



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.



The Importance of Accurate Recipe Costs & Menu Engineering

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REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Mark Kelnhofer

- BA in Accounting and Business Administration
 - Ohio Dominican University, 1993
- Masters in Business Administration (MBA)
 - Ohio Dominican University, 2005
- Manufacturing Cost (1993 – 2010)
 - Plastics, Lighting, Tire Repair Kits, Buses, Restaurants
- Bravo/Brio Restaurant Group (2002 – 2009)
- Return On Ingredients (2009 – Present)
 - Bravo/Brio Restaurant Group, Eddie V's, Bob Evans Farms
- Ohio Dominican University (2007 – Present)
 - Adjunct Faculty, Accounting



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REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Restaurants vs. Manufacturing

Raw Materials Inventory





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Restaurants vs. Manufacturing

Work-In-Process Inventory





REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Restaurants vs. Manufacturing

Finished Goods





REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Restaurants vs. Manufacturing

BOH = Direct Labor





REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Restaurants vs. Manufacturing

FOH = Indirect Labor





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Restaurants vs. Manufacturing

Other manufacturing aspects as well

- Prep Time = Labor Routing
- Customer Order = Manufacturing Order
- Overhead (Direct & Indirect)
- Recipe = Bill of Material (BOM)



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The Restaurant Industry

2009 Restaurant Industry in the U.S.

- Sales of \$566 billion
- Locations 945,000
- Employs 13 million

Source: National Restaurant Association ■ restaurant.org/research



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Restaurant Failure Rate

A 10-year study was conducted by Cornell University and Michigan State University

- 27% failed in the first year
- 50% failed in the first 3 years
- 60% failed in the first 5 years
- 70% failed in the first 10 years

Source: Restaurant Owner.com ■ www.restaurantowner.com/public/302.cfm



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The U.S. Economy



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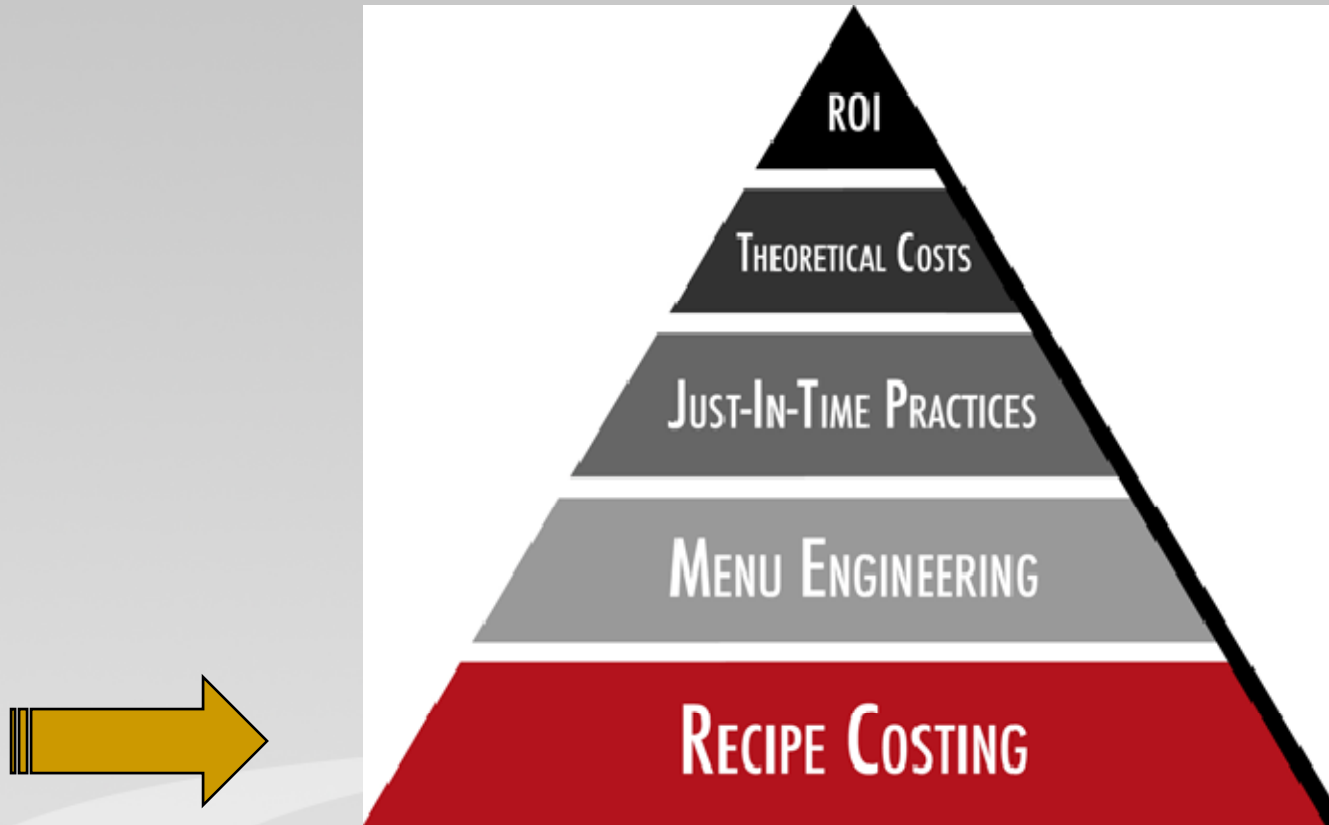
General U.S. Economy

- Recession of 2009
 - 2010 small rebound
 - 2011? Double dip recession?
 - Pending Washington, DC actions
 - States on the verge of bankruptcy
- High unemployment rate 9.7% (02/10)
- Real unemployment rate 16.8% (02/10)
- Discretionary income has dropped
 - Eating out decisions are made less often
 - Highly competitive environment
 - Airport traffic trends



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ROI Methodology



Recipe costing is the base for many other aspects of the operations.



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The Reality Is...

- Some restaurant operators do not have any written or documented recipes.
- Some have recipes that are written are only for execution, not costing.
- The few that have costing in many cases do not take a manufacturing approach.
- Menu pricing in some cases is not based on proper analysis and data.



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

What is in your control?

- *Knowing your costs*



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What is in your control?

- *Knowing your costs*
- *Establishing your selling price*



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Types of Recipes

- Batch or Prep Recipes
 - Larger quantities
 - Become their own unique inventory item when produced
 - Can be used in other recipes
- Serving or Menu Item Recipes
 - Ultimately is what is sold to the guest or customer



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Weights & Measures

- Portion control through the use of utensils (Tbsp, tsp, dishers, spoodles, etc.).
- Accuracy of weights and measures is paramount.

| 1 cup, Basil Leaves | 1 cup, Granulated Sugar |
|---------------------|-------------------------|
| 0.2 ounce | 6.8 ounces |



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Batch Recipes & Yields

- Batch recipes should account for the proper yield (what the result is) including known waste.
- When the purchased product has changed form in any way, a batch recipe should be created to account for the cost.
- If you don't account for the process and yields, your costs in most cases is *understated!*



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Batch Recipe Example #1

- We purchased 'Basil, Fresh' at \$8.50/# or \$0.531/oz

BASIL PICKED

| Ingredients | Quantity | UOM | Cost | Extended |
|--------------|----------|-----|---------|----------|
| Basil, Fresh | 16.0 | oz | \$0.531 | \$8.500 |
| | | | Yield | 11.0 oz |

- The new item 'Basil Picked' now has a correctly stated value of \$0.773/oz or \$12.36/#



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Batch Recipe Example #2

- We purchase 'P&D 31/40 Shrimp' at \$5.50/# or \$0.344/oz

P&D 16/20 SHRIMP THAWED

| Ingredients | Quantity | UOM | Cost | Extended |
|--------------------------|----------|-----|---------|----------|
| P&D 31/40 Shrimp, frozen | 16.0 | Oz | \$0.344 | \$5.500 |
| | | | Yield | 14.2 oz |

- The new item 'P&D 31/40 Thawed' now has a correctly stated value of \$0.387/oz or \$6.19/#



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Batch Recipe Example #3

- We purchase 'Lobster Bisque Soup' by the bag/8# for \$16.95 bag.

LOBSTER BISQUE SOUP YIELDED

| Ingredients | Quantity | UOM | Cost | Extended |
|---------------------|----------|-----|----------|----------|
| Lobster Bisque Soup | 1.0 | Bag | \$16.950 | \$16.950 |
| | | | Yield | 0.98 gal |

- The new item 'Lobster Bisque Soup Yielded' now has a correctly stated value of \$17.30/gallon or \$1.081/oz



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Batch Recipe Example #4

- We purchase 'Bananas' for \$0.513/#.

BANANAS PEELED

| Ingredients | Quantity | UOM | Cost | Extended |
|-------------|----------|-----|---------|----------|
| Bananas | 16.0 | Oz | \$0.032 | \$0.513 |
| | | | Yield | 10.5 oz |

- The new item 'Bananas Peeled' now has a correctly stated value of \$0.049/oz or \$0.782/#



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Execution vs. Costing

- Recipes are written differently for execution than they are for costing.
 - Execution usually states what utensils to utilize
 - Costing involves weights and measures



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Execution vs. Costing

Execution

Costing

BALSAMIC MARINADE

| Ingredients | Qty | UOM | Qty | UOM |
|-------------------------|------|-------|-------|-----|
| Olive Oil Blended 90/10 | 3.0 | cups | 24.0 | oz |
| Balsamic Vinegar | 1.0 | cup | 8.0 | oz |
| Salt and Pepper Mix | 0.25 | cup | 2.025 | oz |
| Chopped Shallots | 0.25 | cup | 1.20 | oz |
| Chopped Parsley | 0.25 | cup | 0.45 | oz |
| | | Yield | 38.0 | oz |



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Menu Level Costing

LINGUINI WITH SHRIMP & CLAMS

| | | |
|--------|----------|-------|
| LUNCH | \$ 17.00 | 23.1% |
| DINNER | \$ 17.00 | 23.1% |

| Recipe Yield | |
|--------------|------|
| Quantity | UOM |
| 1.00 | EACH |

P = Purchased

B = Batch

| TYPE | INGREDIENT DESCRIPTION | QTY | UTENCILS | | WEIGHT/LIQUID | | UOM | EXTENDED |
|------|---------------------------------------|-------|-------------|--|---------------|-----|-------------------|-----------------|
| | | | TYPE | | QTY | UOM | | |
| P | OIL BLND CANOLA/XVRGN 75/25 6-1GALGFS | | | | 1.000 | oz | 0.082 | 0.082 |
| B | DICED APPLEWOOD BACON | 1.000 | tbps | | 0.400 | oz | 0.194 | 0.077 |
| P | CLAMS MANILLA S.O. | | | | 3.000 | ea | 0.330 | 0.990 |
| B | CHOPPED GARLIC | 0.500 | tsp | | 0.200 | oz | 0.122 | 0.024 |
| P | SPICE PEPR RED CRSHD 13Z MCORM | 1.000 | tsp | | 0.100 | oz | 0.475 | 0.047 |
| B | P&D 31/40 SHRIMP THAWED | | | | 5.000 | oz | 0.386 | 1.931 |
| B | TOMATO BASIL RELISH | 1.000 | 1oz-spooble | | 1.000 | oz | 0.076 | 0.076 |
| P | CRIBARI GENERI CHABLIS CASK | | | | 1.000 | oz | 0.056 | 0.056 |
| B | THYME PICKED | 1.000 | tsp | | 0.050 | oz | 1.010 | 0.050 |
| B | HERB BUTTER | 2.000 | #60-scoop | | 1.000 | oz | 0.074 | 0.074 |
| B | SALT & PEPPER MIX | 1.000 | pinch | | 0.021 | oz | 0.043 | 0.001 |
| B | COOKED LINGUINI | | | | 7.000 | oz | 0.022 | 0.152 |
| B | CHICKEN STOCK | | | | 2.000 | oz | 0.028 | 0.056 |
| B | LINDEY'S BREAD SERVICE | | | | 1.000 | ea | 0.309 | 0.309 |
| | | | | | | | Total Cost | \$ 3.926 |



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Labor & Overhead Costs

- Your labor and overhead can be accounted for in the recipe
- Prep Time, Labor Routing
 - Time/motion studies (stopwatch)
 - Time (hours) is loaded on every recipe
- Standard Rates
 - By market
 - Based on budgeted expenses and direct labor hours



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Menu Engineering

- Your menu(s) are what you are in the business to do.
- Types of Menus
 - Lunch
 - Dinner
 - Brunch
 - Banquet
 - Kids
- Pricing Structures
 - By Markets, Demographics



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Cost-Volume-Profit (CVP)

The components that we will be analyzing:

- Menu items in the category
- Quantity/volume sold
- Selling Price
- ➔ • Unit Cost
- Cost Percentage
- Gross Margin Per Plate
- Contribution Margin



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

My Famous Quote

“You cannot place percents in your pocket!”



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

My Famous Quote

Change the focus from cost percent to gross margin dollars

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s |
|-----------------|----------|------------|-----------|--------|-------------|
| Pasta Fettucine | 1 | \$11.99 | \$1.98 | 16.5% | \$10.01 |
| Filet Mignon | 1 | \$32.95 | \$12.49 | 37.9% | \$20.46 |

*Which one would you rather have?
Do we focus too much on cost percents?*



Cost Volume Profit Example

REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Which menu item should be reviewed?

SALADS

Menu in place for 6 months.

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s |
|------------------|----------|------------|-----------|--------|-------------|
| Chopped Salad | 1,664 | \$5.50 | \$0.43 | 7.8% | \$5.07 |
| Wedge of Iceberg | 1,183 | \$5.50 | \$0.33 | 6.0% | \$5.17 |
| Caesar Salad | 1,508 | \$5.50 | \$0.41 | 7.5% | \$5.09 |
| House Salad | 2,041 | \$5.50 | \$0.48 | 8.7% | \$5.02 |
| Averages | | \$5.50 | \$0.38 | 7.0% | \$5.12 |



Cost Volume Profit Example

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If the decision was based on cost percent alone, the 'House Salad' would be reviewed for action.



Cost Volume Profit Example

REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Which menu item should be reviewed?

SALADS

Menu in place for 6 months.

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s | CM \$s |
|------------------|----------|------------|-----------|-------------|-------------|-----------------|
| Chopped Salad | 1,664 | \$5.50 | \$0.43 | 7.8% | \$5.07 | \$8,437 |
| Wedge of Iceberg | 1,183 | \$5.50 | \$0.33 | 6.0% | \$5.17 | \$6,116 |
| Caesar Salad | 1,508 | \$5.50 | \$0.41 | 7.5% | \$5.09 | \$7,676 |
| House Salad | 2,041 | \$5.50 | \$0.48 | 8.7% | \$5.02 | \$10,246 |
| Averages | | \$5.50 | \$0.38 | 7.0% | \$5.12 | |

If you would have chosen the 'House Salad', you would have reviewed the menu item driving the most dollars to cover labor and overhead expenses and possibly removing it from the menu.



Cost Volume Profit Example

REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Which menu item should be removed?

SALADS

Menu in place for 6 months.

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s | CM \$s |
|------------------|----------|------------|-----------|-------------|-------------|----------------|
| Chopped Salad | 1,664 | \$5.50 | \$0.43 | 7.8% | \$5.07 | \$8,437 |
| Wedge of Iceberg | 1,183 | \$5.50 | \$0.33 | 6.0% | \$5.17 | \$6,116 |
| Caesar Salad | 1,508 | \$5.50 | \$0.41 | 7.5% | \$5.09 | \$7,676 |
| House Salad | 2,041 | \$5.50 | \$0.48 | 8.7% | \$5.02 | \$10,246 |
| Averages | | \$5.50 | \$0.38 | 7.0% | \$5.12 | |

The proper item to target to be reviewed is the 'Wedge of Iceberg'.



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What are my options?

- *Review the menu placement*
- *Reengineer an existing menu item*
 - *Review process*
 - *Alternative ingredients*
 - *Price increase*
- *Delete an item and create a new item to replace the old item*



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Engineering a New Menu Item

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s | CM \$s |
|------------------|----------|------------|-----------|--------|-------------|---------|
| Wedge of Iceberg | 1,183 | \$5.50 | \$0.33 | 6.0% | \$5.17 | \$8,437 |
| New Menu Item | - | \$TBD | \$TBD | | > \$5.17 | |

When engineering the new menu item, attempt to create the item that will increase the average gross margin on the item being removed. In this case - \$5.17/menu item.



Menu Placement

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SALADS

| Menu Item | Qty Sold | Menu Price | Unit Cost | Cost % | Unit GM \$s | CM \$s |
|---------------|----------|------------|-----------|--------|---------------|----------|
| House Salad | 2,041 | \$5.50 | \$0.48 | 8.7% | \$5.02 | \$10,246 |
| Chopped Salad | 1,664 | \$5.50 | \$0.43 | 7.8% | \$5.07 | \$8,437 |
| Field Greens | NEW | \$5.75 | \$0.43 | 7.5% | \$5.32 | |
| Caesar Salad | 1,508 | \$5.50 | \$0.41 | 7.5% | \$5.09 | \$7,676 |
| Averages | | \$5.56 | \$0.44 | 7.9% | \$5.12 | |

When reading the menu, customers read from top to bottom of the category they are looking at. Place the menu items that drive the most contribution margin to the top.



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Front of House (FOH) Sales

- If the menu layout is structured with the most profitable items on top, it should not be a secret!
- FOH personnel can play an active role in suggesting to the customers items that drive profit!



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The Top 5 Takeaways

Takeaway #1

Recipe costing is vitally important to the success of the operations. It is the base for many other management tools.



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The Top 5 Takeaways

Takeaway #2

Recipe costing can be a science. Everything can be accounted for. Guessing is not good enough.

Your menu is too important to guess at!



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The Top 5 Takeaways

Takeaway #3

Writing a recipe for execution is very different than for costing. Execution is for the line personnel. Costing is for the management.



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The Top 5 Takeaways

Takeaway #4

“You cannot place percents in your pockets!”. Shift the focus from cost percents to gross margin dollars per plate and contribution margin dollars.



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The Top 5 Takeaways

Takeaway #5

*To ensure success –
The bottom line is
know your costs!*



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Reference Books

The Book of Yields: Accuracy in Food Costing & Purchasing

Francis T. Lynch

John Wiley & Sons

ISBN 13: 978-0-471-74590-7

ISBN 10: 0-471-745909-1

Chef's Book of Formulas, Yields & Sizes

Arno Schmidt

John Wiley & Sons

ISBN 10: 0-471-22716-1

Note: Neither references is truly comprehensive. You need to practice the costing methods discussed in this presentation.



REDUCE COSTS. OPERATE EFFICIENTLY. INCREASE PROFITS.

Articles Booklet

- *“Obtaining Accurate Recipe Costs”*
- *“Improve Your Menu Engineering”*
- *“The Case For Theoretical Food Costs”*
- *“The Advantages of Just-In-Time”*
- *“Robust Supply Chain Management”*
- *“Line Checks That Create Efficiency”*

*Please email me at **mark@returnoningredients** for your free complimentary booklet that includes all of the articles above.*



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Questions & Answers

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