Innovation and Measurement for Food Waste Prevention: Making the Business Case

National Pollution Prevention Roundtable – Food and Beverage Webinar -- 1/15/20

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Leanpath

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Opening Video:

Leanpath: What We Do

https://vimeo.com/298071505
The Scale of the Food Waste Challenge

- FAO estimates that roughly 1/3 of all food produced for human consumption is lost or wasted – about 1.3 billion tonnes annually.
- Other studies (IMECHE, SIWI) estimate annual food loss and waste at up to 50% (2 billion tonnes).
- FAO cites the dollar cost at $1 trillion US annually ($680B in developed countries, $310B in less developed countries).
- In developed countries like the U.S., most food waste occurs at the consumer level, while in less developed countries, most food is lost prior to market.
- In the US we waste up to 40% of our food annually.
- 63 million tons, over 80% from homes/consumer-facing businesses.
- ReFED cites the economic value of food waste in the US at $218 billion.

Global Scale
Rising Momentum – Responsible Goals and Policy

Awareness of the scope and scale of the food waste challenge continues to grow

Target 12.3
By 2030, Halve per capita global food waste at the retail and consumer levels
And reduce food losses along production and supply chains, including post-harvest losses

Paris Agreement
Limit global temperature rise to 1.5°C

California Senate Bill 1383
By 2020, 50% reduction in statewide disposal of organic waste
By 2025, 75% reduction in statewide disposal of organic waste
20% of disposed edible food must be recovered for human consumption

New York State
Food Donation & Food Scraps Recycling Act
Codification, separation, donation, recycling
Global Goal – Target 12.3 of the SDGs

By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.
“Food is the single strongest lever to optimize human health and environmental sustainability on Earth. However, food is currently threatening both people and planet.”

World Resources Institute – series of reports:

Creating a Sustainable Food Future (A Menu of Solutions)

Reducing Food Loss and Waste: Setting a Global Action Agenda (A roadmap for measurement)

Reducing Food Loss and Waste: Ten Interventions to Scale Impact
And Multiple Additional Drivers

Global Footprint Network

Earth Overshoot Day (earliest ever, July 29)

The date at which humanity’s demand for ecological resources exceeds what Nature can regenerate in a year

IPCC Report: Global Warming of 1.5 °C

Global warming will likely reach 1.5 °C between 2030 and 2052 if it continues at the current rate

UNEP Emissions Gap Report: 1.5°C is still possible, but every day/year of delay increases the challenge markedly

We need to close the commitment gap between what we say we will do and what we need to do.
Moving from Awareness to Action

2020 – Transition Point – Decade of Action

Need for urgent action on food and climate
Food is the single biggest lever to impact climate

Food = Climate

Food is too valuable to waste, and too costly to waste (in terms of planet)

And when it comes to food waste, the best thing we can do is to prevent it from occurring in the first place!
LeanPath invented automated food waste prevention technology in 2004

Pioneers in Food Waste Prevention

Offices in the U.S., U.K., Spain and Australia

Over 2,500 deployments in 40 countries and all 50 U.S. states
Selected Experience – Multiple Sectors

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And hundreds more leading foodservice and hospitality brands
Prevention: [Maximum impact, often overlooked]

Our Focus...

The top of the hierarchy yields maximum benefit; impacting the entire food supply chain.
The Why...

For the love of food. And Planet.

What connects us to our world more than food?
Food is Precious, yet we waste it away...

What **system** has more potential for positive global impact?
Food Waste is a Critical Nexus Issue…

Reducing Food Waste Really Matters!
Key Areas of 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 by guests
We Often Waste Food to Manage Risk...

- Over-Production
- Food Safety
- Over-Merchandising
- Labor / Waste Trade-Offs
- Customer Experience & Choice
- Cosmetic Concerns
- Date Label Confusion
- Guarantees & Padding
- Actual Consumption Mystery
- Special Meals & Custom Menus
- Remote Events
- High Guest Expectations
What We Learned Early On

To solve this, we were going to need to roll up our sleeves and get in the kitchen.

To reduce food waste you need to change behaviors, and

*Front line workers are the change makers.*
15 years ago, we set out to solve a really big problem...
And We’ve Never Stopped Innovating

A suite of solutions
Our Vision:
Ensure a sustainable future by eliminating global food waste

We *can* take control.
It’s far beyond tools, tech and software. It’s a *complete food waste strategy*. 
Since 2014 alone, LeanPath has helped its clients prevent over 50 million pounds of food waste.
The Measurement Gap

We need data to...

**Define Baselines & Measure Change Over Time**
Without data we cannot scope the problem or assess improvement

**Conduct Root Cause Inquiries and Develop Solutions**
Without data we can’t diagnose the roots of the problem

**Engage People in the Food Waste Effort**
Food waste prevention is a team activity, and we need everyone in the kitchen (and the industry) on the team

We need data to recruit supporters
New Thinking, New Tools Needed

“We cannot solve our problems with the same thinking we used when we created them”
– Albert Einstein

“If you want to teach people a new way of thinking, don’t bother trying to teach them. Instead, give them a tool, the use of which will lead to new ways of thinking”
– R. Buckminster Fuller
Closing the Measurement Gap – 3 Key Points

The path to meaningful food waste reduction requires Prevention

**Measurement** is the optimal route to Prevention

Because metrics influence behavior....

**Automation** is the optimal approach to **Measurement**
Establishing The Business Case for Preventing Food Waste
Food Waste Costs Organizations a Bundle...

5 Costs

- Food
- Disposal
- Energy / Water
- Labor
- Lost Sales / Profit
Food waste measurement and reduction has emerged as a standard of excellence – AND an expectation – in Foodservice.
Develop Your Business Case; Link to Strategy

- Government Initiatives
- Standards
- Investor Pressure
- Public Commitments
- Analyst Studies
- Corporate Goals
- Technology Strategy

Business Case
Building the Business Case

• **Public Commitments** – IKEA, Sodexo 50%, Aramark (50%, Kroger (Zero Waste/Zero Hunger)

• **Government Initiatives** – SDGs, Target 12.3 (50%), EU Waste Framework Directive, Australia National Food Waste Strategy, NYS Climate Action Plan

• **Standards** – Food Loss and Waste Measurement Protocol (WRI)

• **Investor Pressure** – Organizations pushed to disclose food waste data

• **Analyst Studies** – ReFED Reports, BCG study, NRDC study

• **Partnership Initiatives** – WRAP and Institute of Grocery Distribution launch UK Food Waste Reduction Roadmap:
  - All major UK retailers and 50+ large food businesses have committed to achieving 50% reduction in food waste by 2030; consistent measurement, transparent reporting

Tracking, measuring, and reporting on food waste becoming a basic expectation
How to Deliver on the Promise of 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

You Can’t Manage What You Don’t Measure  
- Drucker
Smart Meters Make Tracking Easy

1-STEP REAL-TIME

Fixed Stations with Photography

Light-Weight Tablet Solutions

Pre and Post-Consumer Incremental Floor Stations
Staff Instantly See Value and Impact

Waste impact metrics and environmental equivalencies upon completion of every food waste transaction

Gamification adds to the tracker experience, “wins” encourage participation
Instant Data Transfer to the Cloud

Centralized visibility across all your sites
Your data is automatically loaded into the LeanPath Online Analytics platform
LeanPath Online – Robust Analytics

- Clear, intuitive graphics
- Drill-down capabilities for detailed investigation
- View data and trends for one or multiple sites
Data Yields Insights to Drive Behavior Change

Weekly waste summaries and detailed daily reports focus the conversation on the greatest opportunities for prevention.
Data Motivates Action

Instant alerts deliver real-time insights, enabling immediate intervention

Identify operational areas where corrective action is needed, and drive behavior change
Data Inspires Measurable Improvement

Goal module allows targeting of specific items for reduction

Keeps teams focused and engaged; enable productive conversations
Sparking Behavior Change Among Consumers...
Benefits

Reduce Waste
Reduce pre-consumer food waste by 50% or more

Increase Savings
Save 2-8% or more on annual food purchases
Additional Benefits

- **Save on Labor**: Staff spend less time preparing wasted items.
- **Save on Disposal**: You’re throwing away less.
- **Protect the Environment**: Reduce CO2 emissions and save water.
- **Increase Employee Engagement**: Let staff know they can have a major impact.
Fire up your people to prevent food waste...
Addressing Changing Societal Expectations

Business RoundTable, U.S. (August 2019)

“We respect the people in our communities and protect the environment by embracing sustainable practices across our businesses.”

World Economic Forum, Davos (December 2019)

“A company...acts as a steward of the environmental and material universe for future generations. It consciously protects our biosphere and champions a circular, shared and regenerative economy.”

“Performance must be measured not only on the return to shareholders, but also on how it achieves its environmental, social and good governance objectives.”

Changing views of business purpose

The Universal Purpose of a Company in the Fourth Industrial Revolution
Leading Change to Focus on Prevention...

The only option that impacts the bottom line

- Reduced food purchasing
- Reduced embedded labor
- Reduced disposal fees

Environmental and Social Benefits

- GHG emissions avoided
- Water consumption avoided
- Soils, Forests, Species benefit
- Free up resources for focus on root cause solutions of hunger and poverty
Game-changing Innovation - Prevention at Scale
Making the Business Case for Food Waste Prevention

Through Tracking, Measurement, Analytics, and Behavior change...

Unleashing the Multiplier Effect in Food Waste to benefit all of the SDGs

Reducing Overproduction

Reducing Earth Overshoot

Sustaining our world.
Join Us in This Journey to Make Food Waste Prevention and Measurement Daily Practice in the World’s Kitchens

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