Carnegie Mellon University
Swartz Center for Entrepreneurship

Strength in Numbers
Welcome to CMU!

- Dave Mawhinney, Executive Director, Swartz Center for Entrepreneurship
- Christine Ferguson-Rau, CMU Alumna
- Donald Bonk, CMU Alumni
- Sonya Ford, Program Manager, CMU
- Aleks Petkov, Program Manager, CMU
Why Convene this Cohort?

- Build capacity in women and minority owned businesses in communities close to CMU
- First pilots in Homewood and Wilkinsburg
Where and When will Cohort Meet?

- Fourth Session: Wednesday, December 1\(^{st}\)
- Educational sessions at Swartz Center for Entrepreneurship at CMU Tepper Quad
Program **Strategy**

- Identify the **road to profitable growth**
- Understand **blocks on that road**
- Work together to **clear them away**
The Cash Cycle

The **cash cycle** is the time period between when a business **pays cash** for materials, inventory, and payroll, and when it **receives cash** from its customers.
The Cash Cycle

The Cash Cycle is used to determine the amount of cash needed to fund ongoing operations, and is a key factor in estimating financing requirements.
Cash Cycle Example

**Acme Manufacturing Co** is a manufacturer of organic beauty products.

Needs **cash** to buy materials, pay workers, and **manufacture products before** they can **sell** the products and **collect cash**.
Cash Cycle

- **Manufacture Products**
- **Move Products into Inventory**
- **Buy RM and Containers**
- **Move Products to Retail Store for Sale**
- **Sell Products and collect CASH**
Cash Cycle Example

Acme manufactures the products then sells them in their retail store and on-line before they collect cash.
Cash Cycle Example

Acme Direct Manufacturing Costs:

Raw Materials $ 25,000
Containers $ 40,000
$ 65,000
Cash Cycle Example

Each month, Acme Manufacturing must also pay $20,000 for indirect costs:

- Rent
- Payroll
- Utilities
- Office Expenses
Acme Mfg Cash Need

$65,000 Direct Costs + $20,000 Monthly Operating Cost

Receive $$$

Feb Mar Apr

$20,000 Monthly Operating Cost
Cash Cycle Example

Financing Needed to Fund Cash Cycle:
$105,000 Less $25,000 Cash on Hand

$80,000
Line of Credit

A **Line of Credit (LOC)** is used to **cover a business’s Cash Cycle**

**LOC** is a **credit facility** provided by a **bank** or a **CDFI** (Community Development Financial Institution)
LOC Amount

The Amount of a LOC is tied to:

- **Accounts Receivable (A/R)** - 75% to 80% collateral
  
  $80,000 in A/R – LOC of approx. $60,000

- **Inventory** - <50% collateral
  
  $100,000 in inventory – LOC up to $50,000
LOC is Different than a Term Loan

**LOC Features and Benefits**

- Interest *Only*
- Borrow, Repay, *Re-borrow*
- Principle clearance may *not be required*
- Less expensive *(lower rate)* *than Term Loans*
Required to get a LOC: Pro forma!

Requirements to apply for financing through Banks, Bridgeway Capital, URA:

All Require 3 Year Projections a.k.a. Pro forma Income Statements for 3 years into the future
The Income Statement

- **Revenues**
- **Expenses**
- **Profit or Loss**
### TEDDY FAB INC.

**STATEMENT OF INCOME**

Year Ended December 31, 2000

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td>$1,000,000</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td>200,000</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td>800,000</td>
</tr>
<tr>
<td><strong>Operating expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Selling, general, and administrative expense</td>
<td>357,700</td>
</tr>
<tr>
<td>Interest expense</td>
<td>20,000</td>
</tr>
<tr>
<td>Depreciation and amortization expense</td>
<td>5,200</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>417,100</td>
</tr>
<tr>
<td>Interest income</td>
<td>20,000</td>
</tr>
<tr>
<td><strong>Net earnings before taxes</strong></td>
<td>437,100</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>240,000</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>$197,100</td>
</tr>
</tbody>
</table>
Accurate Financial Statements

Building **accurate financial statements** is **essential** to understand your company’s **financial performance** and being able to **convey** that **performance to those that can provide capital**.
How Financial Statements are Created

The Chart of Accounts (COA)

- The COA is the foundation of your accounting system
- The COA determines how your transactions are categorized and reported in your financial statements
- Companies use a COA to organize their finances and give interested parties, such as banks, a clearer insight into their financial health
What is a Pro forma?

- **Pro forma** financial statements are based on past performance.

- Provide a **glimpse into the future** financial performance.

- **Tell a story** to banks of your “what-if“ scenario.

- Pro forma financial statements **use assumptions** about things that might occur in the future.
How to begin

Use year-to-date income statement results by MONTH along with what is expected for the remainder of the year to create a full-year pro forma statement for 2021.
Start the Process

List **events** that will **impact your income statement** in the **future** such as:

- New hires, retirements, and employee raises
- New customers
- New marketing campaigns
- New property, machinery, website, etc.
Mirror your Income Statement

Examine the Monthly Income Statement line by line; consider if each line will change in the next year based on changes in:

- Revenue
- Number of employees
- Amount of real estate space used
- Increases in costs or pricing
Explain the changes

- Keep the reader’s perspective in mind – **this is for a BANK**

- Make sure to **thoroughly explain** the basis for and **changes you have made** to your monthly income statement

- Your **Pro forma tells a story** – and like any good narrative – you need to **provide sufficient background on the characters, events, and plot points!**
Apply for a LOC!

When your pro forma Income Statement (by month for 3 years) shows profitable progress for your business – you will be ready to apply for a Line of Credit to fund your Cash Cycle and GROW!
Preparation for December Meeting

• Connect with your mentors weekly

• Build a pro forma income statement for 2022 in Excel; this will be the first year of 3-year monthly pro forma income statements that are required to obtain a line of credit

• Create a monthly pro forma income statement for 2023 and 2024. Review the pro forma with your mentor. Note all assumptions used and ask your mentor if they seem reasonable.
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