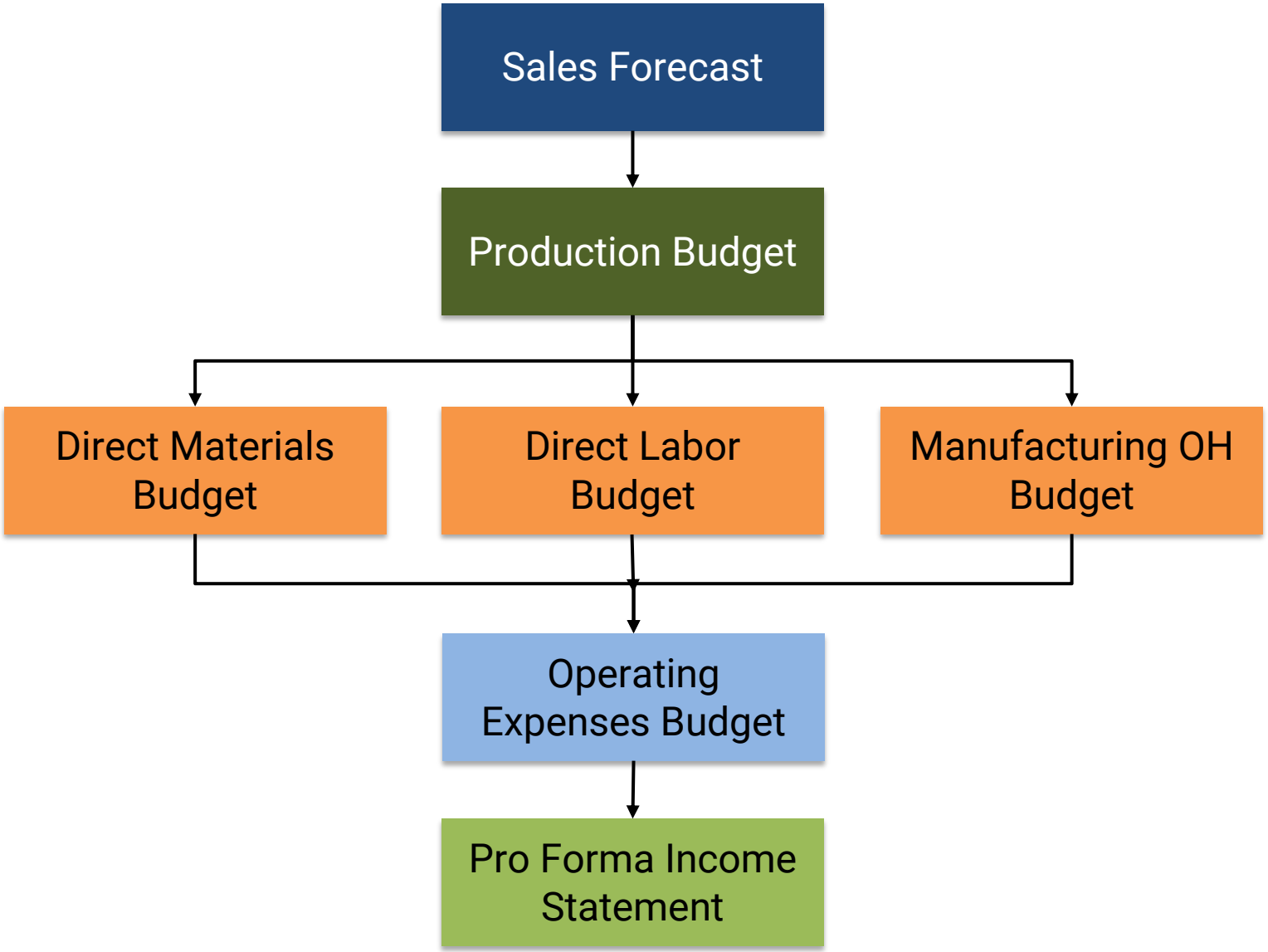
Budgeting for Profit Centers

The Master Budget…

The Operating Budget

- The “Master” plan for the entire organization…
- It is a snapshot of the operational plan…
- That ultimately establishes the basis for the pro forma income statement.



Preparing the Pro Forma Income Statement…

Let's consider a realistic example…

You run Bolder Blue Chips, an all-natural, organic, non-GMO certified, locally produced blue corn tortilla chip company.

You just returned from the West Coast Natural Food Tradeshow, where you received a lot of traction with new customers across the country.

You're now planning next year's budget, building significant growth resulting from your successful marketing campaign - and very tasty tortilla chips.

How might you go through the budgeting process?

Note: this example was adapted from "Managerial Accounting, 4th edition" by Karen Braun and Wendy Tietz, Pearson Education, Inc. (2015), pp. 507-515. This is an excellent reference on preparing a master budgets, among many other very useful topics for a Technical Manager.

Forecasting Sales and Revenues…

The Sales Forecast

# of Unit Sales ("Sales Volume")	x	Sales Price per Unit	=	Revenue

This defines your "top line" for the year.

You estimate 20% growth from last year as you expand the business.
For January, you forecast 30,000 cases of chips:

30,000 cases x $20 per case = $600,000 in January

You now forecast sales for each month of the year, based on what you did this past year…

The Revenues Forecast for Q1…

Bolder Blue Chips LLC Sales Forecast For the Quarter Ending March 31				
	Month			**1st Quarter Total**
	January	**February**	**March**	
Unit Sales (Cases)	30,000	20,000	25,000	75,000
Sales Price per Case	$20	$20	$20	$20
Revenue	**$600,000**	**$400,000**	**$500,000**	**$1,500,000**

This now becomes the "top line" in your pro forma Income Statement!

The Production Forecast for Q1…

How many cases do you need to make?

1. How many cases do you need to sell?
2. How many extra cases do you want at the end of the month?
3. The total so far…
4. How many cases do you already have?
5. How many cases you need to make…

But you need to think about the current inventory that you already have… and the future inventory buffer you want to create…

The Production Forecast for Q1…

Bolder Blue Chips LLC Production Forecast For the Quarter Ending March 31				
	Month			**1st Quarter Total**
	January	**February**	**March**	
Unit Sales (Cases)	30,000	20,000	25,000	75,000
Plus: Desired Ending Inventory				
Total Needed				
Less: Beginning Inventory				
Production Requirement:				

Let's plan for ending inventory equal to 10% of next month's forecast…

The Production Forecast for Q1…

Bolder Blue Chips LLC Production Forecast For the Quarter Ending March 31				
	Month			1st Quarter Total
	January	February	March	
Unit Sales (Cases)	30,000	20,000	25,000	75,000
Plus: Desired Ending Inventory	2,000	2,500	3,200	3,200
Total Needed	32,000	22,500	28,200	78,200
Less: Beginning Inventory				
Production Requirement:				

10%

10%

From Apr

The Production Forecast for Q1…

Bolder Blue Chips LLC Production Forecast For the Quarter Ending March 31				
	Month			1st Quarter Total
	January	February	March	
Unit Sales (Cases)	30,000	20,000	25,000	75,000
Plus: Desired Ending Inventory	2,000	2,500	3,200	3,200
Total Needed	32,000	22,500	28,200	78,200
Less: Beginning Inventory	3,000	2,000	2,500	3,000
Production Requirement:	**29,000**	**20,500**	**25,700**	**75,200**

From Dec.

The Direct Materials (DM) Budget…

What do we need to make those?

The process is similar to establishing the overall production forecast.

Direct Materials:

Blue Corn Flour: 5 pounds per case @ $1.50 per pound

Oil:
Salt:
Packaging:

we'll lump these into MOH, only to make our lives simpler because its hard to keep track of all of this…
…a sophisticated accounting system might roll these into DM

The Direct Materials Budget for Q1…

Bolder Blue Chips LLC

Direct Materials Forecast
For the Quarter Ending March 31

	Month			1st Quarter Total
	January	**February**	**March**	
Production Requirement (Cases)	29,000	20,500	25,700	75,200
Pounds of Flour (Per Case)	5	5	5	5
Quantity Needed (Pounds)	145,000	102,500	128,500	376,000
Plus: Desired Ending Inventory	10,200	12,800	16,150	16,150
Total Quantity Needed:	155,200	115,350	144,650	392,150
Less: Beginning Inventory				
Quantity to Purchase:				
Cost per Pound				
Total Direct Material Purchases:				

10%

10%

From Apr

The Direct Materials Budget for Q1…

Bolder Blue Chips LLC

Direct Materials Forecast
For the Quarter Ending March 31

	Month			1st Quarter Total
	January	**February**	**March**	
Production Requirement (Cases)	29,000	20,500	25,700	75,200
Pounds of BC Flour (Per Case)	5	5	5	5
Quantity Needed (Pounds)	145,000	102,500	128,500	376,000
Plus: Desired Ending Inventory	10,200	12,800	16,150	78,200
Total Quantity Needed:	155,200	115,350	144,650	392,150
Less: Beginning Inventory	14,500	10,200	12,800	14,500
Quantity to Purchase:	**140,750**	**105,100**	**131,800**	**377,650**

From Dec.

The Direct Materials Budget for Q1…

This now becomes part of the COGS

Bolder Blue Chips LLC

Direct Materials Forecast
For the Quarter Ending March 31

	Month			1st Quarter Total
	January	**February**	**March**	
Production Requirement (Cases)	29,000	20,500	25,700	75,200
Pounds of BC Flour (Per Case)	5	5	5	5
Quantity Needed (Pounds)	145,000	102,500	128,500	376,000
Plus: Desired Ending Inventory	10,200	12,800	16,150	78,200
Total Quantity Needed:	155,200	115,350	144,650	392,150
Less: Beginning Inventory	14,500	10,250	12,800	14,500
Quantity to Purchase:	**140,750**	**105,100**	**131,800**	**377,650**
Cost per Pound	$1.50	$1.50	$1.50	$1.50
Total Direct Material Expense:	**$211,125**	**$157,650**	**$197,700**	**$566,475**

Time for a Break!

Credits & References

Slide 1: Medical products manufacturing in a modern factory - worker operates modern industrial plant by industrieblick, Adobe Stock (321832971.jpeg).

Slide 3: The example within this lesson was adapted from "*Managerial Accounting, 4th Edition*", by Karen Braun and Wendy Tietz, Pearson Education Inc. (2015), pp. 507-515.

Slide 16: Young freelance team at a coffee break by djile, Adobe Stock (173707873.jpeg).