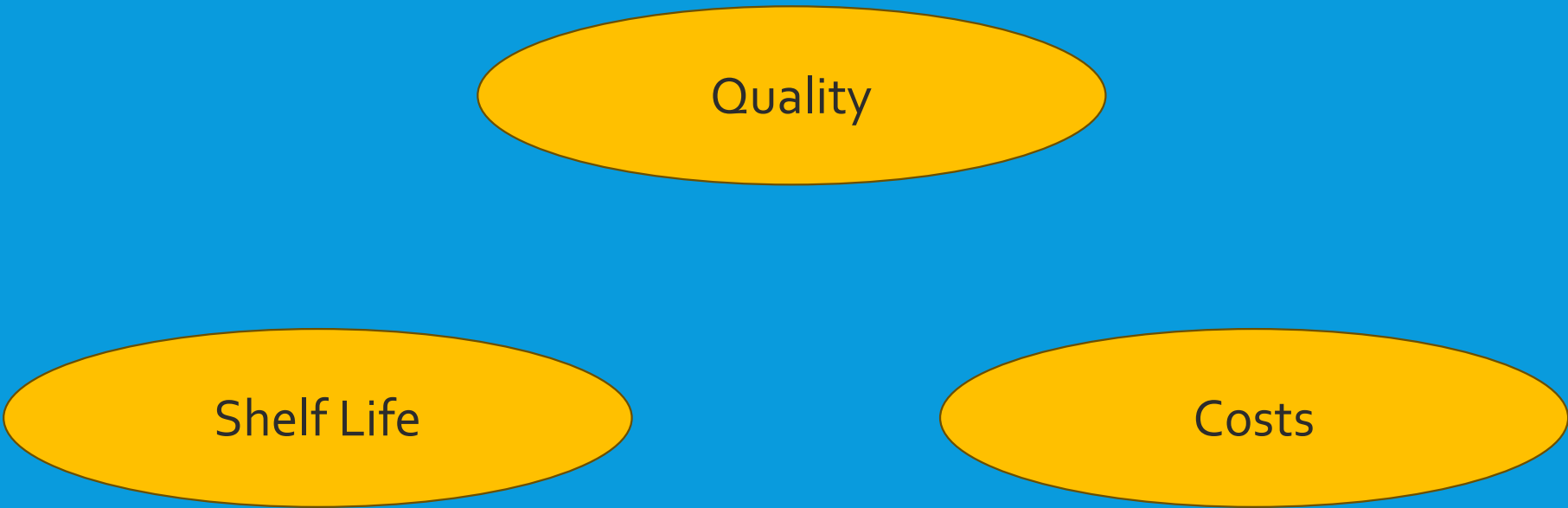


# TORTILLA TROUBLESHOOTING LATEST TIPS AND TECHNIQUES

Dr. Kirk O'Donnell  
Bakers Growth LLC



# AREAS OF TROUBLE



Quality

The diagram consists of three yellow ovals with black outlines. One oval is positioned at the top center and contains the word 'Quality'. Below it, there are two ovals arranged horizontally. The left oval contains the words 'Shelf Life' and the right oval contains the word 'Costs'. The entire diagram is set against a solid blue background.

Shelf Life

Costs

# WHAT'S NEW IN DEALING WITH THESE ISSUES?

Artificial  
Intelligence

Advances in Tech.

Differences in  
Employees

# CORRECTING QUALITY PROBLEMS

## Size and Symmetry

- Dough temp/mix time/dough water
- Protein quantity & quality
- Divider weights
- Dough relaxer
- Proof time
- Equipment adjustments



# IPAD INTERFACE- (HOT PRESS FLOUR)

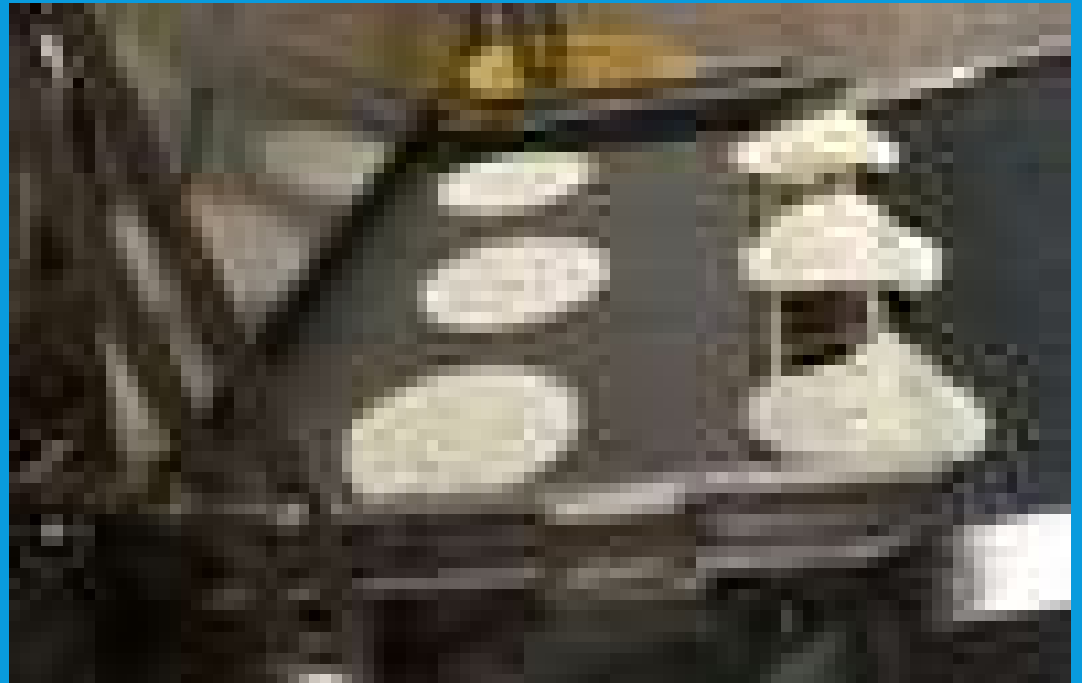
## Size and Symmetry

- Step 1: Key in data: specific product, dough temperature, scaling weight, and press temperatures.
- Step 2: Ipad tells if you are in range of the standard or not. If not in range for dough temperature, it suggests adjusting water temperature by 3 degrees for every 1 degree of dough temperature that you are off. If not in range for scaling weight, link to video on how to adjust the divider. If not in the range of press temperatures, remind operator of desired temperatures.
- Step 3: If the problem is not solved, call for a Supervisor or other authorized person to adjust the dough consistency.
- Step 4: If sizes are different on the same press, link to the video showing how to shim the press as well as how to check heating elements on the press (for Maintenance). You can also include a video on how to change the Teflon belts as an option.

# CORRECTING QUALITY PROBLEMS

## Texture/Product Integrity

- Baking powder, emulsifiers, gums, fats/oils
- Scaling weight
- Oven conditions
- Cooling conditions
- Cooking/steeping-corn
- Supply chain issues



## IPAD INTERFACE- (FLOUR AND CORN)

Texture/Product Integrity

- Step 1: Key in data: specific product, corn cooking profile, steeping time, scaling weight, oven damper settings, number of burners on.
- Step 2: Ipad tells if you are in range of the standard or not. If not in range for corn cooking and/or steeping, it reminds you of the standard. If not in range for scaling weight, link to video on how to adjust the divider or masa sheeter. If not in the range of oven damper and burner settings, remind operator of desired settings.
- Step 3: If the problem is not solved, call for a Supervisor or other authorized person to adjust the formulation and process.

# CORRECTING QUALITY PROBLEMS

Flavor and color:

- Food acids/preservative systems
- Oven conditions
- Lime usage/rinsing-corn
- Supply chain issues



# SHELF-LIFE ISSUES

- Cleanliness of production environment
- Preservative systems (mold inhibitors, gums, emulsifiers, etc.)
- pH control
- Moisture content and Water activity
- Quality of packaging and seal
- Control of conditions of supply chain

# COST ISSUES

- Yields
- Production Capacity
- Production Efficiency and waste
- Staffing and use of overtime
- Production Support (Quality of raw materials, preventive and corrective maintenance, deep cleaning/sanitation)

# GENERAL PRINCIPLES OF PROBLEM PREVENTION

- Do you define and assure consistent production standards?  
(raw materials, times and temperatures, etc.)
- Do you communicate and recognize best practices?
- Do your people know how to adjust for changing conditions?  
(raw material variation, humidity and temp. variation)
- Are new people in your organization successfully oriented  
into your company culture?
- Are you incorporating lean manufacturing concepts in your  
production facilities?

## QUESTIONS YOU COULD ASK HERE

- What would I have to do in order to make my shelf-life goals?
- What are the “trade-offs” in seeking a longer shelf life?
- How can I make my flour tortilla more label-friendly?
- How can investment in \_\_\_\_\_ reduce my production costs?
- What is the role of AI moving forward?