50,000	
Total Operating Expenses:		\$135,000	
Income from Operations		\$31,000	
Net Income expense		\$8,000	
Net Income after Tax		\$23,000	

**Pg. 55 Case Study Retained Statement of Earnings**

Lisa's Waterbed Emporium Inc.	
Retained Statement of Earnings	
for the year ended September 30, 2012	
Retained earnings, September 30,2011	\$61,000
Plus: Net income, 2012	<u>\$23,000</u>
	\$84,000
Less: Dividends	<u>\$3,000</u>
Retained earnings, September 30,2012	<u>\$81,000</u>

**Pg. 55 Case Study Balance Sheet**

Lisa's Waterbed Emporium Inc.			
Balance Sheet			
as at September 30,2012			
<b>ASSETS</b>		<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>	
Current assets:		<b>LIABILITIES</b>	
Cash	\$2,000	Current Liabilities:	
Marketable Securities	\$60,000	Notes Payable	\$67,000
Accounts receivable	\$103,000	Accounts Payable	\$68,000
Inventory	<u>\$91,000</u>	Taxes Payable	\$3,000
Total Current Assets	\$256,000	Current portion of long-term debt	<u>\$10,000</u>
Fixed Assets:		Total Current Liabilities	\$148,000
Land	\$60,000	Long-term Liabilities:	
Building and equipment	\$80,000	Long-term mortgage loan	\$113,000
Accumulated depreciation	<u>\$15,000</u>	Debentures (5% due 2014)	<u>\$34,000</u>
Net Fixed Assets	\$125,000	Total long-term liabilities	\$147,000
Intangible Assets		<b>TOTAL LIABILITIES</b>	\$295,000
Goodwill (net)	\$21,000	<b>SHAREHOLDERS' EQUITY</b>	
Start-up costs	<u>\$4,000</u>	Retained earnings	\$81,000
Total Intangible Assets	\$25,000	Common stock	\$30,000
<b>TOTAL ASSETS</b>	<u>\$406,000</u>	<b>TOTAL SHAREHOLDERS' EQUITY</b>	\$111,000
		<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u>\$406,000</u>

**Business 1220E- Lecture 5- Financial Statements Homework Take-up****Glenn's Glue Stick Income Statement pg. 57**

Glenn's Glue Stick Inc.			
Income Statement			
for the year ending March 31, 2014			
Net Sales			\$5,750,000
Cost of Goods Sold:			
Inventory, 2013		\$21,000	
plus: purchases		<u>\$1,500,000</u>	
Cost of Goods Available for Sale		\$1,521,000	
Less: Inventory, 2014		<u>(\$27,600)</u>	
Cost of Goods Sold			<u>\$1,493,400</u>
Gross Income			\$4,256,600
Operating Expenses:			
Selling Expenses		\$65,000	
General and Administrative Expenses		\$38,000	
Salaries		\$350,000	
Rent		\$40,000	
Maintenance and Repairs		\$10,250	
Depreciation Expense		<u>\$10,000</u>	
Total Operating Expenses			<u>\$513,250</u>
Net income before tax and interest			\$3,727,350
Estimate income tax expense		\$50,000 (40%)= \$20,000	
		<u>\$3,677,350 (25%)= \$919,338</u>	
			\$939,338
Net income after tax			<u>\$2,788,012</u>

**Glenn's Glue Stick Statement of Retained Earnings pg. 57**

Glenn's Glue Stick			
Statement of Retained Earnings			
for the year ended March 31, 2014			
Retained earnings: 2013			\$55,000
Net income for the year 2014			<u>\$2,788,012</u>
			<u>\$2,843,012</u>
Less: Preferred dividends		<u>(\$2,700,000)</u>	
Retained earnings: 2014			<u>\$143,012</u>

**Gleen's Glue Stick Balance Sheet pg. 57**

Glenn's Glue Stick Inc.				
Balance Sheet				
at at March 31, 2014				
<b>ASSETS</b>				
Current Assets:				
Cash		\$25,000		
Accounts Receivable		\$232,000		
Inventory		\$27,600		
Total Current Assets				<u>\$284,600</u>
Fixed Assets:				
Glue making machinery (net)		\$70,000		
Glue making machinery cost		\$100,000		
Accumulated depreciation		(\$30,000)		
Total Fixed Assets				<u>\$70,000</u>
<b>TOTAL ASSETS</b>				<u><b>\$354,600</b></u>
<b>LIABILITIES</b>				
Current Liabilities:				
Notes Payable		\$24,000		
Accounts payable		\$35,000		
Current portion of long-term debt		\$12,500		
working capital loan		\$47,588		
Total Current Liabilities				<u>\$119,088</u>
Long-term Liabilities				
Long-term loan, March 31, 2013		\$62,500		
Total long-term liabilities				<u>\$62,500</u>
<b>TOTAL LIABILITIES</b>				<u><b>\$181,588</b></u>
<b>SHAREHOLDERS' EQUITY</b>				
Capital Stock:				
Common stock				\$30,000
Retained earnings				<u>\$143,012</u>
Total Shareholders' equity				<u>\$173,012</u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>				<u><b>\$354,600</b></u>

**Kelly Automotive Parts Wholesaler Inc. Income Statement pg. 59**

Income Statement			
for the year ending January 31, 2014			
(in 000's of dollars)			
Net Sales			\$2,188.10
Less: Sales returns and allowances			(\$57.50)
Cost of Goods Sold:			
Inventory, January 31, 2013	\$358.90		
Plus: purchases	<u>\$1,729.30</u>		
Cost of Goods Available for Sale	\$2,088.20		
Less: Inventory, January 31, 2014	(\$441.70)		
Cost of Goods Sold			<u>\$1,646.50</u>
Gross Income			\$484.10
Operating Expenses :			
Office expenses	\$105.90		
Salaries and wages expenses	\$207.30		
Depreciation expense	\$35.00		
Interest expense	\$25.30		
Delivery expenses	<u>\$86.60</u>		
Total operating expense			<u>\$460.10</u>
Net income before tax			\$24.00
Estimate income tax expense			(\$6.00)
Net income after tax			<u>\$18.00</u>

**Kelly Automotive Parts Wholesaler Inc. Statement of Retained Earnings pg. 59**

Kelly Automotive Parts Wholesaler Inc.		
Statement of Retained Earnings		
for the year ending January 31, 2014		
(in 000's of dollars)		
Retained earnings: January 31, 2013	\$226.20	
Net Income for the year 2014	<u>\$18.00</u>	
	\$244.20	
Less: Preferred dividends	(\$12.00)	
Retained earnings: January 31, 2014	<u>\$232.20</u>	

**Kelly Automotive Parts Wholesaler Inc. Balance Sheet pg. 59**

Kelly Automotive Parts Wholesaler Inc.			
Balance Sheet			
as of January 31, 2014			
(in 000's of dollars)			
<b>ASSETS</b>			
Current Assets:			
Cash		\$45.50	
Accounts receivable (net)		\$231.20	
Inventory		\$441.70	
Prepaid expenses		\$16.00	
Total Current Assets			\$734.40
Fixed Assets:			
Property, plant and equipment:			
Land		\$33.40	
Net land			\$33.40
Building :			
Building cost		\$123.40	
Accumulated amortization, January 31, 2014		\$55.50	
Net building			\$67.90
Equipment:			
Equipment cost		\$96.40	

Accumulated amortization, January 31, 2014		\$74.60	
Net equipment			\$21.80
Total Fixed Assets			\$123.10
Intangibles:			
Goodwill		\$9.40	
Total Intangibles			\$9.40
TOTAL ASSETS			\$866.90

LIABILITIES AND SHAREHOLDERS' EQUITY			
<b>LIABILITIES</b>			
Current Liabilities:			
Accounts payable		\$248.00	
Income taxes payable		\$6.00	
Bank loan, demand note		\$150.10	
Other current liabilities		\$61.50	
Total Current Liabilities			\$465.60
Long-term Liabilities:			
long-term debt		\$89.50	
Total long-term liabilities			\$89.50
TOTAL LIABILITIES			\$555.10

SHAREHOLDERS' EQUITY			
Capital Stock:			
Preferred shares		\$43.30	
Common shares		\$36.30	
			\$79.60
Retained earnings			\$232.20
TOTAL SHAREHOLDERS' EQUITY			\$311.80
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY			\$866.90



## **Business 1220E-Lecture 6- Statement of Cash Flows**

### **Definitions**

**Statement of Cash Flow**- identifies specific activities that provide or consume cash during a specific period of time

**Operations**- measures the cash flow associated with normal business activities

**Financing**- how much debt or equity has been acquired or retired over the year

**Investing**- outlines all cash movements relating to the acquisitions and disposals of non-current assets

**Net cash flow**- sum of the three components: operating, financing and investing activities

**Financial Ratio Analysis**- a useful financial management tool developed to assist in identifying, interpreting and evaluating changes in the financial performance and condition of a business over a period of time

### **The Importance of Cash Flow**

- Not all the items on the statement of earnings are cash-based
- E.g. depreciation expense, sales, purchases etc.
- Preparing a statement of cash flow aids in revealing a company's real financial standing
- Should use short-term source to pay for short-term purchases and a long-term source should be used to pay for a long-term purchase
- E.g. use your credit card to buy a box of pizza but get a bank loan to buy a car

### **Is it a source or a use of cash?**

#### **Assets:**

- When assets decrease, cash increase
- When assets increase, cash decrease
- E.g. you own a pair of Dr.Dre beats headphones (asset) and you sell them to someone else and receive \$50 (cash). Although by selling the headphones your assets decreased, you gained an extra \$50 increasing your cash
- E.g. you want to buy back the headphones so you pay \$50 to the person you sold the headphones to. Your assets have now increased but your cash decreased as you had to pay to own the headphones

#### **Liabilities and Owner's Equity:**

- When liabilities increase, cash increase
- When liabilities decrease, cash decrease
- E.g. you get a bank loan of \$5,000. You now owe the bank \$5,000 increasing your liabilities but you also now have an extra \$5,000 increasing your cash

- E.g. when you pay back your bank loan of \$5,000, your liabilities decrease as you do not owe the bank anymore money, however you have also lost \$5,000 to the bank decreasing your cash as well

### Statement of Cash Flows

- The balance sheet provides a preview of a company's financial position but fails to show how the financial position of the company has changed over time
- Statement of Earnings show the gains and losses compared to sales over a period of time but only explains a little about how a company uses its funds
- The statement of cash flows is composed of three sections:
  - o Operations
    - Shows how much cash is being made and spent on every day operations
  - o Financial Activities
    - Shows how much cash is made through financial activities such as debt or equity
  - o Investigating Activities
    - Shows how much cash was used or made from investments ( this section focuses on fixed assets)

### Steps to Building the Statement of Cash Flows

- Determine accounts on the balance sheet that fall under either operations, financing or investigating activities
  - o Ignore cash, retained earnings, net fixed assets, accumulated amortization/depreciation, accounts with no changes and totals
- Determine whether or not the accounts increased or decreased in value from the previous year.
- Then identify the accounts as either a source or use of cash
- Subtract the accounts to find the change in value and express in absolute terms
  - o Year 1 – year 2
  - o Place brackets around uses to indicate a reduction or to indicate a use of cash

### Create the Statement of Cash Flow

1. State the net earnings
2. Group account changes into operations, financing or investing activities
3. Place dividends/drawings in the financing section
4. Add total cash from operations, financing and investing activities to get the net cash flow figure
5. Net cash flow + Beginning Cash = Ending Cash

### Interpreting the Statement of Cash Flow

- Questions to answer when interpreting statement of cash flows
  - o Was cash generated from operations?
  - o Is net income a source of cash and what does this tell us?
  - o What are the sources and uses of cash from operations?
  - o What are the remaining major sources and uses?
  - o Recommendations for the future?

### Homework Take-up: pg. 119-121 The 10 Beach Club Statement of Cash Flows

The 10 Beach Club			
Statement of Cash Flows			
for the year ended December 31, 2014			
<b>OPERATIONS</b>			
Net earnings			\$6,761
Adjustments to cash basis:			
Ammortization	\$6,106		
Accounts recievable	(\$13,130)		
Inventory	(\$7,222)		
Prepays	\$328		
Accounts Payable	\$8,535		
	(\$5,383)		
Net cash flow from operations			\$1,378
<b>FINANCING ACTIVITIES</b>			
Long-term debt	(\$3,283)		
Drawings	(\$3,283)		
Bank indeptedness	\$8,798		
Capital Investment	\$5,580		
Net cash flow from financing			\$7,812
<b>INVESTING ACTIVITIES</b>			
Building and equipment	(\$7,221)		
Net cash flow from investing			(\$7,221)
<hr/>			
Net cash flow			\$1,969
Beginning cash, January 1, 2014			\$1,970
Ending cash, December 31, 2014			\$3,939



## Business 1220E- Lecture 7- Financial Ratio Analysis

### Calculations:

**COGS to Sales** =  $\text{COGS (\$/ Net Sales (\$))} * 100 = \%$

**Gross income/profit to sales** =  $\text{Gross income (\$/ Net sales (\$))} * 100 = \%$

**Operating expenses to sales** =  $\text{Operating expenses (\$/ Net sales (\$))} * 100 = \%$

**Net income before tax** =  $\text{income before interest and taxes (\$/ net sales (\$))} * 100 = \%$

**Net income/ profit margin to net sales** =  $\text{Net income (\$/Net sales (\$))} * 100 = \%$

**Return on equity** =  $\text{net income, usually after tax, before dividends (\$/ average years equity (\$))} * 100 = \%$

**Average year's equity** =  $\text{last years ending equity (\$) + this years ending equity (\$)} / 2$

### Age of accounts receivable:

1. Calculate average daily sales

**Average daily sales** =  $\text{total period net sales (\$/number of days in period)} = \$/\text{day}$

2. Calculate the number of days net sales represented by level of accounts receivable currently outstanding

**Age of accounts receivable** =  $\text{accounts receivable (\$/average daily sales (\$/day))} = \text{days}$

3. Average daily sales is calculated by

**Average daily sales** =  $\text{Total sales for the period/ number of days in the period}$

### Age of inventory:

1. Calculate daily COGS:

**Average daily COGS** =  $\text{total period COGS (\$/number of days in period)} = \$/\text{day}$

2. Calculate the number of days goods sold represented by the inventory currently on hand

**Age of inventory** =  $\text{ending inventory (\$/average daily COGS (\$/day))} = \text{days}$

### Average age of accounts payable:

1. Calculate average daily purchases:

**Average daily purchases** =  $\text{total period purchases (\$/# of days in period)} = \$/\text{day revenue}$

2. Calculate the number of days of purchases represented by the accounts payable currently owing

**Age of accounts payable** = accounts payable (\$)/average daily purchases (\$/day) = days

**Inventory turnover** = COGS (\$)/average inventory (\$) = times

**Average inventory** = beginning inventory + ending inventory /2

**Fixed asset turnover** = net sales (\$)/average net fixed assets (\$) = times

**Average net fixed assets** = beginning net fixed assets + ending net fixed assets/2

**Total asset turnover** = net sales (\$)/average total assets (\$) = times

**Average total assets** = beginning total assets + ending total assets /2

**Current ratio** = total current assets (\$)/total current liabilities (\$) = ? /1

**Acid test ratio** = cash + marketable securities+ accounts receivable /current liabilities = ?/1

**Working capital** = current assets (\$) - current liabilities (\$) = \$

**Net worth to total assets** = total shareholders' equity (\$)/total assets (\$) \*100 = %

**Total debt to total assets** = total liabilities (\$)/total assets (\$) \*100 = %

**Total debt to equity ratio** = total debt (\$)/equity (\$)

**Interest coverage** = income before interest and taxes (\$)/interest expenses (\$) = times

**Sales growth** = year 2 sales (\$) - year 1 sales (\$) / year 1 sales (\$) \*100 = %

**Profit growth** = year 2 profit (\$) - year 1 profit (\$) / year 1 profit (\$) \*100 = %

**Asset growth** = year 2 total assets (\$) - year 1 total assets (\$) / year 1 total assets (\$) \*100 = %

## Ratio Analysis

- Ratio analysis is used to evaluate the performance of a company, discover new information within the statement of earnings and balance sheet, and provides information about the business for business making by internal and external users
- Helps to identify potential issues of a business

## Who Looks at Ratios?

- Creditors, shareholders and managers

## Why Look at Ratios?

- Uncovers relationships between financial statement items
- Aids in identifying, evaluating and interpreting changes in financial performance over a period of time
- Required for future business-making decisions

## Ratio Analysis Continued

- Items and accounts are categorized into five categories
  - o Profitability
  - o Efficiency
  - o Liquidity
  - o Stability
  - o Growth

### Profitability

#### Vertical Analysis

- Items from income statement are expressed in percentages of net sales
- Provides information on how much income is generated from one dollar in sales

#### Return on Equity

- Measures the income generated as a percentage of the company's equity
- The amount of income the company makes for each dollar invested by the owners
- Looks at the return on capital invested in the business as well
  - o  $\text{Return on capital} = \text{earnings} / \text{average equity}$

### Efficiency

#### Age of Accounts receivable

- Determines number of days it takes to collect money from those who owe

#### Age of Inventory

- Determines number of day inventory will sit before it is sold

#### Age of Accounts Payable

- Determines the number of days it takes to pay creditors

### Liquidity

- Determines if the company will be able to meet its current liabilities

#### Current Ratio

- For every dollar in current liabilities, how many current assets are there?

#### Acid Test

- For every dollar in current liabilities, how easily is cash attainable?
- Do not include inventory in the acid test

### Working Capital

- How much money is left over after current liabilities are paid?

### Stability

- Major goal is to have a stable financial structure (balance assets with debt and equity)
- Helps assess financial risk of the firm
- May highlight large problems that may lead to bankruptcy

### Net worth: Total Assets

- How much of the assets are financed by equity?

### Debt: Equity

- For each dollar in equity, how much money is there in liabilities?

### Interest Coverage

- Can the company pay the interest on its debt?
- Earnings before interest and tax is used for interest coverage

### Growth

- Determines if the company is growing
- Asset growth
- Earnings growth
- Sales growth
- Equity growth
- Need two years of numbers to solve

### Using Ratios for Analysis

- Ask why? Or so what?
- What's the cause?
- Look at raw numbers
- Look for increasing or decreasing trends
- Does this make sense in the situation?
- How does the company stack up in the industry?

### Interpreting Ratios

- Look for increasing and decreasing trends
- Why has the ratio changed?
  - o Look at the numerators and denominators
- How does the company stack up against the industry?
  - o Look at competitor ratios
  - o Consider outside environment

## Homework Take-up, pg. 117 Ratio Sheet

Draper Distribution Company LTD.				
Ratio Sheet				
for the selected dates and periods				
(365-day year)				
	2013	2012	2011	
<b>PROFITABILITY</b>				
Vertical analysis				
Sales	100%	100%	100%	
COGS	69.00%	70.00%	73.50%	
Gross Income	31.00%	30.00%	26.50%	
Operating expenses:				
Bad debt expense	0.30%	0.10%	1.40%	
General and administration expenses	3.10%	3.50%	3.80%	
Salaries	13.50%	13.90%	14.30%	
Selling	4.00%	3.80%	3.90%	
Depreciation	1.30%	1.10%	1.40%	
Income from operations	8.70%	7.50%	1.90%	
Other income	1.90%	2.30%	2.00%	
Interest expense	1.30%	0.90%	1.30%	
Income before tax	8.80%	8.90%	2.60%	
Income after tax	4.70%	4.80%	1.30%	
Return on average equity	18.90%	16.50%	N/A	
<b>EFFICIENCY</b>				
Age of receivables in days	72.1 days	78.3 days	71.7 days	
Age of inventory in days	153.3 days	111.7 days	121 days	
Age of payables in days	52.3 days	38 days	23 days	
Fixed asset turnover	6.3X	10.9x	11.0X	
<b>LIQUIDITY</b>				
Current ratio	1.75:1	2.06:1	2.02:1	
Acid test	0.71:1	0.98:1	0.9:1	
Working capital	\$6,820	\$4,948	\$4,312	
<b>STABILITY</b>				
Net worth to total assets	39.50%	58.70%	55.80%	
Interest coverage	7.9X	10.6 X	3.0 X	
Debt to equity	1.53:1	0.70:1	0.79:1	
<b>GROWTH</b>				
	2010-2011	2009-2010		
Sales	38.60%	21.10%		
Net income	36.70%	33.54%		
Assets	79.50%	12.20%		
Equity	20.80%	18%		

## **Business 1220E-Lecture 8- Projected Financial Statements**

### **Projected Statements**

- Projected statements are statements prepared to assess what a business can expect in the future
- This is used by entrepreneurs, managers and lenders

### **Sources of Information**

- Information used on projected statements usually come from either a managers' best estimate, past financial performance or case information
- Projected statements use assumptions
- Assumptions must be reasonable (within the realm of reason)

### **Projected Statements Continued**

- Projected statements are either for two years or between high and low sales scenarios

### **Projected Statement of Earnings**

- always begin with the statement of earnings
- being with the sales estimate (either your own or managers' assumption)
- must project two years or a high/low scenario
- remember: sales next year is equivalent to sales last year

### **Operating Expenses**

- after calculating sales, COGS, and gross profit, use the vertical analysis to identify the different trends in the expenses
- make an assumption on what percentage of sales each expense will be for the projected income statement only for expenses that experience fluctuations in sales
- some expenses are estimated as a dollar value vs. percentage of sales
- these expenses do not change when sales increases or decreases
- depreciation, rent and interest expense are always projected as a dollar value
- examples of expenses that do not vary include sales, accounting, legal, parking and depreciation
- always state assumptions

### **Projecting Tax Expense**

- use the same tax rate as the previous year
- if tax rate is not provided, calculate from the previous years' statements
- if there is absolutely no way of calculating the tax expense, only then can you assume 25% as the tax rate

### **Projected Statement of Retained Earnings**

- start with the previous year's retained earnings which will be found on the previous year's balance sheet
- add projected net income from the projected income statement
- identify if drawings or dividends have been paid
- calculate the ending retained earnings which will also be used on the balance sheet under equity

### **Projecting Current Assets (Balance Sheet)**

- for cash, use the amount from the previous year
- for accounts receivable, use the age of accounts receivable formula from ratio analysis
- for inventory, use the ending inventory from the projected statement of earnings

### **Projecting Fixed Assets**

- the fixed assets usually remain the same unless the company has sold some of its assets
- add projection depreciation from statement of earnings to the previous years' accumulated depreciation

### **Projecting Current Liabilities**

- the working capital loan will be solved as the PLUG and will be the last account to be solved for
- for accounts payable, use the age of accounts payable formula and daily purchases
- if there is no purchases figure provided, use COGS figure as a substitute

### **Projecting Long-term Liabilities**

- may have to make adjustments by reducing long term debt by the current portion long term debt

### **Projecting Equity**

- common stock should remain the same unless stated otherwise
- retained earnings can be found on the projected statement of retained earnings

### **The PLUG**

- the plug is known as the unknown
- should be the last account to solve for
- make sure that assets equal to liabilities and equity
- $A=L+E$

### **Seasonality**

- Some of the business's cash needs fluctuate based on the time of year
- E.g. a swim suit store would increase in sales during the summer season but decrease in sales during the winter season

- For companies that are seasonal, increase the size of the plug by the required amount of money needed to cover peak times

### Carson's Ltd. Projected Income Statement, Exercise 1 Pg. 117

Carson's Ltd.			
Projected Income Statement			
At Year End			
Item	Assumption		Amount
Sales	Given		\$750,000
COGS:			
Beginning inventory	last years ending inventory		\$150,000
Plus: Purchases	COGS+EI-BI		<u>\$597,945</u>
COGAFS			\$747,945
Less: ending inventory	90 days		<u>(\$147,945)</u>
COGS	Sales-gross profit=COGS		\$600,000
Gross Profit	20% of sales		<u>\$150,000</u>
Operating Expenses:			
Salary	Given		\$42,000
Depreciation	Given		\$6,000
Other operating expenses	8% of sales		<u>\$60,000</u>
Total operating expenses			\$108,000
Net income before tax			\$42,000
Income tax expense	25% of net earnings before tax		<u>\$10,500</u>
Net income after tax			<u>\$31,500</u>

### Carson's Ltd. Projected Statement of Retained Earnings, Exercise 1 Pg.117

Carson's Ltd.			
Projected Statement of Retained Earnings			
At Year End			
Items	Assumption		Amount
Beginning Retained Earnings	Given		\$75,000
Net Income	Projected income statement		<u>\$31,500</u>
			\$106,500
Less: Dividends	25% of net earnings after tax		<u>(\$7,875)</u>
Ending Retained Earnings			<u>\$98,625</u>

### Carson's Ltd. Projected Balance Sheet, Exercise 2 Pg. 117

Carson's Ltd.		Assumption	Amount
Projected Balance Sheet			
At Year End			
Items			
<b>ASSETS</b>			
Current Assets:			
Cash			\$0
Accounts receivable			\$20,548
Inventory			\$147,945
<b>Total Current Assets</b>			<b>\$168,493</b>
Fixed Assets			
Land			\$30,000
Building and fixture cost			\$90,000
Accumulated depreciation, building and fixture			(\$27,000)
<b>Total Fixed Asset</b>			<b>\$93,000</b>
<b>TOTAL ASSETS</b>			<b>\$261,493</b>
<b>LIABILITIES</b>			
Current Liabilities:			
Bank loan			(\$5,810)
Accounts payable			\$65,528
Income tax payable			\$9,150
<b>Total Current Liabilities</b>			<b>\$62,868</b>
<b>TOTAL LIABILITIES</b>			<b>\$62,868</b>
<b>EQUITY</b>			
Common Stock			\$100,000
Retained Earnings			\$98,625
<b>TOTAL EQUITY</b>			<b>\$198,625</b>
<b>TOTAL LIABILITIES AND EQUITY</b>			<b>\$261,493</b>

### Carson's Ltd. Manager's Projected Income Statement, Exercise 3 Pg.117

Carson's Ltd.		Owner's Projection	Manager's Projection
Projected Income Statement			
At Year End			
Item			
Sales		\$750,000	\$1,000,000
<b>COGS:</b>			
Beginning Inventory		\$150,000	\$150,000
Purchases		\$597,945	\$847,260
COGAFS		\$747,945	\$997,260
Less: Ending inventory		(\$147,945)	(\$197,260)
<b>COGS</b>		<b>\$600,000</b>	<b>\$800,000</b>
<b>Gross Profit</b>		<b>\$150,000</b>	<b>\$200,000</b>
<b>Operating Expenses:</b>			
Salary		\$42,000	\$42,000
Depreciation		\$6,000	\$6,000
Other operating expences		\$60,000	\$80,000
<b>Total Operating Expenses</b>		<b>\$108,000</b>	<b>\$128,000</b>
<b>Net income before tax</b>		<b>\$42,000</b>	<b>\$72,000</b>
Income tax expense		\$10,500	(\$18,000)
<b>Net income after tax</b>		<b>\$31,500</b>	<b>\$54,000</b>

### Carson's Ltd. Manager's Projected Statement of Earnings, Exercise 3, Pg. 117

Carson's Ltd.			
Projected Statement of Retained Earnings			
At Year End			
Items	Owner's Projection	Manager's Projection	
Beginning retained earnings	\$75,000	\$75,000	
Net income	\$31,500	\$54,000	
	\$106,000	\$129,000	
Less: Dividends	(\$7,875)	(\$13,500)	
Ending retained earnings	\$98,625	\$115,500	

### Carson's Ltd. Manager's Projected Balance Sheet, Exercise 3 Pg.117

Carson's Ltd.			
Projected Balance Sheet			
At Year End			
Items	Owner's Projection	Manager's Projection	
<b>ASSETS</b>			
<b>Current Assets:</b>			
Cash	\$0	\$0	
Accounts Receivable	\$20,548	\$27,397	
Inventory	\$147,945	\$197,260	
Total Current Assets	\$168,493	\$224,657	
<b>Fixed Assets</b>			
Land	\$30,000	\$30,000	
Building and fixture cost	\$90,000	\$90,000	
Accumulated depreciation building and fixture	(\$27,000)	(\$27,000)	
Total Fixed Assets	\$93,000	\$93,000	
<b>TOTAL ASSETS</b>	<b>\$261,493</b>	<b>\$317,657</b>	
<b>LIABILITIES</b>			
<b>Current Liabilities:</b>			
Bank loan	(\$5,810)	\$3,907	
Accounts payable	\$65,528	\$92,850	
Income tax payable	\$3,150	\$5,400	
<b>Total Current Liabilities</b>	<b>\$62,868</b>	<b>\$102,157</b>	
<b>TOTAL LIABILITIES</b>	<b>\$62,868</b>	<b>\$102,157</b>	
<b>EQUITY</b>			
Common Stock	\$100,000	\$100,000	
Retained Earnings	\$98,625	\$115,500	
<b>TOTAL EQUITY</b>	<b>\$198,625</b>	<b>\$215,500</b>	
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$261,493</b>	<b>\$317,657</b>	

## **Business 1220E- Lecture 9- Gardiner Wholesalers Incorporated (Elegance Jewellers Incorporated) Case Study**

### **Role/Decision**

- For this case, the decision maker is Kathy Wilson who is the assistant credit manager of Gardiner Wholesalers Incorporated
- Decide whether or not there needs to be changes in credit policy for either of her company's accounts- S.D. Taylor Jewellers Ltd. And Elegance Jewellers Incorporated
- She needs to determine what comments and recommendations she can put on the report regarding the two accounts under analysis
- She has to submit the assessment to both the credit manager and the sales manager in one week
- The concern as to whether or not credit policies need to be changed is due to their lack of sales in the summer months. They rely heavily on suppliers for financial support such as extended credit.

### **Key Information about Elegance Jewellers Inc.**

- New customer to Gardiner Wholesalers Inc. only switched suppliers in early 2011 (this case is for the years between 2011-2012)
- Company owns and generates two small-sized jewellery stores located in Sarnia, Ontario
- Most of the sales were cash
- Installment plans available demanding 20% deposit plus 1% per month of interest on the outstanding balance
- Both accounts sold for 1/10, net 30 and extended to net 90 during the fall
- Canadian economy was improving in 2012 and consumer spending also experienced an increase

### **Elegance Jewellers Inc. Statement of Cash Flows Analysis**

- Cash was not generated from operations, ended up having a negative balance for 2012. This is not good as income from operations is the engine of the business. If it does not make money from operations and this trend continues, the company will eventually go bankrupt
- Accounts payable is the biggest account in operations with \$156,100 which is not good as they have a lot of money to pay off and since they didn't make any money from operations, it doesn't look like it can be paid off
- They also have a lot of money in accounts receivable which is good and bad. It's good because they are expecting a lot of money, however they might want to be a little bit more strict on payment installments to get money faster
- Net income is a source of cash and the balance is good, however looking doing the statement of cash flow, the company did not make any profit as more than their net income was used in their operating expenses. Net income can be used to do whatever

one wants to spend it on and having no net income, especially a negative number is horrible.

- Accounts receivable and accounts payable from operations are a source of cash
- Inventory, income taxes payable and prepaid expenses from operations are uses of cash
- Working capital loan, long-term debt, bank loan and long term notes payable are sources of cash
- Dividends, investments in building, furniture and fixtures, loans to employees, investment in subsidiary and other investments are a use of cash

### ***Problems in Statement of Cash Flows***

- They have taken out a huge amount of bank loan and most of it was used to invest in subsidiaries, which in Elegance Jewellers Inc is investment into the other account; S.D. Taylor Jewellers Ltd.
- Their net cash flow is bad because they only made \$1300 at the end of the period. It is still somewhat good as they increased by \$100 from beginning; however it's still a really concerning figure
- They also took out a bank loan to pay off a lot of their working capital loan which is good from the loaners perspective, however this is a bad thing because they used a long-term debt to pay off a short-term debt

### ***Recommendations***

- Start matching accounts better. i.e. use long-term sources to pay off long-term debt and short-term sources of cash to pay off short-term debt
- Be tougher on customers to start paying faster. This way the company will receive money faster and can start using it to pay off some of their liabilities
- Stop using bank loans to invest in other subsidiaries and use the bank loan appropriately to improve the company's profit
- Try to pay off some of the debt slower, instead of trying to pay them off as quickly as possible. This may help the company have more money left over at the end of the period

### **Elegance Jewellers Inc. Vertical Analysis**

- The cost of sales increased from 2011 to 2012 which is bad as it means the company is making no money
- Gross profit also decreases in 2012 which makes sense as cost of sales increased which again is not good
- Their total operating expenses also increased in 2012 meaning that the management of the operations of the company are inefficient
- The increase in total operating expenses results in their decrease in operating profit in 2012
- The unusual income is really strange and bad. They should not be losing unusual income. The unusual income is most likely from the investment in subsidiaries, however

it does not seem to look like the subsidiaries are being successful which may be the reason as to why there was a loss in unusual income

- Net earnings after tax decreased a lot from 2011 to 2012. The reason behind this may be due to the huge bank loan they took out to give to other subsidiaries instead of using it efficiently within elegance jewelers inc.
- Return on equity also decreased by more than 50% in 2012 which is horrible as it shows that the company is inefficient in utilizing its equity base

### **Elegance Jewellers Inc. Ratio Analysis**

- Their current ratio increased a lot from 2011 to 2012 which is really good as it means they are doing better at paying off their short-term debt. However looking back at the statement of cash flows, it is evident that a big bank loan was taken out to pay for most of the working capital loan which then makes it bad as they have a huge long-term debt to pay off
- The acid test ratio also increased in 2012 which is both a good thing and a bad thing. Its good because it shows that the company is doing a good job at paying off its long-term debt, however the ratio is nowhere near the standard industry ratio of 1.00:1 thus making this ratio a bad thing as well
- Working capital also increased a lot in 2012 which is bad as their everyday operating expenses have increased. They are spending a lot more on operations in 2012 resulting in a negative profit which is shown under growth in the profit percentage
- Age of receivables has also increased in 2012 which is both a good thing and a bad thing. It increased because sales in 2012 have increased as shown on the income statement. However it's also bad as it takes more days on average to receive cash flow from customers in comparison to 2011
- Age of inventory is also both good and bad. It's good as it decreased from 2011 meaning they are making more sales, however it still takes over a year to sell their inventory which is bad as the sales of jewellery is uncontrollable. Not something people buy on a daily basis, only for special occasions such as Christmas.
- Age of payables decreased which is really good as it takes them on average, less time to pay off their liabilities than in 2011
- The interest coverage decreased by about 7% from 2011 to 2012 which is really bad as it means they are now able to only pay off their interest about 2X as oppose to 2011 when they were able to pay off interest about 9X. If this trend continues, the company will go bankrupt. However it is still good because they can still pay their interest about 2X which is over the standard of 1X

**Business 1220E- Lecture 10- Gardiner Wholesalers Incorporated ( Elegance Jewellers Incorporated) Case Study Part Two**

**Elegance Jewellers Inc. Projected Income Statement**

Elegance Jewellers Inc. Projected Income Statement For Years Ending June 30, 2013 (In 000's of dollars)				
Item	Assumption	Low (5%)	High (10%)	
Sales	Sales from 2012	\$2,081.90	\$2,181.00	
COGS:				
Beginning Inventory	ending inventory 2012	\$1,155.40	\$1,155.40	
Plus: Purchases	COGS+EI-BI	\$891.70	\$989.20	
COGAFS	Sum	\$2,047.10	\$2,144.60	
Less: Ending Inventory	decreasing trend 375 days	(\$1,037.40)	(\$1,086.80)	
COGS		\$1,009.70	\$1,057.80	
Gross Income	Sales-COGS	\$1,072.20	\$1,123.30	
Operating Expenses:				
Selling and Administrative	Same (36%)	\$749.50	\$785.20	
Depreciation	same \$ + Depreciation expense (53.8/10yr)	\$59.20	\$59.20	
Total Operating Expenses	sum	\$808.70	\$844.40	
Earnings from operations	sum	\$263.50	\$278.90	
unusual income (loss)	Same \$	(\$11.70)	(\$11.70)	
Subtotal		\$251.80	\$267.20	
Less: Interest expense	Same \$	\$152.10	\$152.10	
Net earnings before tax	COGS-operating expense	\$99.70	\$115.10	
Income taxes	25%	\$24.90	\$28.80	
Net earnings after tax		\$74.80	\$86.30	

**Elegance Jewellers Inc. Projected Statement of Earnings**

Elegance Jewellers Inc. Projected Statement of Retained Earnings For Years Ending June 30, 2013 (In 000's of dollars)				
Item	Assumption	Low (5%)	High (10%)	
Beginning retained inventory	last years balance sheet	\$621.90	\$621.90	
Add: net income	projected income statement	\$74.80	\$86.30	
Less: dividends	same \$ amount	\$50	\$50	
Ending retained earnings	sum	\$646.70	\$658.20	

## Elegance Jewellers Inc. Projected Balance Sheet

Elegance Jewellers Inc. Projected Balance Sheet at at June 30, 2013 (In 000's of dollars)					
Items	Assumption	Low (5%)	High (10%)		
<b>ASSETS</b>					
Current assets:					
Cash	same \$	\$1.30	\$1.30		
Accounts receivable	10 days	\$57.00	\$83.70		
Inventory	PSOE	\$1,037.40	\$1,086.80		
prepaid expenses	same \$	\$6.00	\$6.00		
<b>Total current assets</b>		<b>\$1,101.70</b>	<b>\$1,153.90</b>		
Loans to employees	Same \$	\$25.70	\$25.70		
Investment in subsidiary	Same \$	\$686.20	\$686.20		
Other investments	Same \$	\$17.80	\$17.80		
Fixed assets:					
Land	same \$	\$25.50	\$25.20		
Buildings	old+renovation	\$494.90	\$494.90		
Furniture and fixtures	same \$	\$108.50	\$108.50		
Fixed assets, cost		\$628.90	\$628.90		
Less: accumulated depreciation	old + new expense	(\$280.20)	(\$280.20)		
<b>Total fixed assets (net)</b>		<b>\$348.70</b>	<b>\$348.70</b>		
<b>TOTAL ASSETS</b>		<b>\$2,180.20</b>	<b>\$2,232.30</b>		
<b>LIABILITIES</b>					
Current liabilities:					
working capital loan	"PLUG"	(\$109.60)	(\$91.90)		
Accounts payable	same (85.7)	\$209.40	\$232.30		
Income taxes payable	same \$	\$2.50	\$2.50		
Bank loan (due december 31,2013)	Same \$	\$418.40	\$418.40		
<b>Total current liabilities</b>	Sum	<b>\$520.70</b>	<b>\$561.30</b>		
Long-term notes payable	same \$	\$902.80	\$902.80		
<b>Total liabilities</b>	sum	<b>\$1,423.50</b>	<b>\$1,464.10</b>		
<b>EQUITY</b>					
Common stock	same \$	\$110.00	\$110.00		
Retained earnings	TL&E-TL-CS=RE	\$646.70	\$658.20		
<b>Total equity</b>		<b>\$756.70</b>	<b>\$768.20</b>		
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>\$2,180.20</b>	<b>\$2,232.30</b>		

## Elegance Jewellers Inc. Projection Analysis

- Strengths the company has is that most of their sales are in cash and are very liquid
- They have extra money from unusual income
- Weaknesses the company has is it has a big accounts payable account and have a lot of liabilities( over \$1 million dollars in debt)
- Accounts receivable account is also increasing as customers are taking longer to pay

- Net earnings based on projected income statement is expected to decrease even when sales are estimated to increase
- Company has more weaknesses than strengths
- If this pattern continues, Elegance Jewellers Inc will go bankrupt very soon as they are making close to no profit
- The decision to be made is whether or not to decrease Elegance Jewellers Inc.'s credit policy
- It needs to be determined as to why they are doing so poorly before lowering credit policy
- It is visible that the company is acting a bit strange as they took out over half a million dollars and invested it into other subsidiaries which in this case is most likely their other account, S.D. Taylor Jewellers Inc. They are also keeping additional money for the company instead of paying off the debt, visible through unusual income
- Their income after tax is expected to drop a lot in the high scenario as oppose to the low scenario which also does not make sense

### **Plan of Action**

- Decrease the credit policy for one year, however if Elegance Jewellers Inc fails to pay off their debt, then we will pull the plug on them
- This plan can only work however, if Elegance Jeweller is not notified that they will only be given a year.
- If they know this information, they will pay a lot of their debt off and make themselves look good so that they can continue to operated. After the year is over, they will go back to the way things are at the moment.
- I expect the results to be that Elegance Jewellers Inc. will continue its ways even after the decrease in credit policy as there are a lot of information on these projections and previous financial statements to prove it
- As the credit policy decreases, they may make more unusual income and keep it for themselves while paying off the bare minimum of their liabilities to get by
- This is a continuous pattern since 2011, thus it is very unlikely that things will change
- I predict that Elegance Jewellers Inc. will be shut down within the year as they will continue to do poorly in making a profit and paying off their liabilities

## **Business 1220E- Lecture 11- Maple Leaf Hardware LTD. Case Study Part A**

### **Role/Decision**

- Stuart Foreman is the assistant manager of the Central Canadian Bank for the branch in London, Ontario and is who will be making the decision for Maple Leaf Hardware
- He has a week to decide if he should increase Maple Leaf Hardware's line of credit with the bank
- Robert Patrick is the owner of the Maple Leaf Hardware LTD. and has requested an increase of the company's short-term line of credit from \$100,000 to \$160,000 to cover seasonal working capital needs

### **Considerations/ Constraints**

- Mr. Foreman is new to the London branch and just received a promotion in which his actions may set a precedent
- Patrick has a good relationship with the Central Canadian Bank through Terry Woods who is Foreman's predecessor
- Patrick had been slow in sending financial data the bank had requested in the past
- There may be tension between Patrick and his partner Harrison who owns 40% of the common shares

### **Financial Analysis of Income Statement**

- The sales have increased in 2012 substantially which is good because it is a new company and it takes a while for a new business to start making a competitive amount of sales
- Cost of goods sold increased from 2011 to 2012 which would technically be considered bad however, since it is a new company, it makes sense that their cost of goods sold would increase as long as this trend does not continue there is nothing of concern
- Their advertising cost increased by \$2000 from 2011 to 2012 which makes sense as they are a new and small company and their competitors are Home Depot and Rona
- Their interest expense decreased a lot from 2011 which is really good as it shows that they are paying off their debts
- 2012 is the first time that income tax shows up, however this makes sense as the past two years they made no income and thus there would be no income tax
- Net earnings after tax finally went to the positives in 2012 which is really good as they finally made profit and is a sign of growth for the company

### **Financial Analysis of Balance Sheet**

- Their cash decreased since their start in 2010, however this is reasonable as the company is growing and is required to pay for more things such as inventory. This is however bad if this trend continues
- Their accounts receivable increased from 2011 to 2012 which makes sense because their sales increased, however they do have a large amount of money in accounts receivable and should begin collecting money from their customers faster

- Inventory increased as well from 2011 to 2012 indicating that the company is looking to grow their company. However they have a lot of inventory which may be concerning, however Patrick has mentioned that he is working on reducing the age of inventory in hopes of fixing this inventory issue
- Accounts payable increased over the year as well which is not good as it means their liabilities are increasing
- Their long-term debt is decreasing which is really good as it means they are paying off their debts. The balance sheet for the previous year also shows that even when they were making no profit, they were still able to pay off some of their long-term debt which is amazing and shows that granted the increase in their line of credit, they would be able to pay it off (based on these records)

### **Financial Analysis of Ratio and Vertical Analysis**

- Cost of goods sold decreased as a percentage while it increased as a dollar value, which means that there was a less change in the price of cost of goods sold from 2011 to 2012 than from 2010 to 2011
- Their total operating expenses decreased which is good because it means that the company is being efficient with production
- They finally made profit in 2012 as their net earnings after tax and interest is no longer a negative amount which is really good as it shows that the company is indeed growing
- Their return on equity went from 0 to 25% within one year which is stellar as it means that the company is finally making profit from shareholders investments in the company
- The current ratio is good as it is above industry ratios and is relatively close to 2.00:1 which means that they are doing good at paying off their short-term liabilities
- The acid test however is not as good as it decreased from 2011 and is below industry ratio. It is also really far off from the 1.00:1 ratio which is bad and means that they are doing a lot better paying off their short-term liabilities than their long-term liabilities, however as seen in the balance sheet, they are paying off their long-term liabilities so its not concerning yet as it is also still a new company.
- Their age of accounts receivable decreased from 2011 which is good as it shows that they are collecting money from customers faster and is good if this trend continues
- Their inventory has increased a lot since 2011 which is bad, however it is a hardware store and thus their inventory is more storable and don't necessarily go "out of fashion" as fast as clothing does. Patrick did however address this issue and is not as concerning as he is trying to fix this problem and is aware of the problem that persists
- Their interest coverage increased substantially since 2011 which is amazing as it means the company can now afford to pay off its interest a little over 3 times.
- Their sales, net earnings, total assets, and equity all experienced an increase from 2011 to 2012 which is good as it indicates growth of the company

### **Financial Analysis of Statement of Cash Flows**

- Net income increased in 2012 and is the first time it is actually a positive value which is really good because net income is the best type of income as you can do whatever you want with this money
- Cash was finally generated from operations in 2012 which is really good as it means the company is being efficient with production
- Sources of cash from operations include: accounts payable
- Uses of cash from operations include: accounts receivable and inventory
- Other uses of cash include is working capital loan

#### Recommendations for the Future

- The company's financial documents look really good expect for their inventory account
- The only recommendation would be to lower the age of inventory and try to keep the accounts payable and accounts receivable relatively low as too much of an increase can become a problem for this company, especially if the request for the increase in their credit line is approved

#### Maple Leaf Hardware LTD. Projected Income Statement for 2013 and 2014

Maple Leaf Hardware LTD.				
Projected Statement of Earnings				
At The Year Ending December 31, 2013				
(In 000's of dollars)				
Items	Assumption	2013	2014	
Sales	Given for 2013, 1700000*0.1+1700000 for 2014	\$1,700,000	\$1,870,000	
COGS:				
Beginning Inventory	EI 2012 is for 2013, EI 2013 is for 2014	\$416,000	\$476,000	
Plus: Purchases	COGS+EI-BI	<u>\$1,182,000</u>	<u>\$1,258,647</u>	
COGAFS	Sum	\$1,598,000	\$1,734,647	
Less: Ending Inventory	Age of inventory, decrease to 155 days 2013, 148 days 2014	<u>(\$476,000)</u>	<u>(\$500,447)</u>	
COGS	0.66*1700 for 2013, 0.66*1870 for 2014	\$1,122,000	\$1,234,200	
Gross Income	Sales-COGS	\$578,000	\$635,800	
Operating Expenses:				
Wages and Salaries	Same% (13.5%)	\$230,000	\$252,450	
Rent	\$10,000*8+\$12,400*4 for 2013, \$12,400*12 for 2014	\$129,600	\$148,800	
Property Tax	Same \$	\$24,000	\$24,000	
Utilities	Same% (1.1%)	\$19,000	\$20,570	
Depreciation	Same \$	\$18,000	\$18,000	
Advertising	Same% (1.7%)	\$29,000	\$31,790	
Other	Same% (1.3%)	<u>\$22,100</u>	<u>\$24,310</u>	
Total Operating Expenses	Sum	\$471,700	\$519,920	
Net Earnings before Tax and Interest	Gross income-TOE	\$106,300	\$115,880	
Interest Expense	Same \$	<u>\$22,000</u>	<u>\$22,000</u>	
Net Income before Tax	Sum	\$84,300	\$93,880	
Income Tax Expense	25% from footnote	<u>\$21,075</u>	<u>\$23,470</u>	
Net Earnings After Tax	Sum	<u>\$63,225</u>	<u>\$70,410</u>	

**Business 1220E- Lecture 12- Sensitivity Analysis and the 4Cs of Credit and Decisions**  
**(Maple Leaf Hardware LTD. Case Study Part B)**

### Performing Sensitivity Analysis

- The three accounts that should be considered when performing sensitivity analysis are
  - o Days accounts receivable
  - o Days account payable
  - o Days inventory
- Choose the one account that is the most vulnerable to change based on the case being analyzed
- Determine what would happen if the average number of days increases or decreases from projections and recalculate the dollar value for the account for two years
- Asses the overall impact that increase and decrease in average days have on the plug

### Formulas Required

Days A/R = AR/ sales/ 365

Days A/P = AP/ purchases/ 365

Days INV= INV/ COGS/ 365

### The 4 C's of Credit

- Credit enables a company or organization to purchase goods or services in the present and pay for them in the future
- The 4 C's of credit measures risk
- The 4 C's include:
  - o Conditions of the business
  - o Character
  - o Capacity to repay
  - o Collateral

### Conditions of the Business

- Use PEST analysis to assess how the company has performed in its industry
  - o Political
  - o Economic
  - o Social
  - o Technological
- Not all may apply to the case at hand

### Character

- Questions to consider include:
  - o Who are we lending money to?
  - o If we have a past relationship with the person borrowing the money?

- Do they have expertise in the industry?
- Are they trustworthy and do they have the ability to repay their credit?

### Capacity to Repay

- The company's ability to repay
- Look at past and projected ratio including interest coverage, current ratio and the acid test to determine whether or not the company will be able to repay the additional credit
- Questions to consider include:
  - Trends?
  - Are the trends concerning?

### A negative Plug

- A negative plug means the company has extra cash
- The negative plug must be treated as cash when calculating the capacity to repay

Current ratio=  $(CA + \text{plug}) / CL$  excluding the plug

Acid test=  $(\text{cash} + MS + AR + \text{Plug}) / CL$  excluding the plug

### Collateral Analysis

- This is done to ensure that in an emergency situation, creditors can recover the lent money if the debtor can't pay the loan back
- Secured creditors have first priority on collateral when company goes bankrupt

### Steps of a Collateral Analysis

1. Use most recent balance sheet that is not projected
2. Assume cash is 0 as this is for if company goes bankrupt
3. Identify assets that are secured by creditors and unsecured including any new assets
4. Assign a factor value in terms of a percentage to each asset
5. Calculate realizable value which is the value from the balance sheet \* the factor value percentage
6. Total realizable value for all assets
7. Compare net realizable value with loan requested and/or the plug value

### Decision

- Provide statement on decision and provide an explanation
- Explanation of decision includes support from statement of cash flows, ratio analysis, projections, plug, seasonality, sensitivity, and the 4 C's
- Include and issues, concerns or risks

### Maple Leaf Hardware LTD. Projected Statement of Retained Earnings

Maple Leaf Hardware LTD.				
Projected Statement of Retained Earnings				
As at the Year Ended December 31				
Items	Assumptions	2013	2014	
Retained earnings	from 2012 Balance sheet	\$4,000	\$47,225	
Net income	from 2013 and 2014 PSRE	<u>\$63,225</u>	<u>\$70,410</u>	
	sum	\$67,225	\$117,635	
Less: preferred dividends	Given	<u>(\$20,000)</u>	<u>(\$20,000)</u>	
Retained earnings	Sum	<u>\$47,225</u>	<u>\$97,365</u>	

### Maple Leaf Hardware LTD. Projected Balance Sheet

Maple Leaf Hardware LTD.				
Projected Balance Sheet				
As at December 31				
Items	Assumption	2013	2014	
<b>Current assets:</b>				
Cash	same \$	\$10,000	\$10,000	
Accounts receivable	same days (8)	\$37,260	\$40,986	
Inventory	2013 and 2014 PIS (EI)	<u>\$476,000</u>	<u>\$500,447</u>	
Total Current assets		\$523,260	\$551,433	
<b>Fixed assets</b>				
Leasehold improvements (net)	less: \$6,000	\$60,000	\$54,000	
Fixtures (net)	less: \$12,000	<u>\$60,000</u>	<u>\$48,000</u>	
Total fixed assets	sum	\$120,000	\$102,000	
<b>TOTAL ASSETS</b>		<u>\$643,260</u>	<u>\$653,433</u>	
<b>LIABILITIES AND EQUITY</b>				
<b>Liabilities</b>				
<b>Current liabilities:</b>				
Accounts payable	same 2012-COGS	\$203,000	\$223,000	
Working capital loan	"plug"	\$7,035	<u>(\$37,202)</u>	
Current portion of long term debt	same \$ trend	<u>\$16,000</u>	<u>\$16,000</u>	
Total current liabilities	sum	\$226,035	\$201,798	
Long-term debt	less: \$16,000 trend	<u>\$170,000</u>	<u>\$154,000</u>	
<b>TOTAL LIABILITIES</b>		\$396,035	\$355,798	
<b>EQUITY</b>				
<b>Common stock</b>				
R. Patrick	same \$	\$120,000	\$120,000	
L. Harrison	same \$	\$80,000	\$80,000	
Retained earnings	from 2013 and 2014 PSRE	<u>\$47,225</u>	<u>\$97,635</u>	
<b>TOTAL EQUITY</b>		\$247,225	\$297,635	
<b>TOTAL LIABILITIES AND EQUITY</b>		<u>\$643,260</u>	<u>\$653,433</u>	

## Maple Leaf Hardware LTD. Seasonality, Sensitivity and Capacity to Repay

Maple Leaf Hardware LTD. Seasonality							
		2013	2014	low		2013	2014
High Plug		\$7,035	(\$37,202)	Plug		\$7,035	(\$32,202)
Working capital need		\$120,000	\$120,000	Working capital need		\$80,000	\$80,000
Actual working capital needed		\$127,035	\$82,798	Actual working capital needed		\$87,035	\$29,202

Maple Leaf Hardware LTD. Sensitivity				
	Days	Inventory Amount	Difference from base case	2013 Plug
(base case)	155	\$476,000	\$476,000-\$476,000= 0	\$7,035
(down)	140	\$430,000	\$476,000-\$430,000 = \$46,000	\$7,035- \$46,000= (\$38,965)
(up)	170	\$523,000	\$476,000- \$523,000= (\$47,000)	\$7,035+ \$47,000= \$54,035

Maple Leaf Hardware LTD. Capacity to Repay		
Ratio	P2013	P2014
Current ratio	2.32:1	2.46:1
Acid test	0.21:1	0.41:1
Interest Coverage	4.82 X	5.27X

## Maple Leaf Hardware LTD. Collateral

Maple Leaf Hardware LTD. Collateral			
Asset	2012 value	Factor value	Realizable value
Accounts receivable	\$132,000	75%	\$24,000
Inventory	\$416,000	50%	\$208,000
Leasehold improvements and fixtures (net)	\$138,000	25%	\$34,500
<b>Total realizable collateral</b>			<b>\$266,500</b>
Less: working capital needed			\$160,000
<b>Excess collateral</b>			<b><u>\$106,500</u></b>

## Analysis 4C's of Credit

### Conditions of Business

- They were able to get consumer purchases during a recession
- However the big risk is that they have huge competition such as Home Depot and Rona, thus if they located beside Maple Leaf Hardware, the company would go bankrupt
- The company is still growing and is evident through financial statements and records which lowers the risk of the company

### Capacity to repay

- They have been doing really good with paying off their long and short term debt
- They even paid off some of their long-term debt when they were making no profit in 2011 which lowers the risk of the company even more

### Character

- Patrick is hardworking with past retail experience

- He invested a lot of his own money into the business
- Was honest about issues with inventory instead of trying to hide it from creditors

#### Collateral

- The excess collateral amount is good because it shows that the company has more than enough collateral to provide to creditors in case the company goes bankrupt and cannot pay off their loan
- The company would have \$106,500 in extra collateral which is almost half of the total realizable collateral the company would have if it were to go bankrupt

#### Decision

- I have decided to grant an extension of Maple Leaf Hardware LTD. line of credit from \$100,000 to \$160,000 but under one condition
- The company must get their inventory levels down because then they will have a lot of extra cash on hand which will aid in paying back the loan to the creditors
- The only concern with inventory is that lowering the inventory account will be very difficult as it would need to go down from the current 155 days to 140 days

## **Business 1220E- Lecture 13- Projected Financial Statements (Clark Carriers Ltd.) Part A**

### **Role/Decision**

- Steve Rendl is the assistant account manager for the Commercial Equipment Financing Division of GE Capital Canada which is located in Toronto, Ontario (who will be making the decision)
- Decision on whether to approve a \$270,000 loan for Clark Carriers Ltd. (an existing client to GE Capital Canada)
- Wants loan to purchase two new equipment (assets)
- Signed a contract with Ford Motor Co. in March 2011 which expires in March 31, 2013 and has not been renewed
- Instead, Ford Motor Co. is allowing any trucking companies to bid for their contract and in order to win the bid and sign the contract, Clark Carriers Ltd. must increase its assets (reason for loan request)
- Owners of Clark Carriers Ltd. are Doug and his wife Annette Clark and was founded in 1987
- Rendl is new to the job ( working only for 8 months) and thus his actions create a precedent

### **Constraints/Restrictions**

- In order to receive a loan from GE Capital Canada, there are a few requirements:
  - o Don't deal with any business that has been in operation for less than three years
  - o Must generate enough cash flows to cover the monthly interest payments for the new loan
  - o Company's debt to equity ratio cannot exceed 4:1 including the loan
  - o Will not finance more than 90% of the value of any asset, thus the company must have enough internal funds to cover 10% of the value of the assets it wishes to purchase with the loan
  - o Considers the character of business owners, economic conditions, and any assets that can be used as collateral incase the company is unable to pay back the loan

### **Financial Analysis of the Statement of Cash Flows**

1. Was cash generated from operations?

- Yes, cash was generated from operations which is good because it means the company is being efficient with its production and with the financial management of operations

2. Is net income a source of cash? What does this tell us?

- Yes, net income is a source of cash and it increased substantially since 2011. Net income increased after signing the contract with Ford Motor Co. which suggests that the contract was responsible for the huge increase in net income. Approving the loan request would help Clark

Carriers Ltd. land the contract with Ford providing an opportunity to increase the net income account in the future.

3. What are the sources and uses of cash from operations?

- Accounts receivable and other receivables are a source of cash
- Accounts payable and prepaid expenses are a use of cash
- Both accounts payable and accounts receivable are increasing which is contributing to the increase in revenue
- Based on the statement of cash flows, Clark Carriers seems to be taking out money from their accounts payable account and funding their accounts receivable account until they receive the cash and then uses that cash to pay back all the money taken out from accounts payable (this is very responsible)

4. What are the remaining major sources and uses?

- Loan from GE Capital and loan (newcourt credit) are sources of cash
- Fixed assets is a use of cash
- Increase in loan to buy more fixed assets, which is then used to increase net income and is then used to pay off the loan which is very responsible and shows that the company would be able to pay off the extra \$270,000 loan if granted

5. Recommendations for the future?

- Ensure that when loan is granted that debt to equity ratio remains relatively proportionate to the 2012 ratio as it did exceed the 4:1 requirement in 2011 when they first received a loan from GE Capital Canada
- Also ensure that interest coverage does not decrease too much if loan is granted and try to keep it within 2012 ratio

### **Financial Analysis of Statement of Earnings**

- Cost of sales are really good as it is growing at a slower rate than sales
- Total operating expenses decreased which is really good as it means the company is operating efficiently and is generating cash
- Salaries and wages decreased as a percentage because sales are increasing at a way faster rate than sales
- Net earnings after tax increased substantially due to the contract Clark Carriers Ltd. signed with Ford Motor Co. in 2011

### **Analysis of Financial Ratios**

- Return on average equity increased because net income grew by a lot

- Debt to equity ratio is important to keep track of because it is one of the five requirements for receiving a loan from GE Capital Canada (no greater than a 4:1)
- Interest coverage in 2012 is amazing because they now have more coverage as they can cover their interest expense almost 6 times
- Current ratio is close to the industry average, however it is decreasing because accounts payable is increasing faster than assets are
- Age of receivable in 2012 was received in 18 days and looking at the ratios, the accounts payable was paid off the next day meaning they took the money they received and immediately paid off their debts
- The company's assets are increasing which is used to increase the sales and then used to increase earnings so that equity increases in order to increase assets ( cycle of growth continues)

### Clark Carriers Ltd. Projected Statement of Earnings

Clark Carriers Ltd.				
Projected Statement of Earnings				
For the Years Ending December 31, 2013				
Items	Assumption	Low (30%)	High (60%)	
Revenue	\$835,295 * 0.3, \$835,295 * 0.6	\$1,085,884	\$1,336,472	
Cost of sales	Same % (62.1%)	\$674,334	\$829,949	
Gross margin	Sales-COGS	\$411,550	\$506,523	
Operating expenses:				
Salaries and wages	\$60,000 increase (given)	\$180,259	\$180,259	
General and administration	\$13,000 increase (given)	\$31,512	\$31,512	
Telephone and fax	Same % (1.1%)	\$11,945	\$14,701	
Legal and accounting	Same \$	\$1,491	\$1,491	
Travel and auto	Same % (1.1%)	\$11,945	\$14,701	
Rent and utilities	Same \$	\$10,075	\$10,075	
Bank charges and interest	\$17,300 increase	\$35,805	\$35,805	
Bad debts	Same % (0.2%)	\$2,172	\$2,673	
Depreciation expense	Last year's dep. expense + \$30,000	\$72,795	\$72,795	
Advertising and promotion	Same % (0.1%)	\$1,086	\$1,336	
Meals and entertainment	Same % (0.1%)	\$1,086	\$1,336	
Total operating expenses	sum	\$360,170	\$366,685	
Net earnings before taxes		\$51,380	\$139,838	
Provisions for income taxes	2012 income exp.+ \$17,300*0.45	\$23,121	\$62,927	
Net earnings after taxes		\$28,259	\$76,911	

### Clark Carriers Ltd. Projected Statement of Retained Earnings

Clark Carriers Ltd.				
Projected Statement of Retained Earnings				
For The Year Ended of December 31, 2013				
Items	Assumption	Low (30%)	High (60%)	
Beginning retained earnings	Last Years Balance Sheet	\$56,845	\$56,845	
Add: net earnings after taxes	PSOE	\$28,259	\$76,911	
Less: dividends	Same \$	-	-	
Ending retained earnings		\$85,104	\$133,756	

**Business 1220E- Lecture 14- 4 C's of Credit and Sensitivity Analysis (Clark Carriers Ltd.)****Part B****Clark Carriers Ltd. 2013 Projected Balance Sheet**

Clark Carriers Ltd.				
Projected Balance Sheet				
As at December 31, 2013				
Items	Assumption	Low (30%)	High (60%)	
<b>Current Assets:</b>				
Cash	Same \$	\$4,230	\$4,230	
Accounts receivable	same (18days)	\$53,550	\$65,908	
Other receivables	same \$	\$429	\$429	
Prepaid expenses	Trend: increase \$3200	\$18,265	\$18,265	
<b>Total Current Assets</b>		<b>\$76,474</b>	<b>\$88,832</b>	
<b>Fixed Assets:</b>				
Trucks and trailers (cost)	plus: \$300,000	\$763,800	\$763,800	
Fixtures (cost)	Same \$	\$5,480	\$5,480	
Company vehicle (cost)	Same \$	\$21,500	\$21,500	
Less: accumulated depreciation	Last years BS+ deprec. Exp.	<u>(\$259,351)</u>	<u>(\$259,351)</u>	
<b>Total Fixed Assets (net)</b>		<b>\$531,429</b>	<b>\$531,429</b>	
<b>TOTAL ASSETS</b>		<b><u>\$607,903</u></b>	<b><u>\$620,261</u></b>	
<b>Liabilities</b>				
<b>Current Liabilities:</b>				
Accounts payable	Same (19 days)	\$35,102	\$43,203	
Bank line of credit (\$50,000 limit)	" Plug"	<u>\$71,297</u>	<u>\$26,902</u>	
<b>Total Current Liabilities</b>		<b>\$106,399</b>	<b>\$70,105</b>	
<b>Long-term Liabilities:</b>				
Loan (Newcourt Credit)	\$7,000*12	\$105,000	\$105,000	
Loan GE Capital	$\$36,000 - (800 * 12) + \$270,000 - (\$5,625 * 8)$	<u>\$251,400</u>	<u>\$251,400</u>	
<b>Total Long-term Liabilities</b>		<b>\$356,400</b>	<b>\$356,400</b>	
<b>TOTAL LIABILITIES</b>		<b><u>\$462,799</u></b>	<b><u>\$426,505</u></b>	
<b>Owner's Equity:</b>				
Share capital	Same \$	\$60,000	\$60,000	
Retained earnings	From 2013 PSRE (ending)	<u>\$85,104</u>	<u>\$133,756</u>	
<b>Total Owner's Equity</b>		<b>\$145,104</b>	<b>\$193,756</b>	
<b>TOTAL LIABILITIES AND OWNER'S EQUITY</b>		<b><u>\$607,903</u></b>	<b><u>\$620,261</u></b>	

### Clark Carriers Ltd. Collateral and Sensitivity Analysis

Clark Carriers Ltd.					
Sensitivity					
	Days	Accounts Payable Amount		Difference	New Plug
Base case	19	\$35,102		\$0	\$71,297
Up 22	40	\$74,103		\$39,001	\$32,296
Down 4	15	\$27,712		\$7,390	\$78,687
Clark Carriers Ltd.					
Collateral					
Asset		2012 Value	Factor Value	Realizable Value	
Accounts receivable		\$42,004	90%	\$37,804	
Other receivable		\$429	45%	\$193	
Prepaid expense		\$15,065	0%	-	
Fixed asset, net		\$307,424	40%	\$122,969	
New fixed asset		\$300,000	60%	\$180,000	
		Total Realizable Collateral		\$340,966	
		Less: LTD requested from GE Capital		\$270,000	
		Less: previous outstanding loan from GE Capital		\$36,000	
		Excess Collateral		<u>\$34,966</u>	

### Clark Carriers Ltd. Capacity to Repay

Clark carriers Ltd.						
Capacity to Repay						
Ratio	2013 Projections Low	2013 Projections High	2012	2011	2010	
Current Ratio	0.69:1	1.22:1	2.3:1	2.8:1	3.4:1	
Acid Test	0.54:1	1.0:1	1.7:1	1.9:1	2.2:1	
Interest Coverage	2.43X	4.91X	5.5X	1.7X	1.0X	
Debt to Equity	3.19:1	2.2:1	2.2:1	4.2:1	0.23:1	

### Clark Carriers Ltd. Financial Analysis

- In the low scenario, the company requires more than their \$50,000 credit limit, however the company needs less than the \$50,000 credit limit in the high scenario
- Since the low scenario of 30% of revenues is the more realistic projection, it poses a risk as they would need a larger loan than the one that was requested
- This case does not involve seasonality and thus a seasonality analysis is not required
- After analyzing the sensitivity analysis, Clark Carriers has the potential to extend their age of accounts payable up to 40 days and would still be within the \$50,000 credit limit and would still be able to pay the interest payments
- The only problem to extending the age of accounts payable would be it would frustrate suppliers, however giving a heads up or negotiating can resolve this issue

## 4 C's of Credit Analysis

### Conditions

#### *Political*

- New Mto vehicle safety legislation is required
- Unsafe trucks have been impounded and fined in the past

#### *Economic*

- Competitive industry
- Requires exclusive contracts in order to survive in the industry
- Very low profit margins
- Potential for strong growth in industry with the help of hauling contracts

### Character

- Company survived the recession
- They were successful with winning contracts in the past such as the two year contract with Ford Motors in 2011
- Were able to manage their growth
- Never late with payments
- However they must bid to win contract
- Requires a lot of loans to outbid and win contracts

### Collateral

- Examining the collateral analysis test, it seems as if the company has enough money to cover its assets with excess collateral
- They are asking more than they need

### Capacity to Repay

- The projections for the high scenario look really good, however the low scenario is the more realistic projection
- Low scenario projections are still good but pose a low to medium risk
- The interest coverage in the low scenario is twice as less than in the high scenario, however it is still good because the company can still pay off its interest by almost three times
- The debt to equity ratio increases a lot from the high to the low scenario which poses a mild concern
- Although the company is still far from the debt to equity ratio condition for a GE Capital loan, it is getting closer to going over the limit
- Looking back to 2011, they did exceed the debt to equity ratio which was the year they received a loan from GE Capital which poses a concern as to whether this will reoccur if the \$270,000 loan is granted

- However in 2012, they paid a lot of its debt off which lowered the debt to equity ratio substantially, decreasing risk as it shows the company has the ability to pay back the loan

**Decision**

- I would approve the \$270,000 loan for Clark Carriers Ltd. with the condition that it must win the contract
- The company should also expand its age of accounts payable as they have the ability to wait a little longer to pay instead of rushing to pay off all their debts
- This will help Clark Carriers keep a little bit more cash on hand

## **Business 1220E- Lecture 15- Analysis of SCF and Financial Ratios (More Vino LTD.) Part One**

### **What to Include In Decision**

- Clearly state decision
- Include any conditions if a part of the decision
- Highlight 3-5 major reasons for risks and mitigation

### **Decision/Role**

- Christian and David Stone are the founders of More Vino Ltd. and are also brothers
- Arthur Greenway must decide whether or not to approve a loan request for \$600,000 which will help finance the renovation of an outdoor patio area
- Arthur Greenway is also the silent partner of More Vino which means he does not make management decisions but invested his own money into the company
- Were a wholesaler but is switching into bars because that's where most of the profit is generated

### **Analysis of Statement of Cash Flows**

#### *1. Is cash being generated from operations?*

- Big use of cash in 2006 but because it is a new business and being a wholesaler did not generate much profit and are in the process of making the switch to bars completely, the huge jump from 2006 to 2007 makes sense
- Went from \$(2,918,738) in 2006 to \$726,592 and is finally into positive numbers
- The company did generate cash from operations

#### *2. Was profit generated from net income? What does this tell us?*

- Net income is still in the negatives which is not good because net income is the best type of cash as you can do whatever you want with this money
- It's a little concerning to see that they have asked for such a huge loan when they still can't even generate any profit

#### *3. What are the sources and uses of cash from operations?*

- Accounts receivable is a source of cash
- Accounts payable and inventory are uses of cash
- The decrease in accounts receivable makes sense because as a wholesalers, it takes time for people to pay back for barrels of wine, however with bars, people pay almost instantly
- Looks like the company sold a lot of their inventory which also makes sense because they are no longer wholesalers and thus it is much easier to sell inventory (especially in restaurants and bars)
- There has been a huge increase in accounts payable from 2006 to 2007 which shows that the company is really stretching their accounts payable to ensure that they have extra cash for the business

- This is not of a huge concern at the time being as it is still a new business and they are switching from wholesalers to bars which is expensive
- This is however a concern if it continues as it looks like for the time being, the company is very dependent on their accounts payable

#### *4. What are the remaining major sources and uses of cash?*

- Bank loan is a major source of cash
- Loan payable is a major use of cash
- The company is not good at matching as it looks like they are using long term loans to pay off short term debts
- The company had a loss of net cash flow of \$6,180 from the beginning of the year and did not make a profit (not good)
- This is concerning and begs the question as to whether or not More Vino Ltd. is ready for a \$160,000 loan

#### *5. Recommendations for the future?*

- I would recommend waiting until the company can at least begin to make a profit before approving the loan
- Start matching better by paying long term debts with long term sources of cash and short term debt with short term sources of cash

#### **Analysis of Financial Ratios**

- The company's cost of goods sold decreased substantially which is really good but also makes sense because the company recently went from wholesalers to bars
- This allows them to charge more for the drinks as well, generating a huge profit margin compared to barrels of wine
- Their total operating expenses decreased which is really good and was due to the decrease in rent
- Rent most likely decreased as they no longer need a huge warehouse to store all their barrels of wine
- Wages increased as restaurants and bars require more employees to serve and bartenders
- Wages also increased probably due to the fact that sales increased faster than wages did
- Their interest expense decreased which is really good however there is still a loss in net income
- Although the loss in net income is less than 2006, it is still in the negatives and thus bad as the company is still not making any money
- Return on average equity is n/a on the financial ratio because they have a negative net income and thus cannot be calculated (it is bad)
- The acid test is very concerning as it's not even close to industry average
- For every 1 cent the company makes, they have \$1 in debt

- The reason their age of receivables went down from 2.1 days to less than 1 day is because people usually pay with cash at bars and thus the money is received instantly as oppose to selling barrels of wine
- Again, age of inventory has decreased which makes sense as they are no longer a wholesaler
- Their age of payables has increased because they are relying too heavily on the account and are stretching it to hold on to some cash for a little longer
- There is no interest coverage because there is no net income which is very concerning
- Although total assets and sales are increasing, there is a loss of net income due to all the expenses of switching over from a wholesaler to a bar

## Business 1220E- Lecture 16- Projections, 4C's of Credit Analysis (More Vino Ltd.) Part Two

### More Vino Ltd. Projected Income Statement

More Vino Ltd.				
Projected Statement of Earnings				
(for the years ending February 28)				
Items	Assumption	2008	2009	
Net Sales	2007 sales*40%, 2008 sales*20%	\$12,127,828	\$14,553,394	
Cost of goods sold:				
Beginning inventory	Last years ending inventory	\$708,984	\$1,644,733	
Purchases	COGS+EI-BI	\$7,606,054	\$8,333,314	
COGAFS	sum	\$8,315,038	\$9,978,047	
Less: ending inventory	90 days of COGS	(\$1,644,733)	(\$1,973,680)	
Cost of goods sold	55% decrease 2008 and 2009	\$6,670,305	\$8,004,367	
Gross profit	net sales- COGS	\$5,457,523	\$6,549,027	
Operating expenses:				
Administrative expenses	same % (2.8%)	\$339,579	\$407,495	
Amortization	same \$ (depX= TV/UL)	\$285,104	\$285,104	
Insurance	same \$	\$43,594	\$43,594	
Marketing and advertising	3.5% increase	\$424,474	\$509,369	
Miscellaneous	same % (2.2%)	\$266,812	\$320,175	
Rent	20% incr. 2008, same \$ 2009	\$623,887	\$623,887	
Repairs and maintenance	same % (3.4%)	\$412,346	\$494,815	
Security	same % (1.6%)	\$194,045	\$232,854	
Supplies and expenses	same % (2.0%)	\$242,557	\$291,068	
Telephone	same % (1.6%)	\$194,045	\$232,854	
Travel and entertainment	same % (0.8%)	\$97,023	\$116,427	
Utilities	same % (0.6%)	\$72,767	\$87,320	
Vehicle expenses	same % (0.7%)	\$84,895	\$101,874	
Wages	additional \$300,000	\$1,221,768	\$1,221,768	
Total operating expenses	sum	\$4,502,896	\$4,925,010	
Operating income	gross profit-total op. exp.	\$954,627	\$1,624,017	
Other income	same \$	\$31,884	\$31,884	
		\$986,511	\$1,655,901	
Interest expense	same%+9% on \$1,060,000	(\$798,656)	(\$798,656)	
Net income before taxes		\$187,855	\$857,245	
Taxes	NIBT*23%	(\$43,207)	(\$197,166)	
Net income after taxes		\$144,648	\$660,079	

### More Vino Ltd. Projected Statement of Retained Earnings

More Vino Ltd.				
Projected statements of retained earnings				
(for the years ending february 28)				
Items	Assumption	2008	2009	
Beginning retained earnings	last yrs. Ending RE	(\$3,002,156)	(\$2,857,508)	
Add: net income	from Projected IS	\$144,648	\$660,079	
Less: dividends		-	-	
Ending retained earnings	sum	(\$2,857,508)	(\$2,197,429)	

## More Vino Ltd. Projected Balance Sheet

More Vino Ltd.				
Projected Balance Sheets				
(as at February 28)				
Items	Assumption	2008	2009	
<b>ASSETS</b>				
Current assets:				
Cash	same \$	\$20,706	\$20,706	
Accounts receivable	same days (0.47 days)	\$15,617	\$18,740	
Inventory	ending inventory PIS (2008,2009)	\$1,644,733	\$1,973,680	
Total current assets	sum	\$1,681,056	\$2,013,126	
Fixed assets:				
Automobiles	same \$	\$117,126	\$117,126	
Furniture and fixtures	same \$	\$609,928	\$609,928	
Equipment	same \$	\$429,938	\$429,938	
Leasehold improvements	additional \$1,060,000	\$1,722,388	\$1,722,388	
Subtotal		\$2,879,380	\$2,879,380	
Less: accumulated amortization	last yrs dep. + amort. Exp	(\$606,096)	(\$891,200)	
Net fixed assets		\$2,273,284	\$1,988,180	
<b>TOTAL ASSETS</b>		<b><u>\$3,954,340</u></b>	<b><u>\$4,001,306</u></b>	
<b>LIABILITIES</b>				
Current liabilities :				
Accounts payable	same days (88.4 days)	\$1,842,124	\$2,018,260	
Bank line of credit (limit \$1,500,000)	"plug"	\$1,542,804	\$832,439	
Current portion due on bank loan	same \$	\$78,784	\$78,784	
Total current liabilities		\$3,463,712	\$2,929,483	
Long-term liabilities:				
Bank loan		\$102,136	\$23,252	
Greenway	given	\$600,000	\$600,000	
Stone brothers	\$130,000*2 (given)	\$260,000	\$260,000	
Mrs. Stone	given	\$200,000	\$200,000	
Loan payable	same \$	\$800,000	\$800,000	
Shareholders loans (existing)	same \$	\$666,000	\$666,000	
Total long-term liabilities		\$2,628,136	\$2,549,252	
Equity:				
Common stock	same \$	\$720,000	\$720,000	
Retained earnings	ending RE from PSRE	(\$2,857,508)	(\$2,197,429)	
Total equity		(\$2,137,508)	(\$1,477,429)	
<b>TOTAL LIABILITIES AND EQUITY</b>		<b><u>\$3,954,340</u></b>	<b><u>\$4,001,306</u></b>	

### More Vino Ltd. Sensitivity and Collateral

More Vino Ltd.				
Sensitivity				
	Days	Accounts payable amount	Change in plug	2008 new plug
Base Case	88.4	\$1,842,124	\$0	\$1,542,804
Down	40	\$833,540	\$1,008,584	\$534,220
Up	110	\$2,292,235	(\$1,458,695)	\$1,992,915
More Vino Ltd.				
Collateral				
Asset	2007 Value	Factor Value	Realizable Value	
Accounts receivable	\$11,064	69%	\$7,634	
Inventory	\$708,984	60%	\$425,390	
Net fixed assets	\$1,498,338	60%	\$899,003	
New assets	\$1,060,000	70%	\$742,000	
Total realizable collateral			\$2,074,027	
Less: Greenway loan			(\$600,000)	
Excess collateral			<u>\$1,474,027</u>	

### More Vino Ltd. Capacity to Repay and Seasonality

More Vino Ltd.			
Capacity to Repay			
Ratio	P 2008	P 2009	
Current ratio	0.93:1	0.97:1	
Acid test	0.46:1	0.30:1	
Interest coverage	1.17X	1.63X	
More Vino Ltd.			
Seasonality			
	2008	2009	
Plug	\$1,542,804	\$832,439	
Add: seasonal	\$120,000	\$120,000	
Total working capital loan	\$1,662,804	\$952,439	

### Character

- Both Christain and David are well educated
- Christain graduated from Richard Ivey School of Business from Western University and his brother Brian also graduated from Western University with a degree in economics

*who are we lending the money to?*

- Lending to Christain and David Stone who are the owners and founders of More Vino Ltd.

*Do we have a past relationship with them?*

- Greenway provided a huge portion of the start up costs to the Stone brothers (invested into the company)
- Arthur Greenway is a family friend of the Stone brothers
- Greenway provided his expertise in strategic planning and provided access to regional contacts in the beverage industry as he was the Vice Principle of global consumer beverage firm

*Do they have the expertise in this company/industry?*

- During Christians time in ontario, he became familiar with Ontario's beverage alcohol industry and noted wine sales represented a major portion of the market
- He also visited many canadian bars and restaurants that provided a variety of different drinks including vintage wines
- They have some expertise in the alcohol industry, however are not experts as they thought that wholesalers would generate the most profit, when in fact it was the bar that was making the company the most money

*Can we trust them? Do they have the ability to repay and manage their credit?*

- They are a new company so it may be hard for them to pay back their loans
- The company has however gained popularity and is considered the new local hot spot for drinks and thus should be able to pay back loans with the patio expansion
- Their asset test looks concerning because its very far from the industry average of 1:1 and thus are taking much longer paying off long-term liabilities
- They are however good at paying off their short-term liabilities and thus their ability to repay and manage their credit is inbetween a low and high risk scenario
- They also only have enough money to pay off their interest just once which is good as it shows that they at least have enough money to cover interest expenses, however it is also bad because the company should be able to pay off their interest expenses more than once

## Conditions

*Political: government legislation and issues*

- Island officials placed a maximum 15% increase in the excise duty tax charged on locally manufactured alcoholic products
- There is also a 30% increase on international and imported alcoholic products

*Economic / Social*

- More Vino Ltd. located in Trinidad and Tobago
- Tobago is the centre of the Republics growing tourism industry
- Trinidad is an industrialized island in which a large portion of its economy is based on oil and agriculture
- The country has shown consistent growth in tourism and service industries in the past 10 years

- Trinidad is also known for its festivities and cosmopolitan lifestyle
- Locally made rum and beer are the most profitable alcoholic beverages in Trinidad
- However, with rising incomes, the demand for premium imported products/vintage drinks were increasing
- The Trinidad and Tobago retail market for wine was estimated at TT\$48 million and was expected to grow for the next five years

### **Decision**

- Approve loan request of \$600,000 to More Vino Ltd. for a patio expansion upon the following conditions:
  - o Rely less heavily on accounts payable for extra cash by reducing the average days of accounts payable
  - o Begin making net income/ generating cash
  - o Improve matching (pay long term liabilities with long-term sources of cash vice versa.)
  - o Pay off long-term debts better by increasing the acid test ratio to a ratio that is closer to 1:1
- Based on financial records, the company is not ready to take on another huge loan, they need to spend a couple of years to settle down, generate income and begin paying off the huge amounts of debt before taking on the patio expansion

## **Business 1220E- Lecture 17- Analysis of SCF, Ratio, Projections, 4C's of Credit (Envy Rides Inc.) Part One**

### **Role/Decision**

- Scott Miller, newly appointed manager of commercial accounts at the Genesis Bank of Canada (GBC) is to decide whether or not to grant Envy Rides Inc. a loan of \$60,000 long-term loan and an additional \$450,000 working capital loan
- Jacob Hessels is the dealer principle for Envy Rides Inc.
- Requested \$60,000 long-term loan to open up a tattoo parlor business along with his motorcycle business (expand Envy Rides Inc. services)
- Requested \$450,000 working capital loan to pay off day-day operations of the business
- The company has never applied for a loan before
- Applied for the loan during the recession
- Jacob Hessels noted that if the company does not get the loan, the company might go out of business
- Envy Rides Inc. is a motorcycle company

### **Analysis of Statement of Cash Flows**

#### 1. Was cash generated from operations?

- net earnings are good, however it did decrease from 2008 substantially
- however this makes sense as the economy was going through a recession and its good that they were able to generate cash during the recession period
- this is however not a sustainable trend as if the recession gets worse, cash generated from operations may go down as well

#### 2. Is net income a source of cash? What does this tell us?

- Net income is a source of cash, however it also decreased from 2008
- However the decrease makes sense as sales were decreasing at a faster rate
- Net income only decreased a little bit from 2008 which is a good thing taking into consideration that they were able to keep net income relatively proportional to 2008 when sales were decreasing at a faster rate
- Net income is the best type of cash a company can have as they can do whatever they want with this money and thus is a good thing that they are generating income

#### 3. What are the sources and uses of cash from operations?

- Accounts receivable is a source of cash while inventory and accounts payable are the uses of cash
- Accounts receivable decreased from 2008, however this makes sense as their sales decreased as well
- Their inventory accounts increased by \$451,048 from 2008 which shows that the company is attempting to increase sales, however they made less sales in 2009 which is concerning

- Also concerning because motorcycles are not liquid and cannot force customers to purchase something as big as a motorcycle
- The largest account the company has is what they owe and is accounts payable
- This is very concerning because it looks like they may be stretching their accounts payable to keep some extra cash around for a little longer which tends to frustrate suppliers in the long run

#### 4. What are the remaining major sources and uses?

- Shareholder advancement is the major use of cash
- Shareholder advancement is loans given by friends
- Based on the analysis, it looks like the company is using most of its cash to pay back Jacob Hessels friends which results in the negative cash flow
- There was no cash generated from financing and investing activities and the company has no long term debts yet

#### 5. Recommendations for the future?

- Spend a little less of the cash generated on paying off shareholder advancements so that it can be used paying off the accounts payable
- Lowering accounts payable would increase net earnings which can then be used to pay off other day to day operations of the business

#### Ratio Analysis

- Cost of goods sold decreased which is good because combined with the decreasing sales, they were still able to maintain their gross margin relative to the percentage it was at in 2008
- Total operating expenses decreased mainly due to the huge drop in wages
- It seems as if Hessels fired a good portion of his staff which is not a sustainable method because he wants to open up a tattoo parlor, however with that requires more employees and thus would result in more layoff for Envy Rides Inc. (to ensure salary expenses do not increase)
- Return on equity decreased a lot since 2008 which points towards a poor net income
- Current ratio would decrease even more if the working capital loan of \$450,000 is granted as motorcycles are not the most liquid products in the market
- Interest coverage on the ratio analysis shows N/A because the company never had a long-term loan which can be very concerning as one could never be certain as to how the company handles the loan and whether or not they would be able to pay back the loan, especially as it is during the peak of the recession

## Business 1220E- Lecture 18- Analysis of SCF, Ratios, Projections, 4 C's of Credit (Envy Riders Inc.) Part Two

### Envy Riders Inc. Projected Statement of Earnings

Envy Riders Inc. Projected Statement of Earnings For the Year Ended December 31				
Items	Assumption	2010	2011	
Dealership sales	owners estimate	\$6,000,000	\$7,500,000	
Tattoo parlor sales	owners estimate	\$50,000	\$100,000	
Total sales	sum	\$6,050,000	\$7,600,000	
Cost of goods sold:				
Beginning inventory	last years ending inventory	\$2,408,410	\$4,029,895	
Purchases	COGS+EI-BI	\$6,334,435	\$6,952,853	
COGAFS	sum	\$8,742,845	\$10,982,748	
Less: ending inventory	same days (312.1 days)	(\$4,029,895)	(\$5,062,348)	
Cost of goods sold	same % (77.9%)	\$4,712,950	\$5,920,400	
Gross margin	Sales - COGS	\$1,337,050	\$1,679,600	
Expenses				
Rent and utilities	same \$	\$120,900	\$120,900	
Salaries	12% increase 2010, 13% increase 2011	\$726,000	\$988,000	
Advertising and promotion	same % (1.5%)	\$90,750	\$114,000	
Automotive	same % (0.7%)	\$42,350	\$53,200	
Telephone	same % (0.3%)	\$18,150	\$22,800	
Insurance	same % (0.2%)	\$12,100	\$15,200	
Licence fees and dues	same % (0.3%)	\$18,150	\$22,800	
Office expense	same % (0.3%)	\$18,150	\$22,800	
Professional fees	same % (0.1%)	\$6,050	\$7,600	
Amortization	2010:2009+(\$60k/15yrs)*8/12, 2011: 2009+(\$60K/15)	\$12,898	\$19,348	
Total expenses		\$1,065,498	\$1,386,648	
Earnings before tax	gross margin-expenses	\$271,552	\$292,952	
Interest		(\$60,487)	(\$55,840)	
Net earnings before tax	sum	\$211,065	\$237,112	
Income tax expense	25% of net earnings before tax	(\$52,766)	(\$59,278)	
Net income	sum	\$158,299	\$177,834	

### Envy Riders Inc. Projected Statement of Retained Earnings

Envy Riders Ltd. Projected Statement of Retained Earnings For the Year Ended December 31				
Items	Assumption	2010	2011	
Beginning Retained Earnings	PSRE (ending)	328,489	\$486,788	
Add: Net Income	from PSE	\$158,299	\$177,834	
Less: Dividends		-	-	
Ending Retained Earnings	sum	\$486,788	\$664,622	

## Envy Riders Inc. Projected Balance Sheet

Envy Riders Inc. Projected Balance Sheet As at December 31				
Items	Assumption	2010	2011	
<b>ASSETS</b>				
<b>Current assets:</b>				
Cash	Same \$	\$138,640	\$138,640	
Accounts receivable	Same days (12 days)	\$198,904	\$249,863	
Inventory	PSOE	\$4,029,895	\$5,062,348	
Prepaid expense	Same \$	\$5,231	\$5,231	
Supplier deposit	Same \$	\$17,250	\$17,250	
<b>Total current assets</b>	<b>Sum</b>	<b>\$4,389,920</b>	<b>\$5,473,332</b>	
<b>Fixed assets:</b>				
Shop equipment	Same \$	\$48,729	\$48,729	
Computer equipment	Same \$	\$7,087	\$7,087	
Computer software	Same \$	\$22,713	\$22,713	
Furniture and fixtures	Same \$	\$20,148	\$20,148	
New fixed assets	60000 (given)	\$60,000	\$60,000	
<b>Total fixed assets</b>	<b>sum</b>	<b>\$183,676</b>	<b>\$183,676</b>	
Less: accumulated amortization	Last year balance +amortization	(\$54,523)	(\$73,871)	
<b>Net fixed assets</b>		<b>\$129,153</b>	<b>\$109,805</b>	
<b>Total fixed assets</b>	<b>sum</b>	<b>\$183,676</b>	<b>\$183,676</b>	
Less: accumulated amortization	Last year balance +amortization	(\$54,523)	(\$73,871)	
<b>Net fixed assets</b>		<b>\$129,153</b>	<b>\$109,805</b>	
<b>TOTAL ASSETS</b>		<b>\$4,519,073</b>	<b>\$5,363,527</b>	
<b>LIABILITIES</b>				
<b>Current liabilities:</b>				
Working capital loan	"plug"	\$749,428	\$1,539,650	
Accounts payable	175 days	\$3,036,439	\$3,006,773	
Customer deposits	Same \$	\$3,131	\$3,131	
<b>Total current liabilities</b>		<b>\$3,788,998</b>	<b>\$4,549,554</b>	
<b>SHAREHOLDERS' EQUITY</b>				
Shareholder advance	less \$93,936	\$243,187	\$149,251	
Capital stock	Same \$	\$100	\$100	
Retained earnings (deficit)	from PSRE	\$486,788	\$664,622	
<b>Total shareholders' equity</b>		<b>\$730,075</b>	<b>\$813,973</b>	
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>		<b>\$4,519,073</b>	<b>\$5,363,527</b>	

## Conditions of the Business

### *Economic and Social*

- Asking for a loan during the peak of the recession in 2008
- Biggest competitors are Snow City Cycle and Kahuna Power Sports
- Recession brought a significant change to the recreational motor sport industry, affecting the sales of new and used motorcycles
- Recession led to reduced consumer spending on luxurious items such as motorcycles
- The Motor Cycle Industry Council reported that 12 of the leading brands has seen a decrease in sales by 30.5% in the first quarter of 2009

**Character**

- Jacob Hessels was a talented businessman and specialized in business start-ups
- Well known in many industries
- Amiable and charismatic person
- Was the general manager for the start-up of a Hyundai dealership in a small Southwestern Ontario town
- Is a motorcycle enthusiast and is a motorcycle rider himself
- Possessed the knowledge and expertise of motorcycles
- Lending the money to Jacob Hessels who is the owner of Envy Riders Inc.
- First time requesting a loan and working capital, thus there is no way of estimating whether or not they would be able to pay off their loans (not trustworthy)

**Decision**

- Decline the long-term loan request of \$60,000 and the working capital loan of \$450,000
- Based off of the owners estimate, the projections show that they would require over the asking \$450,000, going into more than one million in capital loans for 2011 projections
- Owners estimate for sales is very optimistic and not realistic
- Adding a tattoo parlor to a dealership would not increase sales by that much as tattoos are also not something that people get on an everyday basis
- It doesn't make sense to open up a tattoo parlor in hopes of increasing sales during the recession
- The company should focus on getting their age of inventory down as this would put the company's working capital loan needed be below the credit limit of \$450,000

**Business 1220E- Lecture 19- Analysis of SCF, Ratio's, Financial Projections, 4C's of Credit, Decisions (La Maison Maison Inc.) Part One**

**Role/Decision**

- Brad MacDougall is the manager of commercial accounts at the central Montreal, Quebec, branch of the Dominion Bank of Canada (decision maker)
- Debra DesRocher is the founder and chief executive officer of La Maison Maison Inc.
- La Maison Maison Inc. is a growing wholesaler providing housewares and textiles to independent and multinational retailers across Canada
- Request of \$4 million long-term loan to purchase and equip a building located in an industrial area of Montreal (to move current location of La Maison Maison Inc. to the other side of the city)

**Considerations**

- Asking for loan request during recession
- One of their retailers filed for bankruptcy resulting in a \$2.5 million loss in sales and a total loss of \$350,000 accounts receivable the company owed La Maison Maison that is uncollectable
- Big American retailers moving from USA to Canada due to the strong Canadian dollar, increasing competition among wholesalers
- Decline in sales due to the \$2.5 million loss in sales requires the company to get rid of bonuses for 2013, however hopes the company would grow enough to bring them back in 2014
- Due to increasing competition, retailers that were experiencing a loss in margin would look to their suppliers for cost relief (concerning as La Maison Maison is a supplier)

**Statement of Cash Flows Analysis****1. Cash from operations?**

- Increase from 2011-2012 as cash from operations in 2011 was a use of cash and in 2012 it is a source of cash which is really good
- This means that the engine of the business is running and the company is being efficient with its operating expenses

**2. Net Income?**

- It increased from 2011 and is a source of cash which is good as net income is the best type of income (you can do whatever you want with this money)
- A further analysis shows that the net income is mostly from depreciation and thus the net income excluding depreciation is not as much as it is with it included
- This shows that the company might be too reliant on its depreciation

**3. Sources and uses from operations?**

Accounts Receivable

- Kept extending accounts receivable and were never really paid and thus a notes receivable forced the collection of their accounts receivable
- Waited a long time to collect \$741,000 which poses the question in regards to why someone would wait so long to collect almost \$1 million
- The use of notes receivable is not a sustainable trend if it continues
- Sales increased, thus it makes sense that accounts receivable increased as well

#### Inventory

- Sales increased and so did their inventory which make sense as the more of the inventory is sold, the more inventory needs to be purchased in order to keep up with the demand

#### Accounts Payable

- Use of cash
- Decreased from 2011 to 2012
- They might have used notes receivable to pay off their accounts payable which is not the best strategy
- They should be using accounts receivable to pay off accounts payable
- Using notes receivable to pay off accounts payable is not a sustainable trend

#### 4. Remaining Sources/Uses

- Didn't need to take out a huge working capital loan for 2012 because of the notes receivable
- The current portion of the long-term debt decreased which means it has been paid off, however the long-term debt is increasing
- This means that the company may just be paying off its current portion of the long-term debt to show us that they can still pay off their debts to get the loan request approved
- There was more cash flow in 2012 and the reason to this increase is due to the notes receivable account

#### 5. Recommendations

- Pay off working capital loan with notes receivable instead of the long-term debt
- Wait a little longer before buying more fixed assets
- Start earning income before to pay back liabilities
- Purchasing a new piece of land may not help the company increase its sales

#### Ratio Analysis

##### Profitability

##### COGS:

- Industry has low averages because it's a wholesaler

- La Maison Maison is above industry averages which is really bad because they aren't being efficient

#### *Operating Expenses:*

- The decrease in bonuses in 2012 is causing the decrease in total expenses
- Although a decrease in total expenses is good, cutting bonuses to reduce this expense is not a sustainable trend as the employees will be frustrated
- Frustrated employees may lead to a huge percentage of employees quitting requiring more requirement
- The hiring process is time consuming and expensive, including training

#### *Net Income:*

- Company is not making net income, however based on the industry average, the industry is making money and thus La Maison Maison should be able to make some money as well
- This is concerning as not being able to make a net income while others in the industry can demonstrates inefficiency within the company

#### *Return on Equity:*

- Return on equity is listed as N/A which is bad because it did not make an income and thus cannot be calculated

#### Liquidity

##### *Current Ratio and Acid Test:*

- Both are lower than industry average which is bad
- The big gap between the company and the industry average shows that the company has a lot of assets (inventory) and needs to start managing their inventory better

#### Stability

##### *Net Worth to Total Assets:*

- Funded by equity but is mostly funded by debt
- Concerning as this company has been around for a while
- Only make sense to be mostly funded by debt if it was a new company
- As ratio decreases, the stability of the company also decreases

##### *Interest Coverage:*

- Increased from 2011, however they can only pay off their interest once, and were barely able to pay off interest in the previous years

## Efficiency

### *Age of Accounts Receivable:*

- Days of accounts receivable is decreasing which is good as they need to start collecting faster in order to reduce working capital loan amount
- Company still above industry average and is taking longer to collect money than others

### *Age of Accounts Payable:*

- Also decreased since 2011
- The decrease in accounts payable is a good trend, however they are still way above industry average demonstrating that the company also takes longer to pay back liabilities

### *Age of Inventory:*

- Also decreased from 2011 just like the other two accounts
- It is also above industry average which is bad as it shows that it also takes longer for the company to sell its inventory
- The company takes longer to do everything compared to the industry average
- This is not a good trend
- As the gap increases between these accounts, the more working capital loan will be required
- The company is already very close to its \$3.5 million credit limit and thus an increase in the gap may push the company's working capital loan requirement beyond the company's credit limit (bad and unsustainable trend)

## Growth

- Total assets is decreasing
- There is a loss of income which results to the decrease in retained earnings
- The company is not being efficient and is not seeing a growth or a very little amount of growth

**Business 1220E- Lecture 20- Analysis of SCF, Ratios, Financial Projections, 4C's of Credit and Decision (La Maison Maison Inc.) Part Two**

**La Maison Maison Inc. Projected Income Statement**

La Maison Maison Inc.				
Projected Statement of Earnings				
For Years Ending December 31				
Items		Assumption	2013	2014
Net Sales	2013: (\$50,000*50)-2013 sales *10%, 2014: 2013 sales*12%		\$15,094,200	\$19,405,000
COGS:				
Beginning Inventory	ending inventory from last year		\$3,553,000	\$3,308,318
Plus: Purchases	COGS+EI-BI		\$11,830,678	\$16,847,327
COGAFS			\$15,383,678	\$20,155,645
Less: Ending Inventory	same days (100days)		(\$3,308,318)	(\$4,631,645)
COGS	80% of sales		\$12,075,360	\$15,524,000
Gross Profit	Sales-COGS		\$3,018,840	\$3,881,000
Operating Expenses:				
Wages and Salaries	same \$		\$1,655,000	\$1,655,000
Bonuses	no bonus 2013, 2012 value for 2014 bonus		\$0	\$457,000
Insurance	50% increase on 2012 dollar amount for 2013,2014		\$112,500	\$112,500
Rent			\$0	\$0
Utilities	\$40,000 increase yearly		\$131,000	\$171,000
Advertisements and Promotion	same \$		\$65,000	\$65,000
Travel expenses	same \$		\$32,000	\$32,000
G & A expenses	increase back to 2010 dollar amount for 2013, 2014		\$183,000	\$183,000
Maintenance and repairs	\$175,000 increase		\$175,000	\$175,000
Bad debt expense	add \$350,00 uncollectable debt(2013) same % (0.6%		\$447,000	\$116,430

Property taxes	\$50,000		\$50,000	\$50,000
Amortization	2012+\$2,000,000/25yrs+\$1,000,000/10yrs		\$415,000	\$415,000
Total Operating Expenses	sum		\$3,265,500	\$3,431,930
Operating profit	gross profit-Total operating expenses		(\$246,660)	\$449,070
Other expenses:				
Interest on existing loan	\$200,000 decrease yearly on existing loan		\$200,000	\$200,000
Interest on new loan	\$160,000 yearly		\$160,000	\$160,000
Other	Same \$		\$13,000	13,000
Total other expenses	sum		\$373,000	\$373,000
Net income before tax	gross profit-(operating+ other expense)		(\$619,660)	\$76,070
Income tax			\$0	\$11,411
Net income (loss)			(\$619,660)	\$64,659

**La Maison Maison Inc. Projected Statement of Retained Earnings**

La Maison Maison Inc.				
Projected Statement of Retained Earnings				
For Years Ending December 31				
Items		Assumption	2013	2014
Beginning Retained Earnings	ending retained earnings from last year		\$2,916,000	\$2,296,340
Add: Net Income	from PSOE		(\$619,660)	\$64,659
Ending Retained Earnings	sum		\$2,296,340	\$2,360,999

## La Maison Maison Inc. Projected Balance Sheet

La Maison Maison Inc.				
Projected Balance Sheet				
For Years as at December 31				
Items	Assumption	2013	2014	
<b>ASSETS</b>				
<b>Current assets:</b>				
Cash	same \$	\$9,000	\$9,000	
Marketable Securities	same \$	\$665,000	\$665,000	
Accounts receivable, net	Same days (61 days)	\$2,522,592	\$2,825,303	
Notes receivable	same \$	-	-	
Inventory	same days (100 days)	\$3,308,318	\$3,705,316	
Prepaid expenses	same \$	\$71,000	\$71,000	
Other current assets	same \$	\$125,000	\$125,000	
<b>Total current assets</b>	<b>sum</b>	<b>\$6,700,910</b>	<b>\$7,400,619</b>	
<b>Fixed assets:</b>				
New fixed assets	same \$	\$4,000,000	\$4,000,000	
Old fixed assets	from last years BS	\$5,949,000	\$5,949,000	
Accumulated amortization	last years BS+ amort.expense	(\$3,209,000)	(\$3,624,000)	
<b>Net fixed assets</b>		<b>\$6,740,000</b>	<b>\$6,325,000</b>	
<b>TOTAL ASSETS</b>		<b><u>\$13,440,910</u></b>	<b><u>\$13,725,619</u></b>	
<b>LIABILITIES</b>				
<b>Current liabilities:</b>				
Working capital loan	Plug	\$2,206,570	\$2,473,620	
Accounts payable	80 days 2013, 61 days 2014	\$2,593,000	\$2,747,000	
Current portion of LTD	same \$	\$193,000	\$193,000	
Current portion of LTD new	same \$	\$250,000	\$250,000	
Other current liabilities	same \$	\$46,000	\$46,000	
<b>Total current liabilities</b>	<b>sum</b>	<b>\$5,288,570</b>	<b>\$5,709,620</b>	
<b>Long-term Liabilities:</b>				
Long-term debt	2013: 2012 LTD-CPLTD, 2014: 2013 LTD-CPLTD	\$1,441,000	\$1,240,000	
Bank Loan (new)	2013: new loan-500K, 2014: 2013-250K	\$3,500,000	\$3,250,000	
<b>Total liabilities</b>	<b>sum</b>	<b>5,851,000</b>	<b>\$5,650,000</b>	
<b>Equity:</b>				
Common stock	same \$	\$5,000	\$5,000	
Retained earnings	from PSORE	2,296,340	2,360,999	
<b>Total equity</b>		<b>\$2,301,340</b>	<b>\$2,365,999</b>	
<b>TOTAL LIABILITIES AND EQUITY</b>		<b><u>\$13,440,910</u></b>	<b><u>\$13,725,619</u></b>	

## La Maison Maison Inc. 4 C's of Credit

La Maison Maison Inc.			
Seasonality			
Assumption			
	2013	2014	
From PBS	\$2,206,570	\$2,473,620	
Given	\$350,000	\$350,000	
sum	\$2,556,570	\$2,823,620	
La Maison Maison Inc.			
Sensitivity			
AR Amount	Difference	New Plug	
\$2,727,000	\$0	\$2,206,570	
\$3,308,318	\$581,318	\$1,625,252	
\$1,984,991	(\$1,323,327)	\$3,529,897	
La Maison Maison Inc.			
Capacity to Repay			
P:2013	P:2014		
1.27	1.3		
1.04	1.08		
N/A	6.67 X		

La Maison Maison Inc.			
Collateral			
2013 Value	Factor Value	Realizable Collateral	
\$2,522,592	80%	\$2,018,074	
\$3,308,318	50%	\$1,654,159	
\$6,740,000	40%	\$2,696,000	
\$4,000,000	60%	\$2,400,000	
\$9,000	0%	\$0	
\$665,000	35%	\$232,750	
\$71,000	0%	\$0	
\$125,000	20%	\$25,000	
Total realizable collateral		\$9,025,983	
Less: long-term loan		(\$4,000,000)	
Less: working capital needed		(\$2,437,620)	
Excess collateral		\$2,588,363	

## Conditions

### Economic and Social:

- Recession had a huge affect on the wholesalers industry, especially because La Maison Maison sells soap dispensers and other items that are more wants than need
- Experienced a huge increase in American chains in Canada due to the strong Canadian dollar
- Due to increased competition, retailers must lower prices to remain competitive which results in the wholesalers to decrease its prices
- There is a large increase in the shift to e-commerce and is expected to grow

- There was an increase tendency to only buy products when there was a promotion or sale
- Estimated to have a lack of domestic demand in 2013
- However, there is an estimated increase in international demand, mainly from South Asia mostly for grocery stores

### **Character**

- Completed a degree in commerce at McGill University
- After completing her degree, she was employed as a buyer for a variety of department and well known stores across Canada
- During her employment, she gained valuable management experience and exposure to the industry and network of industry experts
- Hard worker
- Also travelled abroad to visit manufacturers, suppliers and new clients both onsite and on industry tradeshowes

### **Decision**

- Not approve the loan request for \$4,000,000 for La Maison Maison Inc.
- They are not in a great financial position at the moment and buying more assets (building) may just increase expenses as oppose to increase sales substainally
- The company is not making an income in 2013, when they would have received the loan if approved
- Barley able to pay off interest
- Debt to equity ratio is really bad, can only pay 50 cents for every dollar they would owe the bank if the loan was granted
- They are taking too long to collect their money
- They are below industry average on just about everything
- The company should wait and continue running the business until they are making a net income
- Should look into expanding into e-commerce instead of expanding land as there is estimated growth in online shopping for the future

**Business 1220E- Lecture 21- Analysis of SCF, Ratios, Financial Projections, 4 C's of Credit and Decision (Forest of Flowers) Part One**

**Business Name: Forest of Flowers**

**Role/Decision**

- Brad MacDougall is the account manager at the London, Ontario branch of the Business Development Bank of Canada (the decision maker)
- Decide on whether or not to grant Forest of Flowers the requested \$120,000 long-term loan to finance the opening of two additional London retail locations
- The owner and founder of Forest of Flowers is Wayne Watson

**Considerations**

- Company already has a pre-approved \$60,000 increase in their line of credit limit with a chartered bank
- Forest of Flowers has an existing relationship with Brad MacDougall as he approved the loan for the start up of Forest of Flowers
- Eliminated wholesalers and purchasing agents from its buying process and buys directly from the supplier allowing Watson to sell more flowers for a lower price than its competitors
- Forest of Flowers honored the Top 25 Canadian Florist Award for the past two years
- Has been up to date with all the company's existing loans with BDC
- Watson wants the loan so that he can earn a spot on the Ontario Flower Growers Co-operative Auction to get flowers for cheaper which should decrease cost of goods sold, resulting in an increase in net income

**Statement of Cash Flow Analysis**

*1. Cash from Operations?*

- There is cash being generated from operations
- Good because the company is generating more cash than the year before
- The engine of the business is working and is operating efficiently

*2. Net Income?*

- Net income increased from 2001 and 2002 which is a really good and sustainable trend
- Net income is the best type of money because you can do whatever you want with it
- Net income is the company's largest source of cash which is the ideal
- Although almost half of net income is from depreciation, depreciation is not technically collected and thus this is a good trend and makes it easier to be willing to grant the loan requested
- Makes sense that depreciation increased because when you buy more fixed assets, depreciation increases

*3. Sources/Uses from Operations?*

- Accounts receivable and inventory are uses of cash
- Accounts payable is a source of cash
- Accounts receivable increased which makes sense because sales for 2003 also increased
- Did not increase substantially which also makes sense because sales only increased by a small amount
- Inventory increased as well which also makes sense as sales increased and with more sales comes more inventory to be available for sale
- Inventory just like accounts receivable only increased by a little bit because sales only increased by a small portion (company has good matching)
- Accounts payable increased which makes sense as they bought more assets
- However, in 2002 the company paid off a huge amount of their accounts payable and paid off less this year which is more impressive than concerning (very responsible and sustainable)

#### 4. Remaining Sources/Uses?

- They are paying back their operating line of credit which is really good because it decreased the company's working capital loan (making it further away from the credit line of limit)
- Due to shareholders account increased a lot from 2002 which shows that Watson is very committed to the company and admirable as that is his own money being put into the business
- Generating more cash from financing activities which is a good and sustainable trend for the future success of the company
- The company is still able to generate cash with an increase in assets
- The company's ending cash for each year continues to increase which is a sustainable trend and shows continual growth within the company

#### 5. Recommendations?

- So far, the company has a very strong financial history
- The most ideal recommendation to make this statement even better is to increase net income by decreasing cost of goods sold, which Watson has already identified and is the reason he wants this loan
- The increase in cost of goods sold is decreasing profit margin, thus to decrease cost of goods sold is the ultimate goal
- The company can collect accounts receivable a bit faster, however the company is being efficient with every single account

### Ratio Analysis

#### *Profitability:*

#### COGS:

- COGS increased from 2002 to 2003

- This makes sense as sales has also increased in 2003, however this trend is not a good nor sustainable trend
- A higher COGS decreases profit margin
- It is decreasing the company's profitability

#### Operating Expenses (what stands out):

- Wages and benefits is the highest account in operating expenses with 27.1% of total operating expenses
- This is way over industry average and would seem odd or concerning for most companies, however Forest of Flowers pays its employees way above industry average so that the employees will have an incentive to provide exceptional service (this is how Forest of Flowers makes a lot of their sales)

#### Total Operating Expenses:

- Total operating expenses decreased from 2002 to 2003 which is good because it means the engine of the company is running
- The company is operating efficiently
- This is a good and sustainable trend

#### Net Income:

- Net income is decreasing which is not a sustainable trend, however it's good that the company is still making a lot of income
- This is however expected as COGS increased and that eats away at the profitability of the business
- Net income can be increased by collecting money faster, stretching accounts payable a little longer and the most effective way, by decreasing COGS

#### Return on Equity:

- Net income decreased from 2002 to 2003 which makes sense as to why return on equity decreased as well
- The decrease in return on equity shows poor net income, however at least the company is still producing a net income

#### *Liquidity*

##### Current Ratio:

- It is above the bench mark of 2:1 and is way above industry average which is really good
- The company is doing really good with paying off its current liabilities
- The 2003 ratio of 2.70 is rather impressive

#### *Stability*

##### Net Worth to Total Assets:

- It increased from 2002 indicating strong stability in the company
- It is mostly funded by equity

#### Interest Coverage:

- Although interest coverage is still high, it decreased substantially from 2002 to 2003
- In 2002, the company was able to pay off their interest by almost 8 times and in 2003, the company can only pay off their interest by about 5 times
- Not a sustainable trend for the future of the business
- However it is above industry average and the decrease also makes sense as net income decreased due to the increasing COGS

#### *Efficiency*

##### Age of Receivables:

- Increased from 2002, however the company is only over industry average by one day which is not too concerning
- It would be better if the company can bring it back down to 16 days like in 2002, however it does not affect the company greatly by taking one additional day to collect money from the industry
- However, this is not a sustainable trend especially when it gets to the point where there's too much money to collect that the company gets too lazy to collect it

##### Age of Inventory:

- Age of inventory increased in 2003 which would be bad for most flower company's as flowers tend to die, however Forest of Flowers gets its products directly from the supplier and thus the flowers are most likely fresher than the rest of the industry
- It is however way over the industry average which is a little concerning
- The company should decrease the age of inventory to at least the industry average of 42 days

##### Age of Payables:

- Age of payables is way below industry average, providing the company with a huge time frame where it can stretch its AP without ticking off the suppliers
- Accounts payable did increase which makes it seem as if the company is stretching their AP, however it was only stretched by 2 days from 2002, thus not concerning yet

#### *Growth*

- The company is not growing in 2003 due to the decrease in net income
- Sales increased, however due to COGS net income decreased, which led to the decrease in equity
- If COGS is not lowered and this decreasing trend continues, it has the potential to be very concerning and is not sustainable

**Business 1220E- Lecture 22- Analysis of SCF, Ratio, Financial Projections, 4C's of Credit and Decision (Forest of Flowers) Part Two**

**Forest of Flowers Projected Income Statement**

Forest of Flowers				
Projected Statement of Earnings				
(for the Years Ending September 1, 2004)				
Items	Assumption		Low(10%)	High (3%)
Net Sales	low: 10% decrease 2003+540K	High: 3% increase 2003+720K	\$2,471,390	\$2,930,369
COGS:				
Beginning inventory	last years ending inventory from BS		\$122,796	\$122,796
Add: Purchases	solve		\$947,553	\$1,146,335
COGAFS	sum		\$1,070,349	\$1,269,131
Less: ending inventory	same days (51 days)		(\$131,221)	(\$155,591)
COGS	38% of sales		\$939,128	\$1,113,540
Gross Profit	Net sales-COGS		\$1,532,262	\$1,816,829
Operating Expenses:				
Advertising and promotion	same % (4.3%)		\$106,270	\$126,006
Automotive	same % (0.7%)		\$17,300	\$20,513
Bad debts	same % (0.2%)		\$4,943	\$5,861
Bank charges and interest	\$23,760 given		\$23,760	\$23,760
Credit card discounts	same % (1.3%)		\$32,128	\$38,095
Depreciation	same \$+180,000/10*8/12		\$47,015	\$47,015
Delivery	same % (4.7%)		\$116,155	\$137,727
Insurance	\$1,320 increase from 2003 value		\$4,823	\$4,823
Legal and accounting	same \$		\$3,426	\$3,426
Office expenses	same % (0.2%)		\$4,943	\$5,861
Repairs and maintenance	same % (0.2%)		\$4,943	\$5,861
Rent	same \$+monthly rent (\$3,000*2)*8months		\$201,014	\$201,014
Store supplies	same % (4.4%)		\$108,741	\$128,936
Telephone	same % (0.8%)		\$19,771	\$23,443
Travel and entertainment	same % (0.7%)		\$17,300	\$20,513
Utilities	same % (0.9%)		\$22,243	\$26,373
Wages and benefits	same % (27.1%)		\$669,747	\$794,130
Additional administration cost	\$3,600*8months		\$28,800	\$28,800
Total Operating Expenses	sum		\$1,433,322	\$1,636,296
Income before taxes	Gross profit-operating expense		\$98,940	\$180,533
Income taxes	income tax 2003/NEBT 2003 *income B4 taxes 2004		\$19,788	\$36,107
Net income	sum		<u>\$79,152</u>	<u>\$144,426</u>

**Forest of Flowers Projected Statement of Retained Earnings**

Forest of Flowers				
Projected Statement of Retained Earnings				
(For Year Ending September 1, 2004)				
Items	Assumption		Low (10%)	High (3%)
Beginning retained earnings	ending retained earnings from last year SORE		\$239,922	\$239,922
Add: net income	from PSEO		79,152	\$144,426
Less: dividends			-	-
Ending retained earnings			\$319,074	\$384,348

## **Business 1220E- Lecture 23- Introduction to Marketing Management**

### **What is marketing?**

- Marketing links the company to its customers
- Performance is achieved by creating, developing, and maintaining profitable relationships between the customer and the company
- A marketer is responsible for understanding, influencing, and serving people

### **The Marketing Challenge**

- The organization must identify the marketing challenge before creating the marketing plan
- Marketing challenges include:
  - o Attract more customers into the stores
  - o Increase profit from existing customers
  - o Increase customer satisfaction

### **Internal Analysis**

- Questions to consider when conducting an internal analysis include:
  - o What are our financial capabilities?
    - Financial backing
    - Marketing budget
  - o What are our marketing capabilities?
    - Established brands
    - Good sales teams
  - o What are our operational capabilities?
    - Capacity restrictions
    - Quality of production
    - Supplier relationships
  - o What kind of human resources do we have?
    - Established relationships
    - Previous experience

### **External Analysis**

- As used in Finance chapter, external analysis consists of conducting a PEST analysis  
*PEST Analysis*
  - o Political
    - Government legislations
    - Issues
  - o Economic
    - Economy
    - Cycles
    - Competition
  - o Social
    - Environment
    - Social

- Market trends
- o Technological
  - New innovations
- Not all four components of PEST analysis will apply to the case

#### *Competitive Analysis*

- o How does the product compare to other products in the same category?
- o Can the customer's perceptions be influenced by any way?
- o Who are the competitors? Are they direct or indirect competitors?
- o What are the competitors doing poorly on and well on?
- o How to compete with competitors?
- o How might competitors react to decisions made by other competing organizations?

#### *Market Segmentation*

- o Dividing people into groups based on similar characteristics in order for marketers to work more efficiently in influencing their behavior
- o Different market segmentations include:
  - Age, race, education, income, gender etc.
  - Broad vs. narrow segmentation

#### *Consumer Analysis*

- o Questions to consider include:
  - What are the consumers?
    - Demographics
    - Size of market segment
  - What do they want/value?
    - Physical product
    - Package/benefits
  - When do they buy?
    - Time of the year
    - Point in their lifestyles
  - Where do they shop/buy?
    - Distribution networks
  - How often do they buy?
    - Frequency

#### *Target Market Selection*

- More expensive to increase customers than to maintain and develop loyal customers
- Target market allows the marketer to focus all its marketing measures towards a specific group of people
- A marketer must select a target market that best fits both the external and internal capabilities of the company
- Target market refers to who has the ability to make a purchase and consumer refers to who will be using the product
- E.g. for a Barbie bike, the target market is parents who will be making the purchase and the consumer will be the child who will be using the bike

- When making marketing decisions, marketer must meet the needs of both the consumer and the target market

### **Marketing Decisions**

- Once target market is selected, the marketer must analyze the customer's needs, wants, and purchase influences
- This aids in determining the marketing mix (4 Ps of marketing)
  - o Product
  - o Price
  - o Place
  - o Promotion

#### *Product*

- o Questions to consider about the product include:
  - What product should the company produce?
  - What product characteristics are of most importance? (based on the target market)
    - Size, color, shape, texture, materials
  - Quality of the product?

#### *Price*

- o Price is based on:
  - Competition
  - Target market's ability to pay
  - Manufacturing costs of the product
  - How much the consumer is willing to pay (price perception)

#### *Place*

- o Questions to consider about the placement of a product include:
  - Which distribution channels are to be used
  - Location of the business
  - Product location in retail store
  - Product location on shelves
  - Is it easy for consumers to find the product?

#### *Promotion*

- o Questions to consider about promotion include:
  - How to effectively promote the product/service to the target market?
    - Advertising
    - Sales force
    - Branding

### **Financial Feasibility**

- Marketers then need to prove that their marketing plan is feasible through the use of numbers
- Feasible refers to how likely or probable the marketing plan is
- Questions to consider about financial feasibility include:
  - o How much money will be spent? How much money will be earned?
  - o How many units will be needed to sell to breakeven

## Simple Example of Marketing Plan



Target market:

- Moms with young children from the ages of 4-9

Product:

- Dunk mug that has a slot to put cookies in while drinking coffee, milk, hot chocolate etc.
- May make adjustments to the product by adding a lid to the cup so that children don't spill drink all over the place (meets the need for mom/target market)
- Have different cartoons and designs on the mugs to meet the needs of the consumer (SpongeBob, Barney, Frozen etc.)
- Can also have two cups where one is for the mother and the other one is for the kid (matching mother and kid dunk mugs )

Price:

- Can sell each for about \$9.99
- Also sell them in bundles, 3 for \$15.99

Place:

- Place in scholastic catalogues for children
- Department stores such as Wal-Mart
- Grocery stores such as Sobeys
- Indigo or Chapters
- Disney Store

Promotion:

- Heartfelt commercials like the one for Hellmann's Mayonnaise where the child and parent are eating sandwiches (cookies in replace) to show mother-child bonding
- Place advertisements in children TV channels such as YTV and Disney Channel
- Place the products on shows such as Breakfast Television



## **Business 1220E- Lecture 24- Introduction to Marketing Math**

### **Marketing Math**

- A marketing plan must be financially feasible (in other words must be financially reasonable)
- Marketing plan should be generating more profit than its total costs
- Considerations of a marketing plan include:
  - o Variable and fixed costs
  - o Investments
  - o Contribution

### **Classifying Costs**

#### Variable cost

- is a cost that varies depending on the volume
- Examples include:
  - o Direct wages (commission)
  - o Direct labour
  - o Cost of goods sold

#### Fixed cost

- is a cost that does not vary depending on the volume
- Examples include:
  - o Rent
  - o Depreciation
  - o Interest
  - o Manager salary
- Think of variable and fixed cost as in the income statement under operating expenses
- If it is same \$ it is a fixed cost
- If it is same % it is a variable cost

#### Investment

- is a one time cost
- Examples include:
  - o Trucks
  - o Buildings
  - o Land
  - o Furniture
  - o Computer

### **Contribution Analysis**

- Two types of contribution analysis:
  - o Unit contribution

- Represents the gross profit after covering its COGS
- Formula:
  - $\text{Unit contribution} = \text{selling price} - \text{variable costs}$
- Total contribution
  - Is the net income after paying off operating costs
  - Formula:
    - $\text{Total contribution} = \text{unit contribution} \times \# \text{ units sold}$
  - If total contribution is more than fixed costs than there is a profit
  - If total contribution is less than fixed costs than there is a loss of profit

### Breakeven Analysis

- Provides the company with an appropriate number of units required to be sold in order to cover the fixed costs of the marketing plan
- Breakeven is the amount required to be sold to make zero profit
- How to calculate breakeven:
  - Find the unit contribution
    - $\text{Unit Contribution} = \text{Selling Price} - \text{Variable Costs}$
  - Determine total fixed costs
  - Calculate the breakeven point
    - $\text{Breakeven} = \text{fixed costs} + \text{unit contribution}$

### Profit Target

- The amount of net income the company aims to make
- To find the breakeven amount with a profit target, the formula is:
  - $\text{Breakeven} = \frac{\text{fixed costs} + \text{target profit}}{\text{unit contribution}}$
- This provides information as to the volume required to sell in order to meet a specific profit target

### Weighted Average Unit Contribution

- Is the unit contribution that is proportionate to the sales weight for each product with different unit contributions for each product
- Formula:
  - $\text{WAUC} = (\% \text{ sales} \times \text{UC } 1) + (\% \text{ sales} \times \text{UC } 2) + \dots$

### Sensitivity Analysis

- provides the company with information as to which variables will have the most impact on the person's/ company's profitability
- variables include:
  - Selling price
  - Fixed costs

- 
- Variable costs
- Profit target

### Profit Potential

- To calculate profit potential, construct a smaller version of an income statement similar to the following:

Total sales	\$ XXXX
Less: variable costs	\$ <u>(XXXX)</u>
Gross margin	\$ XXXX
Less: fixed costs	\$ <u>XXXX</u>
Net profit	\$ XXXX

### Margin

- Percentage of the selling price that the seller keeps
- The money from the selling price goes towards covering fixed costs and the remainder towards profit
- Whenever we are given a selling price, we must working with margin and convert to markup
- Conversion of margin to markup:
  - $\text{Mark up} = \frac{\text{Margin}}{(100\% - \text{Margin})}$

### Mark Up

- Percentage in which the unit cost is increased from supplier along the chain until it reaches at the selling price to the customer
- When we are given cost, we must work with markup and convert to margin
- Conversion of Mark up to margin:
  - $\text{Margin} = \frac{\text{Markup}}{(100\% + \text{Markup})}$

## **Business 1220E- Lecture 25- Analyzing Marketing Plan (Catfish Creek Canoe Company)**

### **Background information**

- Steve Davidson wants to open up catfish creek canoe company
- He has extensive experience in building canoes and in wood working
- His visit to a canoe store where he was surprised by the high price of a cheap quality canoe sparked his idea of creating customized, high quality canoes
- Can build 30 canoes for the entire year taken into consideration some sick days
- In the past year he only made 3 canoes
- However, the assumption of 30 canoes comes from the increased equipment and resources available once he starts up his company

### **Internal: Corporate Capabilities**

#### Finance

- Limited funds, cant afford a bad year because he is funding everything
- He is his sole source of income (his income is based on this company)
- He needs to price the canoes to ensure that he is maximizing profit so that he can have enough income to live off of
- Also needs to take into consideration of the competitive market prices and ensure he is not under or too over the competitive market price

#### Marketing

- brand new business
- hopes people will come without guarantee
- no sales force, he works 7 days a week to build the canoes all by himself

#### Operation

- 30 canoe capacity
- Pro is that there is no mass production which is unique as competitors all mass produce
- Another pro is that he customizes the canoes; the more customized the more he can charge

#### Human Resource

- Pro is that he is knowledgeable in building canoes
- Only one person working
- Limited business experience
- Can be problematic if he gets sick or injured, resulting in even less canoes being produced
- This would result in Davidson having to increase the price even more to the point at which customers may not want to make a purchase

### **External: PEST Analysis**

### Political

- N/A

### Economic

- Can't sell during economic downturn (recession)
- Cyclical industry
- Canoes that are sold at higher prices are more affected during recession
- Highly competitive market

### Social

- Target market canoes for a hobby
- Canoes are very popular in Canada and thus makes sense to stay in Canada to sell canoes
- Lots of variety in market

### Technological

- N/A

### **External: Competitive Analysis**

Who are our competitors (direct or indirect)?

- Large and small canoe manufacturers exist within the industry

What are they currently doing well? Poorly?

- Pro is that they have good distribution channels
- Pro is that they have a variety of canoes
- Con is that they charge high prices for poor quality

How can Steve compete?

- Offer custom options such as carving in names or initials (people pay a lot for these sorts of customizable options)
- Maybe sell to a retailer as they have more customers and are more well known
- Also because people would prefer to buy luxury products from a known company as oppose to an unknown company

### **External: Customer Analysis**

Who are they?

- Above average income professionals that canoes as a hobby

What are they looking for in a canoe?

- Quality

How much are they willing to spend (price ceiling/ price floor)?

Case: \$2,000-\$10,000

Mass produced: \$750-\$3000

Exhibit 1: \$1,700-\$13,450

Mean: \$2,200-\$5,500

- By examining the differences in the lowest and highest price for canoes that customers are willing to pay in both the US and in Canada, Canadians are willing to pay a much higher price and thus makes sense to sell to Canada on top of the existing fact that the market for canoes in Canada is huge

### Decision: Pricing

What price would you charge and why?

$$BE = FC/UC \quad \text{or} \quad BE = FC/(SP - VC)$$

$$BE = \$17,572 / (\$5,472 - \$1,161)$$

$$= \$1,915$$

Variable Costs:

$$VC = \$1,161$$

Fixed Costs:

General and administrative \$8,644

Rent \$4,212

Advertising \$ \$2,396

Depreciation \$ \$2,320

$$FC = \$17,572$$

### Depreciation Calculations

Investments :

Power equipment \$5,530

Hand tools \$835

Cutter, blades, and bits \$800

Benches, stands, and cabinets	\$1,600
Forms and jigs	\$160
Office equipment	\$3,055
Total costs	\$11,980

Depreciation = Cost/useful life  
 = \$11,980/5 years  
 = \$2,396 per year

### Advertising Calculation:

Fixed Costs:

Canoe and Kayak	\$5,040
= \$140/month X 3 inches X 12 months	
Kanawa	\$1,020
Press release	\$300
Cost of ad development	\$1,000
Total	\$2,320

### Davidson's Estimate

*\$90,000 revenue target 1*

Sp= \$90,000/30 canoes  
 = \$3000

Total profit:

Revenue	\$90,000
Less: COGS	\$(34,030)
Gross Profit	\$ 55,970

*\$52,000 revenue target 2*

30= (\$22,612 + \$52,000)  
 (sp- \$1,161)

$$SP = \$3,648$$

*Sell directly to a retailer*

(assume a markup of 50%)

$$SP = \$3,648 \times 1.5$$

$$= \$5,472$$

- Retailer might be a good choice because retailer has more customers making it easier to break even
- However this would diminish the perception of a high value, custom canoe

Price points

Break even	\$1,915
Owners estimate	\$300
\$52,000 profit target	\$3,648
Selling price	\$5,472

**Business 1220E- Lecture 26- Analysis of SCF, Ratios, Financial Projections, 4C's of Credit, and decision (Forest of Flowers) Part 3**

**Forest of Flowers Projected Balance Sheet**

Forest Of Flowers Projected Balance Sheet (As at September 1, 2004)					
Items	Assumption		Low (10%)	High (3%)	
<b>ASSETS</b>					
<b>Current assets:</b>					
Cash	same\$		\$14,386	\$14,386	
Accounts recievable	same days (19)		\$128,648	\$152,540	
Inventory	same days (51)		\$131,221	\$155,591	
Prepaid expenses	same \$		\$23,528	\$23,528	
Total current assets	sum		\$297,783	\$346,045	
<b>Fixed assets</b>					
Computer hardware and software	same \$		\$18,060	\$18,060	
Furniture and fixtures	same \$		\$74,662	\$74,662	
Signage	same \$		\$25,342	\$25,342	
Leasehold improvements	same \$ +\$180K		\$411,572	\$411,572	
Corporate development	same \$		\$102,796	\$102,796	
Total fixed assets (cost)	sum		\$632,432	\$632,432	
Less: accumulated depreciation	last year same \$ +Depr x PSOE		(\$204,907)	(\$204,907)	
Net fixed assets	sum		\$427,525	\$427,525	
<b>Other assets:</b>					
Deposits	same \$		\$13,901	\$13,901	
Organization cost	same\$		\$4,039	\$4,039	
	sum		\$17,940	\$17,940	
<b>TOTAL ASSETS</b>			<b>\$743,248</b>	<b>\$791,510</b>	
<b>LIABILITIES</b>					
<b>Current liabilities:</b>					
Working capital loan	plug		(\$45,175)	(\$67,633.00)	
Accounts payable	same days (10 days)		\$25,960	\$31,406	
Taxes payable	same \$		\$28,909	\$28,909	
CP of long term loan	\$43,200 (given)		43,200	\$43,200	
Total current liabilities	sum		\$52,894	\$35,882	
<b>Long-term liabilities:</b>					
Term bank loans	\$180,000+\$29,574+33,929-\$43,200*2		157,103	\$157,103	
Due to shareholders	same \$		\$104,347	\$104,347	
Deferred income taxes	same\$		\$25,794	\$25,794	
Total long term liabilities	sum		\$287,244	\$287,244	
<b>Shareholders' equity</b>					
Share capital	same \$		\$84,036	\$84,036	
Retained earnings	from PSORE		\$319,074	\$384,348	
Total shareholders' equity	sum		\$403,110	\$468,384	
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>			<b>\$743,248</b>	<b>\$791,510</b>	

### Forest of Flowers 4 C's of Credit

Forest of Flowers				
Seasonality				
		2004 (high)	2004 (low)	
Plug		(\$67,633.00)	(\$45,175)	
Add: seasonal		\$66,000	\$66,000	
Total working capital needed		(\$1,633)	\$20,825	

Forest of Flowers				
Sensitivity				
	days	inventory amount	change in plug	New 2004 (low) plug
base case	51	\$131,221	\$0	(\$45,175)
up	70	\$180,106	\$48,885	\$94,060
down	38	\$97,772	\$82,334	\$37,159

Forest of Flowers				
Collateral				
Asset	2003 value	Factor value	Realizable value	
Accounts receivable	\$111,391	69%	\$76,860	
Inventory	\$122,796	15%	\$18,419	
Fixed Assets (net)	\$294,540	20%	\$58,908	
New fixed assets	\$180,000	40%	\$72,000	
		Total realizable collateral	\$226,187	
		Less: long term loan	(\$183,503)	
		Less: working capital needed	(\$45,175)	** means extra cash so add it to total realizable collateral
		Excess collateral	\$87,859	

Forest of Flowers			
Capacity to repay			
Ratio	P:2004 (low)	P:2004 (high)	
Current ratio	6.48	11.53	
Acid test	3.56	6.54	
Interest coverage	8.2X	5.1X	

### Interpreting the Plug

What does the plug figure mean?

- For both low and high projections for the 2004 fiscal year, Forest of Flowers would have extra cash on hand and would be nowhere near their line of credit limit of \$40,000

Will seasonality/sensitivity affect the plug?

- Seasonality would affect the plug as the flower industry has a lot of seasonal fluctuations, however even with the additional \$66,000 seasonality, they would still be under the \$40,000 limit and would not require the extra 60,000 extension to their line of credit
- Sensitivity affects the plug as if the days of inventory increases to 70 days, the plug would be very close to the extended \$100,000 credit limit but would still be under
- It would also affect the plug if days of inventory decreased to 38 days as the plug would be very close to the initial \$40,000 credit limit, however still remaining under the limit

How will this affect your decision

- Even with seasonal fluctuations and increased days of inventory, Forest of Flowers remains under both their initial \$40,000 limit and their extended \$100,000 limit and thus does not pose a concern for their ability to pay back the additional \$1.2 million long term loan to BDC

## Character

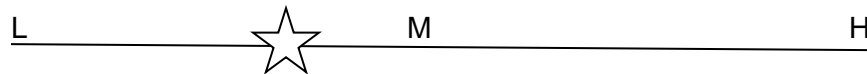
### Strengths

- Educated
- Experienced
- Great previous relationship with BDC
- Personally invested into the business
- Last expansion went very well
- Pays employees over industry average showing that he cares

### Weaknesses

- Projections are based off of the assumption that he gets a seat on the OFG
- Has never been on the OFG
- Risk that he may not be able to click the button on time (requires a certain skill to click the button at the right time to buy inventory in OFG)
- If he is unable to click the button at the right time, it can hurt Forest of Flowers by increasing COGS instead of decreasing it
- He might be saturating the market

Risk Spectrum



## Conditions

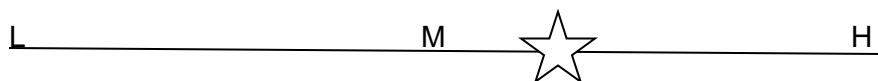
### Strengths

- Reputable business
- 13% market share
- Strong infrastructure
- One of the biggest competitors in the industry due to their supply chain (buying directly from suppliers instead of wholesalers)

### Weaknesses

- Over saturating the market
- Short shelf life (perishable)
- A lot of seasonal fluctuations

## Risk Spectrum



### Decision

As Brad MacDougall, I will approve the \$1.2 million long-term loan for Forest of Flowers for the expansion of two additional London retail locations. Approving the loan for Forest of Flowers based on projections will result to a negative plug, excess collateral, and will benefit BDC in the long-run.

Approving the loan for Forest of Flowers will decrease COGS as a percentage and result in excess cash for the company. For the low scenario which is more realistic, the plug for 2004 is projected to be \$45,174 in excess and for the High scenario, an excess of \$67,633. With excess cash, the company has more assets than liabilities and thus is more liquid, adding onto the reassurance that Forest of Flowers will have no problem paying back. In both cases, the company is nowhere near its line of credit limit of \$40,000 or the extended \$100,000 limit. This increases the possibility for Forest of Flowers to repay BDC the additional long-term loan of \$1.2 million. Even with the sensitivity and seasonality analysis, the plug is still under their limit. Fluctuations in seasonality for the flower industry is one of the risks, however with the analysis, the high scenario projects that the company will still have an excess of cash and would not need a working capital loan at all, and in the low scenario, they are still way below the \$40,000 limit. With sensitivity, the company can still afford to go up 70 days in inventory and still be under the extended \$100,000 limit. Although not ideal, this shows that with the approval of the loan, Forest of Flowers can not only afford the expansion but also have the ability to repay; interest coverage in the low scenario was 8.2X and 5.1X in high scenario.

Another reason as to the approval of the loan is that without this loan, they will not be able to secure a spot on the OFG. The OFG has the ability to decrease COGS which is estimated to result in an excess amount of cash for the business. Forest of Flowers already has a pre-existing loan with BDC and thus, the rejection of the loan request will result in the decrease in profitability for the business until they go bankrupt. This will impact BDC as the business may not be able to repay. This decrease in profitability due to COGS was shown in the income statement and is the reason for this loan request. With the loan, the business is projected to continue growing and increase profitability which results in an excess collateral if worst comes to shove. Even with the pre-existing and new loan, the company would still have an excess collateral of \$87,859, further proving that with the loan, Forest of Flowers will have the ability to pay back BDC, even if they go bankrupt.

Finally, approving the loan would benefit BDC as the projections and previous financial statements show that they are a profitable business and would be a great client for BDC that they can't give up. The loan will decrease COGS, increase profit, generate excess cash, and decrease liabilities. Since BDC has a good pre-existing relationship with Forest of Flowers, approving the loan will further develop their relationship, making it more likely for them to come

back in the future for another loan. If we do not approve the loan, some other bank will and we will lose a very big, profitable client as another chartered bank already approved a loan of \$60,000 to extend their line of credit.

There aren't a lot of risks or issues with Forest of Flowers. The only two risks would be an increasing days of inventory and his ability to succeed in OFG. Forest of Flowers is already above the industry average for days of inventory by 9 days and thus should ensure that the days don't increase any further. An increase in days of inventory would increase the need for a working capital loan to \$94,060 which although below the extended \$100,000 limit, is dangerously close to the limit. The increase in days will negatively impact the company by shifting from having excess cash to a need of almost \$100,000 in a working capital loan. Forest of Flowers is good at 51 days and to ensure days don't increase, they can try to advertise their flowers a little more during the non-busy days to ensure they are making enough sales. The only other risk is Watson's ability to use OFG efficiently to decrease COGS. He has no experience and thus may not be able to press the button at the right time to be able to decrease COGS. However, he knows what he is doing as Forest of Flowers is very successful. The only recommendation would be to stay patient and buy when it seems feasible to do so.

Overall, with the approval of the \$1.2 million long-term loan, the 2004 projections look promising and is estimated to experience everything that Watson hoped would happen. COGS should decrease and the company will once again increase its profitability while decreasing liabilities by having enough extra cash to cover most of their working capital needs. The business is overall at a low risk and thus shows that not only can they afford the expansion, but also has the ability to pay back the loan without a problem.

**Business 1220E- Lecture 27- Omega Paw Inc. Internal and External Marketing Analysis**  
**Part One**

**Alternatives**

Target Market

- New pet owner
- Existing pet owner
- Gray zone owner

Placement (distribution channels)

- Pet store
  - o Product placement in pet stores will make Omega Paw a lot of money and profit
- Mail order/TV
  - o TV allows for demonstration of the self cleaning litter box
  - o Demand for the product may exceed capacity
- Mass distribution
  - o Allows for an increase in advertising
  - o Capacity is too low for mass distribution
- Grocery store
  - o Not enough profit as there are a lot of middle men that will continue to mark up the price
  - o Do they have enough demand for the product or too much demand for the product based on their production limit of 3,500 units/week?

Promotion

- Mail TV/order
  - o Is their marketing budget of \$100,000 enough for major ad campaigns and high quality advertisements?
- Other

**Distribution Options**

1. Increase market penetration through pet stores (Canada/US)
2. US mail order/ TV campaign
3. Mass distribution outlets
4. American grocery stores

**Internal Analysis**

Finance:

- Great sales; made over \$1 million in sales in their first year of business

- Budget is low (\$100,000)
- Direct competitors budget is around \$200,000-\$300,000
- Do they have enough of a budget to meet target goals of \$5.7 million dollars within three years?
- Do they have enough capacity to achieve this target goal?

#### Marketing:

- Success with previous magazine/TV ads and manufacturer representatives sell well
- Poor prototypes (reputation); a lot of their litter boxes towards the beginning of the business had dents in them
- Manufacturer representatives also sell other products for other brands as well

#### Operations:

- Good relations with distributors
- Initial production delays damaged reputation
- Capacity to produce only 3,500 units/week

#### Human Resource:

- President of Omega is the inventor
- Working with manufacturer representatives

#### **External: Pest Analysis**

##### Political:

N/A

##### Economic:

- USA is a much larger market than Canada with 74 million in the US, and 10.2 million in Canada

##### Social:

- Cat population expected to grow 3.6% within the next few years
- 33% of Canadian households on average have 2 cats
- Typical owners spend \$792 annually on litter, litter boxes, and bowls
- More people are beginning to live in apartments
- Aging population

##### Technology:

N/A

### External: Competitive Analysis

- Everclean- \$53-\$63
  - o Very strong in their advertisement and promotion strategies
  - o The product is a bit on the more pricy side of the market
- Quicksand- \$29
  - o They have a celebrity endorsement
  - o Made mistakes in the first year of business and lost a lot of profit for the first year
- Lift and Sift- \$27
  - o Mass distribution which beat its competitor Quicksand to the market
  - o They put little efforts into advertising and promotion
- Basic Model- \$10-\$15
  - o Very inexpensive, and has an uncomplicated design
  - o It is more of an inferior product (as income increases, demand decreases)
- Litter Maid- \$129
  - o Used a lot of advertisements and guarantees a clean litter box
  - o Very expensive in which a small population of the market can afford

### Competitive Advantage

- Offers a convenient product at a convenient price that none of their other competitors have been able to provide

### External: Customer Analysis

- US market is 7.25X the size of the Canadian market
- 14.5 million households\*33%=4.8 million cat owners (market size)

New pet owner:

4.8 million\*5%=240,000 new pet owners in Canada

Existing pet owner:

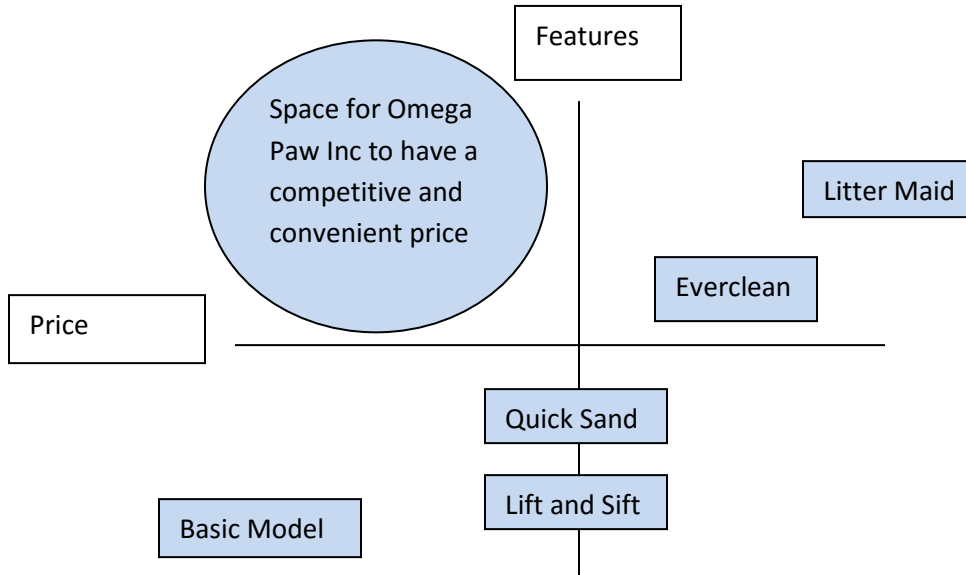
4.8 million\*80%= 3.840,000 existing pet owners in Canada

Gray Zone pet owner:

4.8 million\*15%= 720,000 gray zone pet owners in Canada

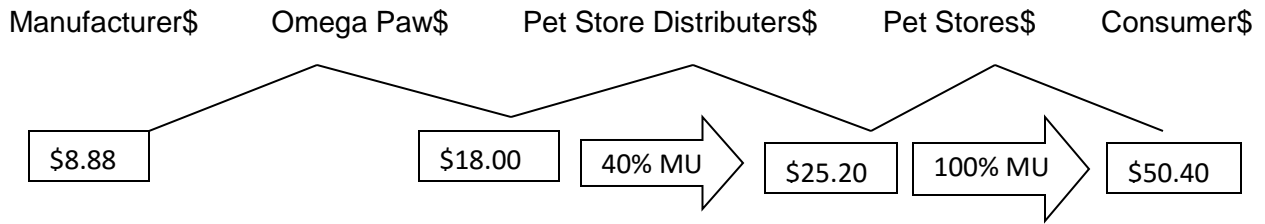
**Diagram:**

Consumer Perception map



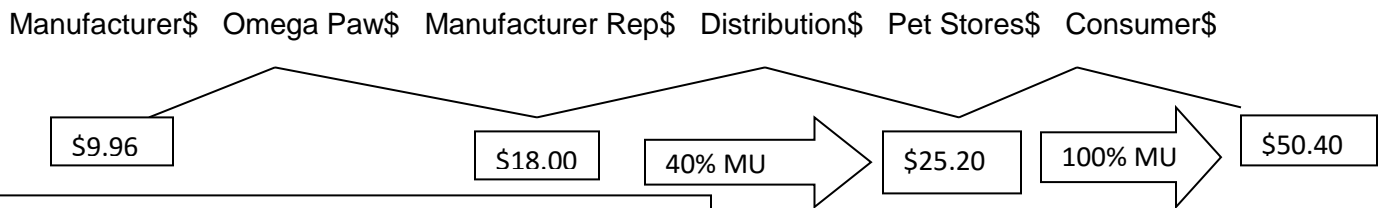


Retail Selling Price for Pet Chain Distribution (Canadian)

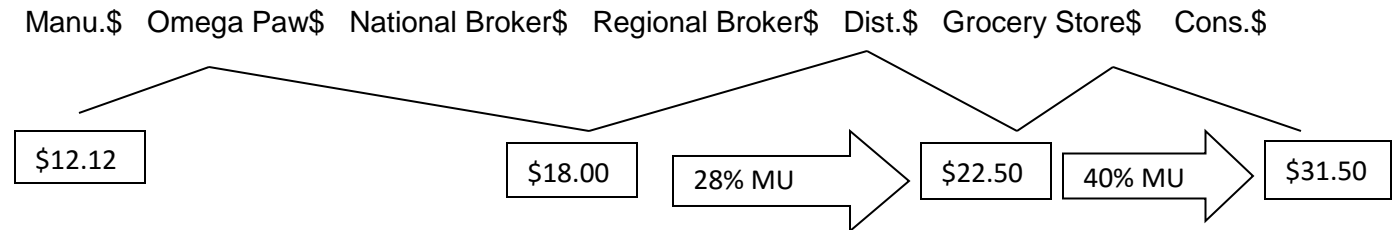


From Pet Store Distributors to Pet Stores 40% Mark up  
 =  $\$18.00 \times 1.4$   
 =  $\$25.20$   
 From Pet Store to Consumer 100% Mark up  
 =  $\$25.20 \times 2$   
 =  $\$50.40$   
 Variable costs  
 \$6.00 Production  
 \$1.50 Shipping  
 \$1.38 Packaging  
 Total:  $\$8.88$   
 Unit Contribution =  $\$18.00 - \$8.88$   
 =  $\$9.12$   
 Break even =  $\$100,000 / \$9.12$   
 =  $\$10,965$  units

Retail Selling Price for Pet Chain Distribution (American)



From Distributor to Pet Store 40% Mark up  
 =  $\$18.00 \times 1.4$   
 =  $\$25.20$   
 From Pet Store to Consumer 100% Mark up  
 =  $\$25.20 \times 2$   
 =  $\$50.40$   
 Variable Cost  
 \$6.00 Production  
 \$1.50 Shipping  
 \$1.38 Packaging  
 \$1.08 Manufacturer Representative Commission  
 Total =  $\$9.96$   
 Unit Contribution =  $\$18.00 - \$9.96$   
 =  $\$8.04$   
 Break even =  $\$100,000 / \$8.04$   
 =  $12,438$  units

Retail Selling Price for American Grocery Store

From Distributor to Grocery Store 28% Mark up  
 =  $\$18.00 \times 1.25$   
 =  $\$22.50$   
 From Grocery Store to Consumer 40% Mark up  
 =  $\$22.50 \times 1.4$   
 =  $\$31.50$   
 Variable Cost  
 \$8.88 Existing Variable Cost  
 \$1.80 Co-op Ads  
 \$0.72 National Broker  
 \$0.72 Regional Broker  
 Total=  $\$12.12$   
 Unit Contribution =  $\$18.00 - \$12.12$   
                           =  $\$5.88$   
 Break even =  $\$100,000 / \$5.88$   
                   = 17,007 units

**Target Market**

- Existing cat owners that are more towards the older age group
- Ages 50+
- Elders may not have the ability to physically clean their cats litter box
- The self-cleaning litter box's simple design makes it very easy to clean (does not require much physical ability)

**Decision**

- To increase sales to meet company sales goals, Omega Paw should consider mass distributing its products to Wal-Mart
- Wal-mart has millions of customers and generates a lot of traffic everyday
- Having products sold at Wal-Mart automatically guarantees sales success
- With the markups calculated, the retail selling price of \$25.20 provides a convenient price to its consumers; something the other competitors are not currently providing the market

- The retail price also demonstrates the high quality image that Omega Paw wants to establish, without the high-end price yet not too low as it would create a low quality perception
- The huge amount of franchise stores Wal-mart has (4,200) would allow Omega Paw to only have to sell 4 units of the self-cleaning litter box to each Wal-Mart location in order to break even
- More people are more likely to accidentally discover Omega Paw at Wal-Mart than the pet store (Wal-Mart is not a specialized store resulting in a larger store traffic)
- Selling to the American grocery stores would result in a \$50.40 retail price, placing it very close to other competitors on the preference map
- The high price would also diminish their competitive advantage of providing a convenient price for their convenient product
- Due to the large size of the product, the product would most likely be placed on the top shelf in grocery stores (making it difficult or even impossible for people to reach without the help of customer service)
- It is also not very likely that people would buy litter boxes at the grocery store along with buying their grocery's for the week

**Business 1220E- Lecture 29- Internal and External Analysis (Mackenzie and Marr Guitars)****Part One****Alternatives**

## Target Market

- Experienced
- Intermediate
- US expansion
  - o Do we have the capacity to meet the demand for the entire US and Canadian market combined?

## Promotion

- Endorsement
  - o Worked in the past with the Dragon's Den appearance
  - o Advertisement budget of \$4000/month may not be enough to score a huge endorsement deal with someone like Brad Paisley
- Google
  - o Using Google Adwords did help increase sales in the past
  - o Cap of \$25/day with \$0.50 for each click may not be enough to increase brand awareness (brand awareness lacking due to small constraint budget)
  - o Using Google Adwords "search and ad" package would require allocating the entire firm's budget towards using just Google as the promotion strategy
- Facebook
  - o Allows advertisers to target a more specific target group
  - o Not everyone has Facebook, thus eliminating a portion of potential consumers from the target market
  - o Many do not pay attention to the ads and just scroll down which may make it less effective than the other options
- Magazine
  - o AGM and GWM
  - o AGM is strictly a magazine for acoustic guitars which is good as MMG sells only guitars
  - o AGM has a total subscriber base of 52,795 readers, website traffic of 256,321 unique visitors per month, 103,000 Facebook fans and 13,800 twitter followers, providing an opportunity for an enormous amount of exposure to the target market
  - o GWM is a magazine that covers both acoustic and electric guitars which can be a good thing as some guitarists play both acoustic and electric and thus could expand the market even more and increase sales
  - o Has a total monthly readership of 140,000 and website traffic of 1 million unique visitors which provides more exposure than AGM

## Price

- \$699 new model price (suggested)
  - o This can be altered and can be increased with no consequences if the target market was towards the experienced group
  - o Experienced group are not price sensitive and are more likely to make very expensive guitar purchases (this price for the new model is quite low compared to its competitors)
  - o Tariffs on imported goods from China will increase in January 2015 and thus will affect the prices of MMG by increasing them

## Product

- New dreadnought guitar model
- Guitar accessories
  - o They don't have a lot of musical experience and thus shouldn't be adding more products that they don't necessarily know about
  - o Accessories include more than just one item, they may not know how well these accessories may work out
  - o It may however help MMG reach their monthly sales goals of 100 guitars or the \$1 million in revenue

## Internal Analysis

### Finance

- January and February, sales doubled from previous years but were still short of monthly sale goals of 100 guitars or \$1 million in annual revenue
- Advertising budget is \$4000/month
- They have very tight cash flows as they have no accounts payable
- They must pay their suppliers upon placing an order

### Marketing

- They found true success only on Dragons Den
- Can still leverage the fact that their guitar was preferred over the quality of others on Dragons Den
- They saw a sharp decline in sales when the episode was removed
- They require a lot more promotion for the new guitar and existing guitars to reach their sale targets

### Operations

- Extremely reliant on suppliers in China with capacity of 100 month
- Allow time for the wood to adapt to the colder temperature in Canada before attaching strings for the best quality
- Check to ensure all guitars meet their quality expectations
- If their manufacturer in China gain another contract, they will not be able to produce the 100 guitars needed to meet the firm's sales goal

- Currently, they can only produce enough to meet their sales goal of 100 guitars a month

#### Human Resource

- No experience in music industry
- Is it really possible or smart to get accessories with the launch of the new guitar?

#### External: Pest Analysis

##### Political

- Since 1974, Canada granted lower tariffs to several developing economies including China to help foster their growth
- After reviewing China's current economic status, the Federal Government of Canada decided to remove the lower tariffs as they are no longer in need of this financial aid
- Tariffs expected to increase from 5 -6% which is not that big of a difference and thus is not worth moving production to another location outside of China

##### Economic

- Demand for manufacturing in china is decreasing and thus the firm can ask to lower production costs as they know there is not a lot of demand
- Won't need to worry about the firm not being able to produce the 100 guitars as demand is diminishing in China
- Expected for stronger growth in economy in the future
- Outsourcing overseas would be affected by the state of the economy

##### Social

- Negative perception of quality for Chinese products which is the opposite of this firm as their guitars produced in China are of excellent quality
- Only 25% of MMG's orders come from the U.S.A. making it less likely to expand into the US
- Canada is home to approximately 2.5 million guitar players which is big enough to meet their monthly sale goals

##### Technology

- N/A

#### External: Competitive Analysis

- MMG's competitive advantage is providing guitars of excellent quality for a more affordable price than all other competitors

#### External: Consumer Analysis

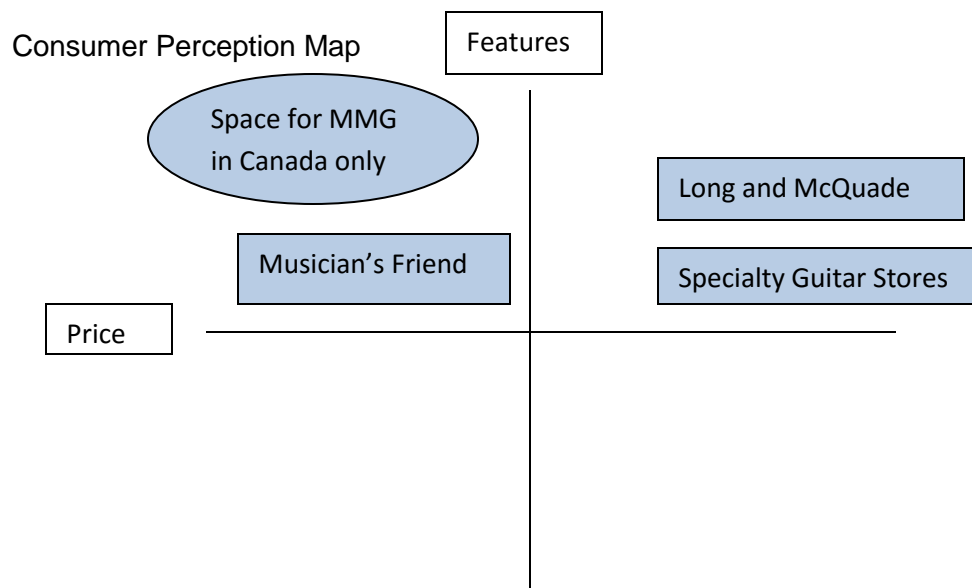
- Experienced Players
  - o Current target market

- 45-60 years old, mostly male
- Looking for high quality
- Intermediate
  - Potential target market
  - 15-22 years old, both genders
  - Looking for above average quality at low price
- U.S. Expansion
  - 25% of current orders come from US
  - \$500 million industry
  - Highly competitive, new logistical challenges
- Canada V.S. US Market
  - Canadian Acoustic Guitar Market= \$59 million
    - \$1 million sales goal= 1.7% market share
  - US Acoustic Guitar Market = 500 million
    - \$1 million sales goal= 0.02% market share

### Who will be the target market?

- Decision is to target the intermediate guitar players as the new target market

### Diagram



**Business 1220E- Lecture 30- Marketing Math (Mackenzie and Marr Guitar) Part Two****Unit Contribution Calculation without Endorsement**

Tom Rush

Price: \$999.99

Margin: 40%

Unit contribution =  $\$999.99 * 40\%$ 

= \$400

Sales proportion: 41%

Tofino

Price: \$799.99

Margin: 30%

Unit contribution =  $\$799.99 * 30\%$ 

= \$240

Sales proportion: 33%

Dionisio

Price: \$899.99

Margin: 35%

Unit contribution =  $\$899.99 * 35\%$ 

= \$315

Sales proportion: 8%

New Guitar

Price: \$699.99

Margin =  $54\% / (100\% + 54\%)$ 

= 35% margin

Unit contribution =  $\$699.99 * 35\%$ 

= \$245

Sales proportion: 18%

**Weighted Average Unit Contribution Calculation**WAUC =  $(41\% * \$400) + (33\% * \$240) + (8\% * \$315) + (18\% * \$245)$ 

= \$312.50

**Breakeven Calculation**

Fixed costs:

Ad budget =  $\$4000 * 12$  months

= \$48,000

BE = FC/WAUC

$$= \$48,000/\$312.50$$

$$= 153.6$$

$$= 154 \text{ guitars}$$

### Breakeven Proportionate to Sales Goals

$$\text{BE proportionate to sales goal} = 154\text{BE}/1200 \text{ sales goal}$$

$$= 12.8\% \text{ of sales goal}$$

$$\text{Historical sales} = 35 \text{ guitars per month} * 12 \text{ months}$$

$$= 420 \text{ guitars/year}$$

$$154 \text{ BE}/420 \text{ historical sales} = 36.7\% \text{ of historical sales}$$

### Unit Contribution Calculation with Endorsement

Tom Rush

Selling price: \$999.99

Margin: 40%

Unit contribution =  $\$999.99 * 40\%$

$$= \$400$$

Sales proportion: 37.5%

Tofino

Selling price: \$799.99

Margin: 30%

Unit contribution =  $\$799.99 * 30\%$

$$= \$240$$

Sales proportion: 30%

Dionisio

Selling price: \$899.99

Margin: 35%

Unit contribution =  $\$899.99 * 35\%$

$$= \$315$$

Sales proportion: 7.5%

New Guitar

Selling price: \$699.99

Margin =  $35\% - 10\%$  (endorser commission)

$$= 25\% \text{ new margin}$$

Unit contribution =  $\$699.99 * 25\%$

$$= \$175$$

Sales proportion: 25%

**Weighted Average Unit Contribution Calculation**

$$\begin{aligned}\text{WAUC} &= (37.5\% \times \$400) + (30\% \times \$240) + (7.5\% \times \$315) + (25\% \times \$175) \\ &= \$289.38\end{aligned}$$

**Breakeven Calculation**

Fixed costs:

$$\begin{aligned}\text{Ad budget} &= \$4000 \times 12 \text{ months} \\ &= \$48,000\end{aligned}$$

$$\begin{aligned}\text{BE} &= \text{FC} / \text{WAUC} \\ &= \$48,000 / \$289.38 \\ &= 165.87 \\ &= 166 \text{ guitars}\end{aligned}$$

**Breakeven Proportionate to Sales Goals**

$$\begin{aligned}\text{BE proportionate to sales goals} &= 166 \text{ BE} / 1200 \text{ sales goal} \\ &= 13.8\% \text{ of sales goals}\end{aligned}$$

$$\begin{aligned}\text{Historical sales} &= 166 \text{ BE} / 420 \text{ historical sales} \\ &= 39.5\% \text{ of historical sales}\end{aligned}$$

**Promotion: Ad Options**

Google: Search ad VS. Remarketing

- 12,000 to 18,250 clicks when allocating annual advertising budget of \$48,000

Facebook

- 4,344 clicks
- \$1000 per month \* 12 months = \$12,000
- BE without endorsement =  $\$12,000 / \$312.50 = 39$  guitars
- BE with endorsement =  $\$12,000 / \$289.37 = 42$  guitars

Acoustic guitar Magazine

- Male, 55+ readers

- 7.5% Canadian readers
- 52,795 subscribers

#### Guitar World Magazine

- Younger demographics
- 20% Canadian readers
- 140,000 readers
- Fixed cost: ad budget \$33,345
- BE without endorsement=  $\$33,345/\$312.50= 107$  guitars
- BE with endorsement=  $\$33,345/\$289.37= 115$  guitars
- 140,000 readers per month\*12 months = 1.82 million readers per run

#### Product: Guitar Accessories

##### Pros

- Has the potential to generate more revenue
- The target market (intermediate players) are more likely to buy a lot of guitar accessories as they are still relatively new guitar players

##### Cons

- They don't have experience with selling guitar accessories through e-commerce (don't know how well sales would be for guitar accessories)
- They would need to find new suppliers to produce the guitar accessories because their current suppliers as stated in the case does not have the ability to produce the accessories

#### Endorsement

- A popular YouTube star (musician) who is within 17-27 years old
- Preferably male
- Won't require much payment and is much more realistic when it comes to the advertisement budget of \$48,000 a year
- Can ask the artist to upload a couple of videos playing the new guitar from MMG
- Can also ask the artist to provide a very brief description of the product right before playing the guitar
- The artists fan base should also be around 15-30 years old which is generally where most of the intermediate players fall in between

#### Decision

- The target market should be focused more towards intermediate players
- A YouTube star such as Leroy Sanchez who has over 1 million YouTube subscribers should be the endorser

- The price for the new mahogany guitar should remain at the suggested price of \$699.99 as it is just in between being affordable and of high quality (maintaining its competitive advantage)
- Lowering the price would result in a loss of its high quality perception and increasing the price would diminish the affordable aspect of the competitive advantage
- As for advertising, MMG should use Google AdWords and Guitar World Magazine
- The company should not expand into the US at the moment as they don't have much experience in the U.S. and should focus on Canada as most of their current sales are from Canada
- MMG should also refrain from adding guitar accessories into their product line for the time being as they have no experience with accessories and would be bad timing with the launch of their new guitar
- After sales are steady and the company is closer to reaching its sales goals of 100 guitars/month or \$1 million in revenue, then can MMG look into adding guitar accessories into the mix

## **Business 1220E- Lecture 31- How to Write a Marketing Report**

### **Case Facts V.S. Implications**

- Do not restate case facts
- Instead, use the case facts to draw implications and recommendations or provide your own opinions
- Use your internal and external analysis to draw major implications that will lead to a target market decision and the 4Ps decisions

### **Contents of the Report**

- The report should consist of:
  - o A title page
  - o An executive summary (one page and the only page in the entire report that is single spaced)
  - o The body (8 pages double spaced)
  - o Exhibits (3 pages single spaced and does not necessarily need to be included)

### **The Executive Summary**

- One page, single spaced
- An executive summary is a summary of the entire report that shows up at the beginning of the report
- However, the executive summary should be written upon completion of the report
- Should not include any new information that was not included within the report
- Should include:
  - o What is the marketing challenge?
  - o Any recommendations?
  - o What are the major points of your marketing plan?
  - o Important numbers
  - o Why your plan will work
    - Should be used in the conclusion statement of the executive summary

### **The Report Body**

- Introduction should include:
  - o What the marketing challenge is
  - o Any goals/targets?
  - o Any constraints?
- Internal/external analysis
  - o Findings from analysis
  - o Implications drawn from analysis
  - o No decisions are to be made at this point
- Recommendations
  - o Recommendations and decisions about target market and 4Ps of marketing

## Exhibits

- Used to support the decisions made in your report
- Must look professional
- Exhibits should include implications and not a summary of case facts
- Should not be referenced in footnotes throughout the report
- Mention exhibits and the numbers from the exhibits throughout the report
  - o "To see a suggested advertisement for the firm, see Exhibit 1."
- Place exhibits in order

## Writing Style

- Use headings and proofread work
- Paragraph style and should be written in full sentences
- Add page numbers at the bottom of each page after the executive summary
- No table of contents
- Write in third person
- Not all rough work will end up in the report
- Be neat and to the point

## The Marketing Challenge

- Identify and solve the marketing challenge presented in the case
- Focus on main concerns and major issues
- Identify what goals the owners aspire to achieve

## Corporate Capabilities and Implications

- Analyze the company's:
  - o Marketing
  - o Finance
  - o Operations
  - o Human resources
- Ensure to relate this back to how it will impact your marketing mix decisions
- Also ensure your plan is feasible

## PEST Analysis and Implications

- PEST analysis includes:
  - o Political
  - o Economic
  - o Social
  - o Technological
- If there is nothing in the case regarding any of these four, then do not include it in the marketing report as pages are limited
- Consider how these will change or affect your marketing mix decisions

### **Competitive Analysis and Implications**

- Identify the direct and indirect competitors and if they are doing well or not
- Analyze how the company is performing against its competition
- What is the company's competitive advantage?
- Consumer perception map is included with the exhibits, not within the body of the report
- Also consider how the competition might react to your marketing plan

### **Consumer Analysis and Implications**

- Analyze all the alternative target markets
- Analyze the consumers needs, wants, and what stimulates/motivates purchase
- What are the threats, opportunities, and implications?

### **Target Market Selection**

- Before making decisions on the 4Ps of marketing, you must choose your target market
- The entire marketing plan must be focused on this decision
- Be as specific as possible when describing the selected target market

### **Product**

- Describe the product and or service that the company is selling
- How is the product/service positioned in comparison to its competitors
- What are some implications?
- Connect back to how the product will meet the needs and wants of the selected target market

### **Placement**

- What are the pros and cons of the placement options (distribution channels)?
- Which options are reasonable based on the amount of resources the company has?
- What are implications of your placement choice and how does it fit with selected target market?

### **Price**

- May require to determine the retail selling price
- Should consider the margin/markup demands for different distribution channels
- Can use trade chain but should be included in the exhibit, not within the body
- Connect the pricing strategy back to the selected target market and if it is a good fit

### **Promotion**

- Consider the promotional alternatives to determine how to promote the product or service
- Outline promotional choices in detail

- How much would it cost to use each promotional alternative? (does not have to be for each alternative, can only determine costs associated with the chosen promotional strategy)
- Must focus on the target market and should consider how the promotional strategy fits with the selected target market

### **Promotional Strategy**

- Should consider the following when determining the promotional strategy:
  - o What message should be communicated?
  - o Actual message?
  - o Tone of message?
  - o Timing?
  - o Costs?

### **Marketing Math and Financial Feasibility**

- You can use any of the following within the marketing report:
  - o Trade chain analysis
  - o Margins and markups
  - o Breakeven analysis
  - o Unit contribution
  - o Statement of earnings
- However, a sensitivity analysis is essential within the marketing report
- Play around with numbers to determine what would be beneficial and detrimental to the company

**Business 1220E- Lecture 32- Internal and External Marketing Analysis (Gracie Barra London) Part One**

**Alternatives**

Target Market

- Western University Students
- Males
- Females
- Children

Promotion

- Western Gazette
- Direct mail
- LTC bus advertisements
- Other

Product

- Gym expansion
- Add new classes
- Increase number of classes

Price

- Pricing adjustments
- Gym membership pricing

**Marketing Objective**

- To increase enrollment and interest
- Goal of increasing enrollment by 40% within the upcoming year
  - o Currently, there are 100 members and thus wants to increase total members by an additional 40

**Internal Analysis**

Finance:

- Only has \$3000 from personal savings for marketing budget which is considered relatively small in relation to the marketing goal of an increase of 40% in enrollment
- Fateh Belkalem has secured an \$8000 interest free private investment for a potential expansion, however would require an additional \$2000, resulting in only \$1000 left over for marketing which is definitely not enough to reach goals or produce effective ads

Marketing:

- GBL received most of its advertisement attention through word of mouth, Facebook, free local newspaper articles on the gym and appearances on a local TV sports program (in the past, the company has been getting away with spending close to nothing on advertising and experiencing growth; however the increase in enrollment has since plateaued)
- Wants to create a marketing campaign

#### Operations:

- Current schedule: 13 hours of classes for children, beginners, advanced members and 3 hours of open mat
- Belkalem quitting his full time job to change GBL's hours of operation to a full time basis
- This increase in commitment provides an opportunity for adding more classes
- GBL may not have enough diversity within the classes currently offered to appeal to the different customer segments
  - o i.e. female and Western University Students

#### Human Resources:

- Belkalem is one of the 1<sup>st</sup> BJJ black belt in London and is currently the only BJJ black belt gym owner
- There has been scheduling problems with current employers
- Prior to quitting his other full time job, Belaklem did not teach a wide variety classes
  - o Poses the question: is he teaching enough?

#### External Analysis: PEST Analysis

##### Political:

- N/A

##### Economic:

- Still recovering from 2008 recession (even in 2012)
- London's unemployment rate currently around 8% which is one of the highest in all of Canada
  - o BJJ (Brazilian Jiu-Jitsu) is not a necessity and thus with high employment rates, people are less likely to pay for a membership when they could be saving that money to spend towards necessities

##### Social:

- 17% of London population are baby boomers
- Western University has 30,000 students
- Fanshaw College has 15,000 students
- Martial arts practiced by over 100 million people worldwide (huge industry)
- There is an increase in children enrollment due to the obesity epidemic

Technological:

- N/A

### **External Analysis: Consumer**

Western University Students:

- A lot of students who require additional extra-curricular's for medical school, law school, and Richard Ivey Business school applications may find enrolling in GBL's BJJ classes as beneficial
- Student's don't necessarily have a lot of disposable income to spend on a membership
  - o They can easily practice BJJ for free at the Western BJJ club and receive physical exercise from the recreational centre on campus for free
- Majority of students don't live in London, thus memberships from students would only be seasonal

Males:

- The least amount of advertising and marketing is required to attract a more male customer base, saving the company more money into expanding or just saving money in general
- Already the main customer base for GBL and thus would make it easier to attract more males

Females:

- Are untapped and could provide competitive advantage if GBL can convince them to enroll in the BJJ classes offered
- May be very expensive to advertise and convince females as their enrollment is not consistent
- 52% of the city's population are females which provides a huge market as no competitors are competing for females (competitive advantage if capable of capitalizing on this consumer segment)

Children:

- A lot of GBL's competitors are taking notice of the growth in children memberships and thus is not worth trying to compete for a share of this market, especially with the low \$3000 marketing budget
- However, getting children to start taking BJJ classes at GBL would result in a loyal relationship as the kids will continue on with training until they have mastered it ( takes years and years of continued training, earning the business steady and consistent revenue from these memberships in the long-run)

### **External Analysis: Competitor**

The Submission Academy- Brazilian Jiu-Jitsu:

- Owner is a purple belt while GBL owner is a black belt, making him more qualified (attracting more consumers to GBL)
- Prices are lower than GBL, increasing demand for Submission Academy
  - o This may be the reason to why the enrollment for Submission Academy has been increasing rapidly since its opening

#### Binder's Jiu-Jitsu Academy:

- Again, owner is less experienced in BJJ than the owner of GBL
- Offers lower prices for memberships in relation to GBL
- However, lack of diversity in BJJ classes and very few enrollments in those BJJ classes and thus is not a huge threat to GBL

#### Adrenaline:

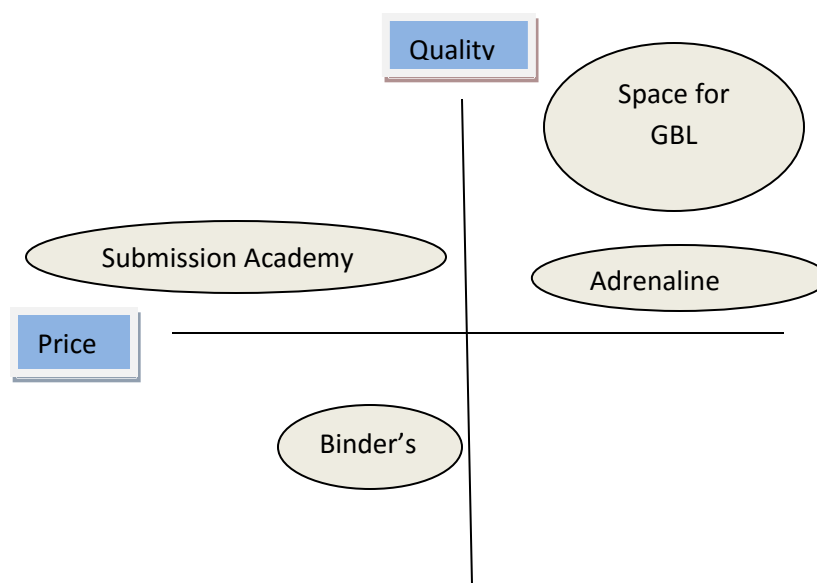
- Co-owned by professional UFC fighters, increasing publicity and word-of-mouth
  - o Has the potential to hurt the reputation and customer base of GBL
- Prices are also a little lower than the prices offered by GBL
- Offers a diverse amount of classes which attracts even more demand for memberships (targeting many different consumer segments by offering classes to meet their needs)
- Also offers more diverse classes than GBL currently offers

#### Competitive Advantage

- The quality of GBL's owner/instructor
  - o Fateh Belkalem has a black belt in BJJ making him a very knowledgeable and experienced instructor/owner

#### Diagram

##### Consumer Perception Map



## **Business 1220E- Lecture 33- Creating a Marketing Plan (Gracie Barra London) Part 2**

### **Target Market**

- Males
- Includes children and adults up to the age of 35 (males)

### **Price**

- Keep the price at \$80
- For personal one-on-one classes with Fateh, increase the price to an additional \$4 per session
- Can increase charge extra for each personal session because Fateh is a black belt in BJJ and one-on-one classes would very beneficial to the trainee and the increase in quality of training would increase demand (may even attract additional enrollment)

### **Product**

- Add more one-on-one classes with Fateh Belkalem for those who aspire to train in BJJ competitively
- Add the one-one-one classes on Sunday mornings from 10-11:00 am as the people who are serious about training one-on-one with Fateh will make the effort to wake up early
- Sunday is also usually when people, especially working adults have the most time to spare
- Saturday mornings are already consumed with children BJJ and for the adults, may not be the best time as Friday nights are usually when the adults kick back and have drinks (are more likely to be hung-over Saturday mornings than Sunday mornings)
- When targeting the more student male adults, the timings available for one-on-one training sessions should be during the available timeslots for evenings such as Monday's from 6-7 and from 7-8 pm as most students are done with classes by then
- Should only offer a limited amount of times for one-on-one classes and should sign up prior on-line
- People who are able to book their one-on-one session will have to pay an additional fee of \$4 per session (only members can sign up for these sessions)

### **Promotion**

- Referral system where a member receives a free class with every person they get to attend enroll into BJJ
- Provide a one-time free trial pass for 3 classes to non-members considering enrollment
- Use the western gazette and the LTC bus advertisements as the main methods of advertisement
- Use the full year, half page ad for the Western Gazette (total: \$963.20)
- Use the seventies size, 2 ads for 8 weeks ad for the LTC bus advertisements
  - o  $\$950 \times 2 = \$1900$
  - o Total budget left over =  $\$3000 - (\$1900 + 963.20)$   
= \$136.80

- Using seventies size for the ad on the LTC buses may be more useful in attracting adult male customers as many drive and when stopped behind the bus, will have a higher chance of reading the advertisement for GBL
- Using the half sized ad for the western gazette is better than a full page for the entire year because many students don't even bother to read the newspaper and thus allocating almost half of the ad budget would not be feasible
- Using half a page would provide the perfect amount of space to provide all the information needed to draw in more customers
- Some of the students read the Gazette to search for new extra-curricular activities for applications such as law school, medical school or even the Richard Ivey School of Business
- Leverage Fateh's experience in BJJ (competitive advantage over other competitors)

### Placement

- There cannot really be anything done about the placement of GBL
- However, they should not expand and build a new gym, they should allocate their \$3000 marketing budget towards advertising effectively and efficiently to the male target market
- Being located in Canada's 15<sup>th</sup> largest city is a huge advantage as an increase in population increases the likelihood for a greater demand
- London is also known for Western University which is home to 30,000 students actively looking for extra-curricular activities that would make them stand out amongst others in various different post-grad applications

### Decision

- Do not expand GBL by adding an additional gym
- Allocated the budget to use the LTC bus advertisements and the Western Gazette
- Provide free trials and referral systems to generate more enrollment
- Add one-on-one classes with Fateh to increase demand and provide competitive advantage (only owner that is a black belt in BJJ in London, Ontario)
- Target children and adults up to the age of 35 (males)
- Keep price the same, however for one-on-one sessions, charge an additional \$4 per session

**Business 1220E- Lecture 34- Internal and External Analysis/ Creating a Marketing Plan  
(Marble Slab Creamery: A Grand Occasion) Part One**

**Alternatives:**

Target Market

- Families
- Young adults
- Females

Potential Locations (Place)

- Vaughan
- Toronto Annex Area
- The Beaches
- Oakville

Promotion

- The Toronto Star
- NOW Magazine
- 104.5 Chum FM
- Pattison Outdoor
- Canada Post Direct Mail

Product

- Ice cream
- Possible event catering option

**Marketing Objective**

- Run a successful Marble Slab Creamery franchise successfully, with a goal of \$400,000 revenue after the first year of operations

**Internal Analysis**

Marketing:

- The actual content of the marketing campaigns were already designed by other successful Marble Slab Creamery franchises and thus Thomas only needed to worry about what promotional options to use
- The promotional option selected must be appropriate as the placement of the ads are the most important part
  - o Choosing the wrong promotional option (does not fit with the chosen target market) may result in failure for at least the first year of operations

Finance:

- Has a \$10,000 ad budget for the grand opening which should be enough to advertise the grand opening of Marble Slab Creamery as it is already a well known brand, resulting in less marketing efforts as oppose to opening up a completely new store/company
- Received a long-term loan to help with finances
- Thomas had paid \$25,000 for start up costs with her own money which shows that she is very committed to running this franchise

#### Operations:

- Thomas quit her full time job working as the buyer for the Hudson's Bay Company to commit to her passion of running her own franchise (Marble Slab Creamery)
- She also recruited her daughter, Rhea who is a full time product assistant at Kraft Foods Canada, however because she works full time her presence at the Marble Slab Creamery was very minimal
  - o This could be problematic if the store becomes very busy and Thomas is the only one running the place (should look into possibly hiring more employees)

#### Human Resources

- No committed employees, only Thomas and her daughter, however her daughter has obligations at her full time job at Kraft Canada and thus has minimal time to work at Marble Slab
- Needs more employees, especially if business starts to pick up
- Should look at hiring more people for the busy seasons such as the summer time

#### External Analysis: PEST Analysis

##### Political:

- N/A

##### Economic:

- Most of Marble Slab's franchise locations are in the states; the economy is headed towards a downward slope
- This affects the Canadian Marble Slab locations as many are taking action to prepare for the possible effects of the negative US economy (even though compared to the US in 2008, the Canadian economy was in a stable standing)
- Marble Slab sells high quality ice cream at "luxurious" prices and would without a doubt be affected negatively if the economy goes into a recession (would not survive in the market)

##### Social:

- Many refrain from buying ice cream during the winter seasons, especially since Marble Slab is located on streets and in malls

- No one would want to buy an ice cream outside in -30 degrees and no one would want to be selling ice cream in such cold weather
- Marble Slab has been doing well with keeping up-to-date with trends such as the healthy eating/fitness trend by adding fat-free yogurt to their collection
  - This is good as the company is expanding their market segment by adding different food items to meet different group demands
- There is also a children obesity trend occurring and thus they should try to adjust their topping options to be a little on the healthier side so that parents would be more inclined to let their children eat Marble Slab's ice cream
- Ice cream is also a popular snack, with the average Canadian consuming 8.4 L annually in 2007 resulting in a huge market available

#### Technology:

- N/A

#### External Analysis: Consumer

##### Families:

- Most purchases within families are influenced by children, thus focusing on children while keeping in mind the needs of their parents can help reach the revenue goal of \$400,000
- The fat-free option can be for parents (most adults are health conscious or have diabetes etc.) and the tasty, different flavored ice cream options for the children
- Family bonding over ice cream can be used as leverage for promotional purposes to attract more families to Marble Slab
- There are some children who are lactose and tolerant and thus should be taken into consideration when deciding what other food options to include
  - May consider adding some options so that all children that enjoy ice cream are incorporated, expanding the market segment even further

##### Young Adults:

- They don't have any family obligations and have a lot more disposable income than adults with their own children do and thus can afford to treat themselves to expensive, high quality ice cream
- However, this group is constantly being targeted by every other competitor and thus may be too expensive to target to
  - May be a better idea to target another market segment that is not being targeted by other competitors as frequently like women
  - If Marble Slab can appeal to another market with less competitors, Marble Slab may have a competitive advantage
- Young adults are usually trend setters, and thus if they can attract the young adults to come to the new location, Thomas may be able to meet her \$400,000 goal

##### Women:

- They make most of the food purchases in and out of the household and thus has the potential to maximize revenue
  - o Since they usually shop at grocery stores, it may be difficult to target women as most would just pick up a tub of ice cream from their local grocery store as oppose to going to a Marble Slab and paying extra for the ice cream
- Females are also more health conscious than males and thus would require to offer more healthy options for not only them but also their children if they really want to target this market segment
- However, most of Marble Slab's competitors are targeting the other two market segments and thus, targeting women provide Marble Slab with an opportunity to tap into the market and gain a competitive advantage over the others

### External Analysis: Competitor

Direct competitors

Baskin Robbins:

- It's the largest ice cream chain in the world, and has a strong presence in the Canadian market, making Marble Slab Creamery small compared to Baskin Robbins
- However they don't offer the customize ice cream option and since the price points are relatively the same, the customizable ice cream may increase demand for Marble Slab ice cream as not everyone will enjoy the flavors offered at Baskin Robbins (options in Marble Slab are limitless)
- They do however have the 31 original flavors option making it very unlikely that someone would dislike all the flavors they have to offer
- Having their original flavors also provides Baskin Robbins with a huge competitive advantage over the rest of its competitors, including Marble Slab

Dairy Queen:

- Dairy Queen has over 2,700 restaurants worldwide, whereas Marble Slab has only 400 across the US and Canada
- Dairy Queen blizzard competed directly with what Marble Slab's mixins concept, however Marble Slab offers customized options which may appeal to more people as Dairy Queen only offers a limited amount of options (cheesecake, cookie dough blizzards)
- However, Dairy Queen is very established and has other items such as hot dogs that people would be more motivated to purchase on cold winter days (as oppose to ice cream)
- The quality of the options at Dairy Queen are not of as high quality as Marble Slab, providing Marble Slab with the competitive advantage
- However Dairy Queen is more internationally recognized and thus the demand for Dairy Queen is much more than Marble Slab (would require Marble Slab to market extensively to compete against Dairy Queen)

## Indirect competitors

### McDonalds:

- Is the world's largest and best-known quick service restaurant chain with locations in over 120 countries and thus would make it hard to compete with McDonald's McFlurry which is very similar to Marble Slab's mixins concept
- However, once again Marble Slab provides exceptional quality and customizable ice cream that McDonald's cannot compete with
- The only downfall is that McDonald's McFlurry is substantially cheaper and more affordable, driving most of the young adult market segment towards McDonalds

### Starbucks:

- Starbucks positioned itself as the place to go with friends or co-workers to socialize over drinks in a relaxing atmosphere which makes it harder for Marble Slab to compete for the young adults market segment as most will choose to go to Starbucks for their customized drinks and social experience
- However, ice cream lovers would not be satisfied at Starbucks and thus would increase demand for Marble Slab's customizable ice cream
- There is not a lot of alternatives for children at Starbucks and thus Marble Slab has a competitive advantage and would make more sense for Marble Slab to target to families with children instead of the young adults (would see a stronger customer base by targeting families)

### Grocers and Convenience Stores:

- Not as big of a competitor to Marble Slab as the other competitors
- Grocers and convenience stores attract mainly the women market segment as they are the ones that make most of the food choices in the household
- However, the ice cream offered at stores are not as fresh as the ones at Marble Slab (fresh for 30 days) and does not offer a social environment which would discourage market segments (young adults and sometimes families) from going to grocery/convenience stores
- Unless customers desire to purchase a tub of ice cream, most people would go to places like Menchies or maybe even Marble Slab to purchase small amounts of ice cream

## Competitive Advantage

- Provides high quality, fresh ice cream options that can be customizable (add topping of choice into ice cream and it will be blended in the ice cream)



## **Business 1220E- Lecture 35- Marketing Math and the 4P's Decision (Marble Slab Creamery) Part Two**

### **Target Market**

- Young adults aged 15-25 years
- They have more disposable income as they either use their allowance money or have a part time/full time job
- They don't have a lot of family obligations and thus can spend all their earned money on themselves
- Go to ice cream stores/café's for a social experience (go out with friends and chat over drinks or dessert)

### **Product**

- Do not pursue the catering option as it does not add to the profitability of the business by a lot
- Although the portable slab brings in the most profit with \$426 an event, it is very unlikely that there will be a lot of events that have at least 100 guests attending
- Display 21 flavors that would attract to young adults (more sophisticated flavors that have the flexibility to be mixed with a variety of different topics)
- The 21 flavors that Marble Slab Creamery should put on display include:
  - o Banana
  - o Caramel
  - o Cheesecake
  - o Chocolate mint
  - o Chocolate peanut butter
  - o Coffee
  - o French vanilla
  - o Mango
  - o Peanut butter
  - o Strawberry
  - o Vanilla
  - o Pina colada
  - o Mocha
  - o White chocolate
  - o Peppermint
  - o Raspberry
  - o Blueberry
  - o Black cherry
  - o Chocolate rum
  - o Birthday cake
  - o Key lime

## Placement

- Place the new Marble Slab Creamery in Vaughan
- Is the most populated city amongst the other possible locations
- The young adult population in Vaughan (Thornhill) is massive with 33,135 as oppose to the Toronto Annex area with a 3,390 young adult population
- The bigger market for the young adults in Vaughan provide Marble Slab Creamery with a higher probability of being able to capture a portion of the market segment, even with all the other competitors

## Promotion

- Use Pattison and Direct Mail as the two forms of promotion
- For Pattison, use the side bus advertisement package which comes with 7 poster ads
- Place each ad on the seven most popular bus numbers
  - o The buses that are most frequently used and usually packed means that it travels through popular routes, ensuring that the ad will be seen
- Young adults use public transportation the most as they don't have enough money for their own car but still need to travel to school, work and for social activities
- The cost of the side advertisement would be:
  - o Total cost= \$3,150 + \$120  
= \$3,270
- Very affordable as the total ad budget for the grand opening is \$10,000 leaving an additional \$3780 for other methods of promotion
- Also use the outdoor billboard option at the busiest intersection in Vaughan which is Famous Ave and Colossus Dr.
  - o Total cost= \$2,750 + \$200  
= \$2,950
- For the direct mail option, provide coupons and or invitations to the grand opening only to the target market (young adults aged 15-24 years)
- By providing direct mail to the young adult population in Vaughan, it would cost:
  - o Total cost= 33,135 people \* 11.6 cents (0.0116)  
= \$384.37
- Since its super inexpensive, we could afford to send the entire population direct mail with the \$3780 marketing budget after the Pattison expenses
  - o Total cost= 238,865 people \* 11.6 cents (0.0116)  
= \$2,770.83
  - o Left over budget = \$3,780 - \$2,770.83  
= \$1,009.17

## Price

- There is no flexibility when it comes to price as this is already decided for by the owner of the company (each franchise uses the same selling prices)
- The prices are a good fit for the target market as they have more disposable income than families who have to pay the bills and provide for their family

- Some of the product options are very inexpensive which would attract those that maybe use their allowance money and the products that are a little more on the expensive side would attract more to those within the target market that have part time/full time jobs (they can afford to splurge)

### Calculations

#### **Sundae Bar (40 people)**

Revenue:

$$= \$6.95 * 40 \text{ people}$$

$$= \$278$$

Food costs:

$$= \$5.50 * 0.48$$

$$= \$2.64 \text{ per person} * 40 \text{ people}$$

$$= \$105.6$$

Supply costs:

$$= \$0.25 * 40 \text{ people}$$

$$= \$10$$

Employee costs:

$$= 2 \text{ employees} * \$12/\text{hr} * 6 \text{ hours}$$

$$= \$144$$

Total costs:

$$= \$105.6 + \$10 + \$144$$

$$= \$259.6$$

Profitability:

$$= \$278 - \$259.6$$

$$= \$18.4$$

#### **Portable Slap (100 people)**

Revenue:

$$= \$8.95 * 100 \text{ people}$$

$$= \$895$$

Food cost:

$$= \$4.95 * 0.52$$

$$= \$2.57 \text{ per person} * 100 \text{ people}$$

$$= \$257$$

Supply cost:

$$= \$0.25 * 100 \text{ people}$$

$$= \$25$$

Employee cost:

$$= 2 \text{ employees} * \$12/\text{hr} * 6 \text{ hours}$$

$$= \$144$$

Total cost:

$$= \$257 + \$25 + \$144$$

$$= \$426$$

Profitability:

$$= \$895 - \$426$$

$$= \$469$$

### **Ice cream social (40 people)**

Revenue:

$$= \$5.95 * 40 \text{ people}$$

$$= \$238$$

Food cost:

$$= \$4.95 * 0.52$$

$$= \$2.57 \text{ per person} * 40 \text{ people}$$

$$= \$102.8$$

Supply cost:

$$= \$0.25 * 40 \text{ people}$$

$$= \$10$$

Employee cost:

$$= 2 \text{ employees} * \$12/\text{hr} * 6 \text{ hours}$$

$$= \$144$$

Total cost:

$$= \$102.8 + \$10 + \$144$$

$$= \$256.8$$

Profitability:

$$= \$238 - \$256.8$$

$$= -\$18.8$$