SOURCE REDUCTION

Automated Food Waste Tracking Systems for Food Service Operators to Minimize Waste

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ABOUT: LeanPath

• Founded in 2004 and based in Portland, OR
• Creators of the automated food waste tracking system category
• Patented technology
• Customers in 49 U.S. states
• Active internationally in the United Kingdom, Ireland, Canada, Australia, Spain and Middle East
LEANPATH VISION

Make food waste prevention easy.
My Focus: Source Reduction

Aka: Prevention Minimization

Preferred

Source Reduction
Feed Hungry People
Feed Animals
Industrial Uses
Composting
Landfill

Not Preferred

www.epa.gov/foodrecoverychallenge
My Focus: Foodservice & Retail

Production
- Farm
- Ranch
- Packaging

Distribution
- Transportation
- Storage
- Co-Packing

Point of Sale
- Foodservice
- Food retail

Consumption
- Residential

Waste & Loss
We Must Manage Two Types of Food Waste in Foodservice

Pre-Consumer
“Kitchen Waste”

• Due to overproduction, spoilage, expiration, trim waste, etc.
• Controlled by kitchen staff

Post-Consumer
“Plate Waste”

• Due to behaviors, portion sizes, self-service, etc.
• Controlled largely by guests
Pre-Consumer Food Waste: Significant Financial Opportunity

HOW MUCH OF THIS PROBLEM STEM FROM U.S. FOODSERVICE OPERATIONS?

4–10% of food purchased is thrown out before reaching a plate. $8–20 BILLION of pre-consumer waste generated by the U.S. out-of-home restaurant and foodservice industry every year.

Pre-consumer waste is the kitchen waste that occurs before the food even reaches a guest, from OVERPRODUCTION, SPOILAGE, EXPIRATION and TRIMMINGS. It’s within the control of the foodservice operator and can be prevented!
HOW TO MAKE PRE/POST-CONSUMER FOOD WASTE PREVENTION POSSIBLE & EASY?
Identify Root Causes:
Why Do We Waste Food?

• It’s a problem to **run out of food** (so we make more than we need...creating waste)

• We must serve **safe food** (so we establish margins of error...creating waste)

• Attractive merchandising and big portions may increase **customer satisfaction** and **sales** (so we over-merchandise and over-portion....creating waste)

• Large batch production helps control **labor costs** (so we produce big batches even if they’re less flexible...creating waste)

• We provide convenient service and **wide choice** (so we ensure our first and last customers experience the same options....creating waste)

• Customers purchase **more than they need** (so they feel they get plenty of value, sufficient product and plenty of choice...creating waste)
What should we think about this?

• There are **multiple valid priorities** & high stakes
• But we can improve **operational efficiency** without failing to maintain **customer satisfaction**, safety, or choice
• This new balance will be achieved through **awareness, planning, and engagement by managers & staff**
• It will also require **customer communication** about the links between expectations and food waste consequences
Make Food Waste a Safe Topic

• **Food waste myths**
  - Waste is an indicator of poor performance.
  - I should have this under control already.

• **Fear of failure**
  - What if I DON’T succeed?
  - What if I DO succeed?
  - Will my team support this?

• **Can’t this wait?**
  - Why now? I have a lot on my plate.
Culture Reset

- Open, transparent & positive
- Data-driven
- Engaged and inclusive
- Goal-focused
- Fanatical about value-added activities for customers
HOW DO WE CREATE THIS CULTURE?
Food Conservation Needs to Be On the Scoreboard

• The foodservice “scoreboard:”
  • Food Quality
  • Food Safety
  • Customer Satisfaction
  • Sanitation
  • Food Waste/Sustainability
Measurement Enables & Sustains Food Waste Prevention

Find out what is being wasted and why, so teams can...

**Understand & Improve**
- Understand the waste
- Set goals
- Track improvement

**Change Team Behavior**
- Engage employees
- Raise awareness
- Celebrate progress
Audit ≠ Tracking

Auditing
- Point in time
- SSO/mingled data collected by an audit team
- Quantity and limited food detail

Tracking
- Continuous
- SSO data collected by employees
- Item detail, context, value, condition
Use Food Waste as a Critical Control Point

What Can you Learn From your Trash?

A whole lot!

Just like archeologists learn about our history from our ancestors’ trash, your trash today can reveal how well your business is doing.
Manual Data Collection (2-Step)

- Paper Log Books & PC Data Entry
- Handwritten
- Manual analysis from paper or via PC data entry (e.g. MS Excel)
Long Term: There is a Tipping Point

Viable Strategy

Effective

Fast

Easy

Actual waste sheet
Automated Monitoring

1-step Real-time

Fixed Platforms

Light-Weight Tablet Solutions

Post-Consumer Floor Scales
Tracking Process

Kitchen → Tracking Station → Servery → Garbage / Disposal

No incremental labor required.
On average, less than 1 minute per employee per day.
Example Device

Review & Send Your Report

- **Quantity:** 1.0
- **Event Order# (Optional):**
- **Food:** Pastry - Special
- **Loss Reason:** Dropped
- **Container:** Metal 4"

Value of Loss

$2.47

Send Report
Example Feedback for Front Line
Example Dashboard

1. Total Waste Overview
2. Top Wasted Foods
3. Top Loss Reasons
4. Waste by Day of Week
5. Top Waste Sources
6. Top Highest-Value Transactions
Example: Top Wasted Foods

Top item is “Rolls”—Why? Drill Down by Clicking
Following the Data

Top Reason for Discarding Rolls is Expiration

- Expired: $736.89
- Overproduction: $559.25
- Contaminated: $96
- Trim Waste: $346.11
- Spoilage: $407.78
Drill-down the see underlying transactions to see what’s driving high-waste, high-cost opportunities.
Photo of Waste Event (Condition)
Needs to Be Easy for Managers, Too
Tracking ➔ Monitoring

FOOD WASTE ALERT

from LeanPath

IMAGE:

FOOD: Chicken Breast
WEIGHT: 18.0lb
COST: $73.08
REASON: Pan Waste-Overproduced
LOCATION:
OPERATOR: Justin R
DAY/TIME: Nov 12, 2014 7:14 PM

LOG IN TO LEANPATH ONLINE
Engage Front-Line Teams

Vivid data

Team-Based Solutions
Pre-Consumer Outcomes

- Changes to **production** levels and methods
- Changes to **purchasing** par levels, packaging, and products
- Changes to **menus and catering order guides** to eliminate waste-making options or streamline inventories
- Modifications to individual **behavior**, matching the plan more closely with the execution
Post-Consumer Outcomes

- Test **smaller portions and customization options** and monitor impact on waste generation volumes

- Modify service models to **manage portions** more effectively and reduce waste (e.g. staffed service)

- In certain operations, use data to **provide customer feedback loops** connecting waste outcomes with customer choices

- Review snapshots of plate returns and **discontinue unpopular items**
CLOSING THOUGHTS
Don’t Overlook Prevention in "Zero Waste" Initiatives

Prevention + Diversion → Zero Food Waste Effort

Total food waste generation — with prevention program

Total food waste generation — no prevention program
Let’s Take a Fresh Look at Zero Food Waste
WE ALL PLAY A ROLE IN SOLVING THE FOOD WASTE CRISIS

“Measure what is measurable. And make measurable what is not so.”

Galileo Galilei
Questions?

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