

Unleash the Potential of AI in New Product Development

February 16, 2023





Meet
Your Moderator

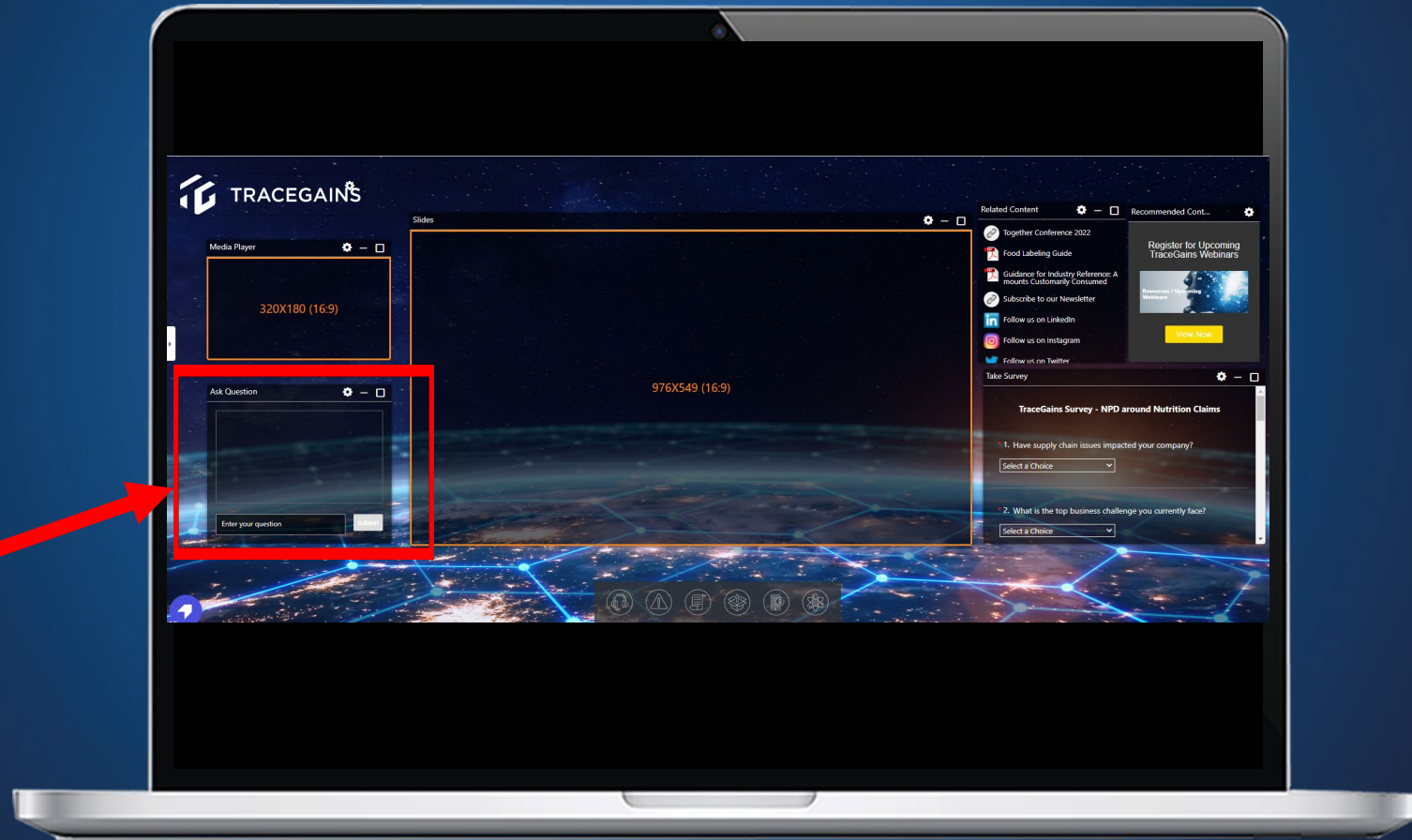


Kristen Goodale
Digital Marketing Webinar &
Podcast Specialist



Slides And Recording Will Be Shared

We want to hear from you! Please type your questions in the chat box.



Win a Gift Card...

Take our survey and
be entered to
win a **\$50** gift card!



About TraceGains

Together we do more



Food and Beverage ••• **Dietary Supplements** ••• **Retail** ••• **Consumer Packaged Goods**



TRACEGAINS

Discover the Power of Networked

What Makes TraceGains Different?

On average, companies find that 80% of their suppliers are already on TraceGains Network.



Meet

Your Speakers

Bénédicte Bimont

Global Innovation Manager | Gastrograph AI



Marin Eusterman

Product Marketing Manager | TraceGains





TRACEGAINS

gastr
graph

The hardest problem in CPG was:

Scale & distribution



The Goal was:

One mass market product that everyone likes



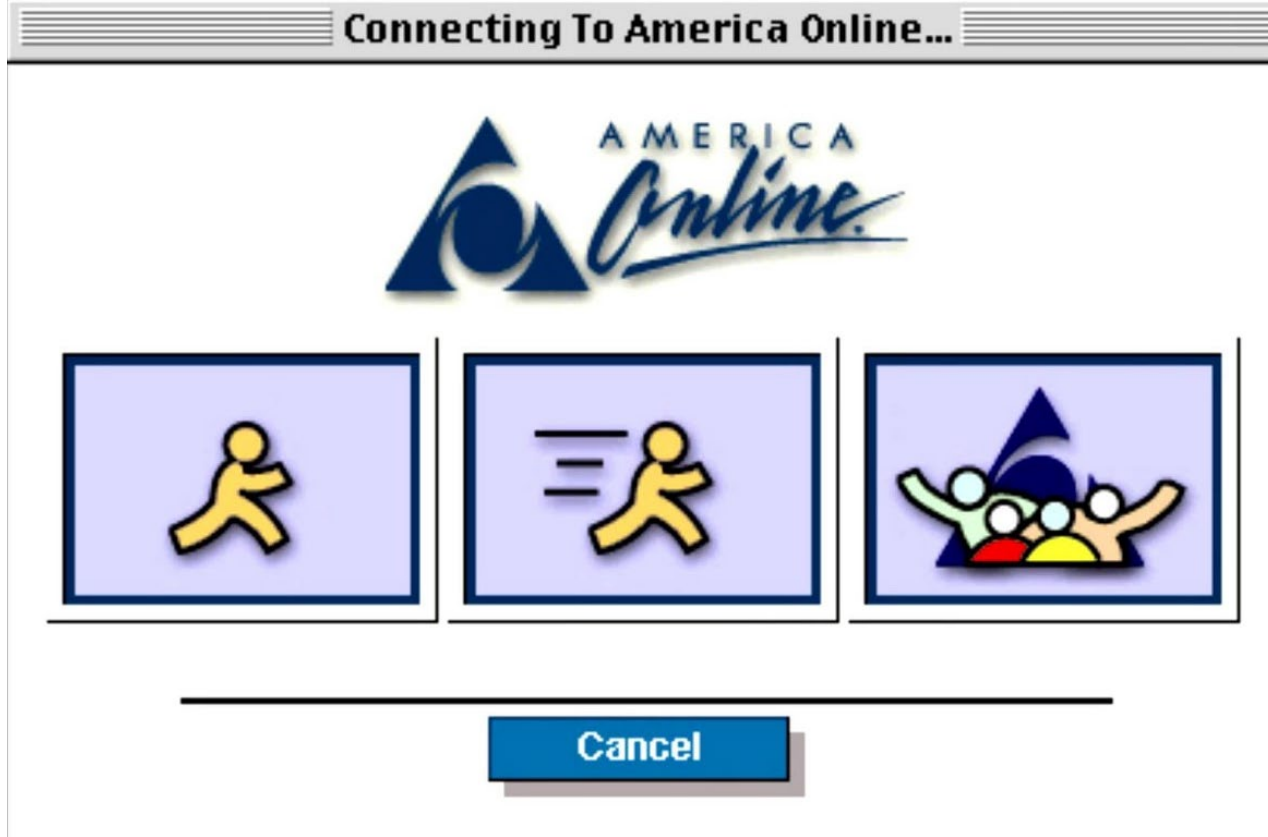


The Hardest Problem in CPG Today:

Targeted & Competitive

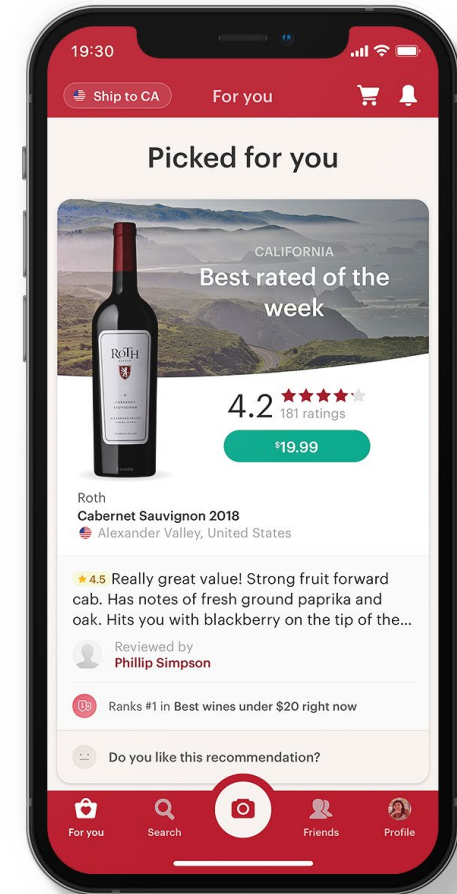


“New” Technologies Introduced to F&B



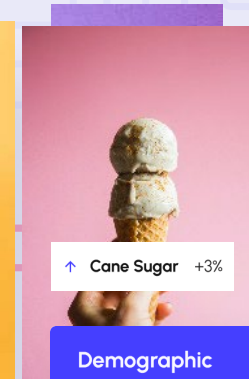
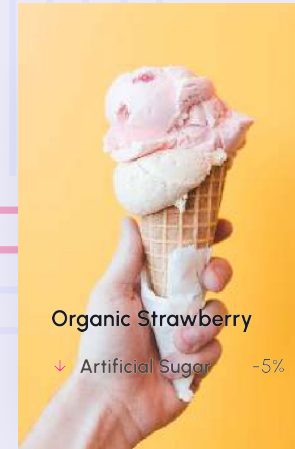


“New” Technologies Introduced to F&B



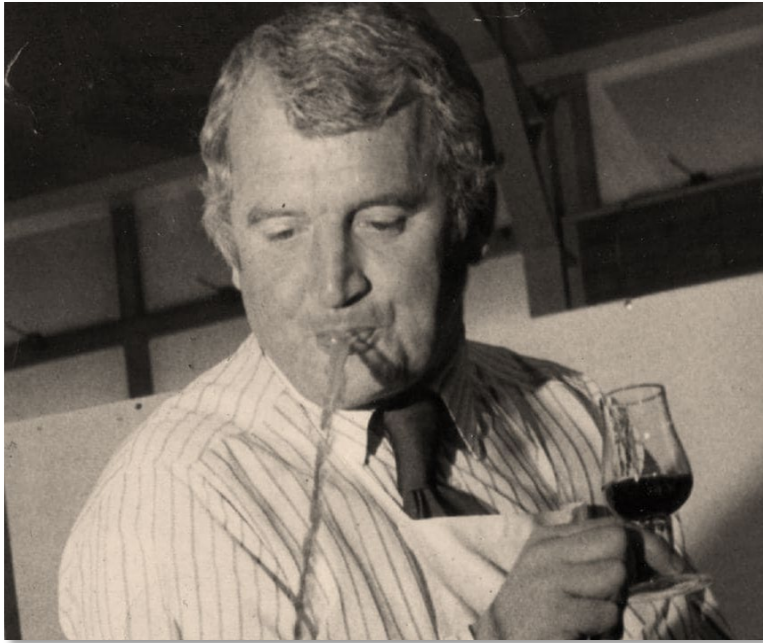
“New” Technologies Introduced to F&B

Artificial Intelligence



Demographic	
Region	Northeast US
Gender	Female
Age	24-40

Traditional Tools for Traditional Results



Human Experts

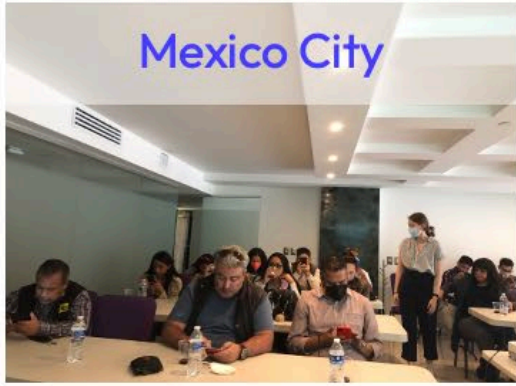


Descriptive Analysis



Consumer Panel

AI is trained from *Real People Tasting Real Products*





Gastrograph AI Global Coverage

The Gastrograph AI platform currently has predictive coverage in the following markets:

COUNTRIES

US, Argentina, Australia, Brazil (Bahia, Rio), Canada, Chile, China, Colombia, Denmark, Egypt, France, Germany, India (Mumbai, Kolkata, Chennai, Ahmedabad, Bangalore, New Delhi, Lucknow), Indonesia (West Java), Italy (Rome, Milan), Japan, Mexico, Norway, Philippines, Poland, Portugal, Romania, Russia (Moscow, SPB), Saudi Arabia, Singapore, South Africa, Spain, Thailand, Turkey (Istanbul, Ankara), UAE, UK, Vietnam (HCMC, Hanoi, Da Nang)



Some markets can be divided per regions. For example: In the US, we can make predictions for east/west. In India, we can make predictions for North/East/South/West



AI for Product Development

Like Extremely

Flavor Comparison		
Product	A	B
erol	3%	0%
um	0%	1%

Broccoli Cheddar Soup

- 2% Salt
PQ Rating: 4.00 / 7

↑ Egg +3%

Limitations of a Traditional Sensory and Empirical Data Collection

Empirical & Traditional Sensory



Static empirical data

New question : new test

Guesswork

Wrong question : Retest

Disposable insights

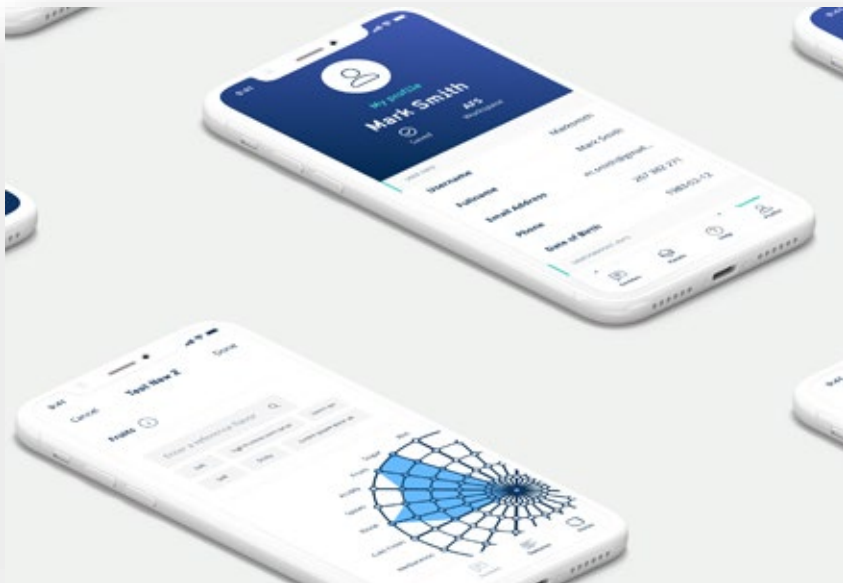
Snapshot data invalid over time

Low-fidelity descriptors

Consumer language \neq expert descriptors

Advantages of a Predictive Framework

gastrograph



Predictive Power

Less Time and Lower Costs

Question Agnostic

One test for any question

Compound Learning

Continuous improvement

Actionable Insights

Insights needed for great products

Super-Human Performance in Discovery

Market Maps



PQ Rating 2.75 / 7

+ 2% Cinnamon

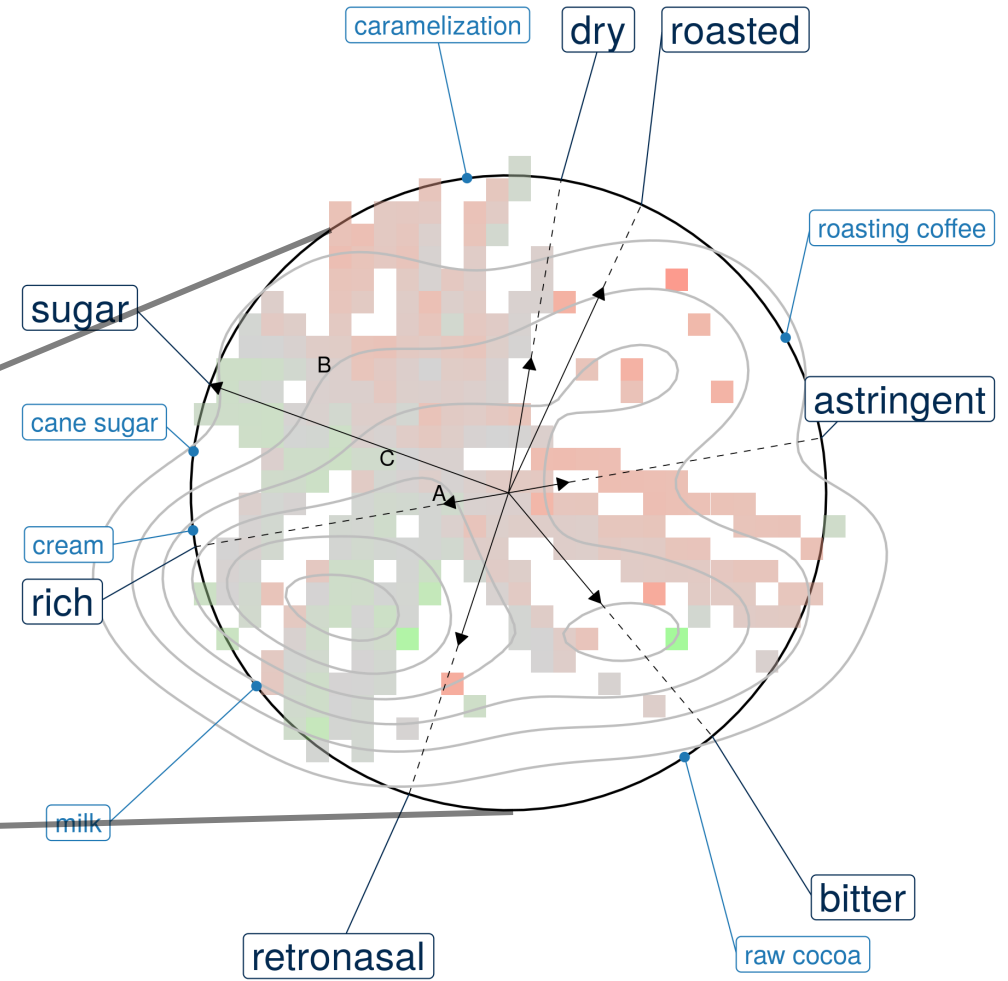
New PQ Rating: 5.25 / 7

-2% Savory

PQ Rating 5.25 / 7

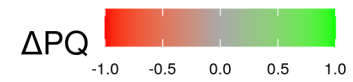
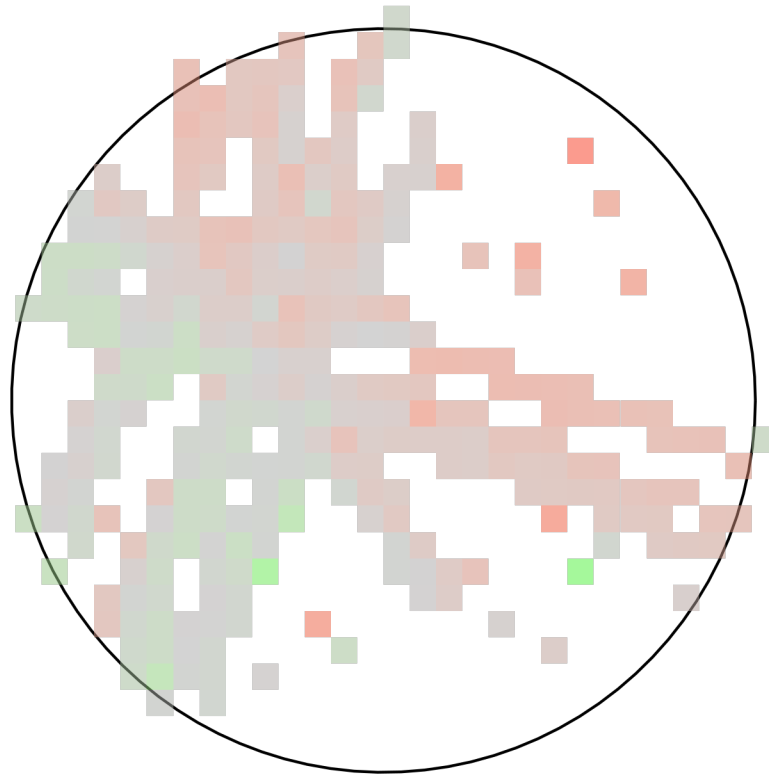


Mapping Markets



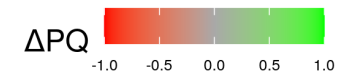
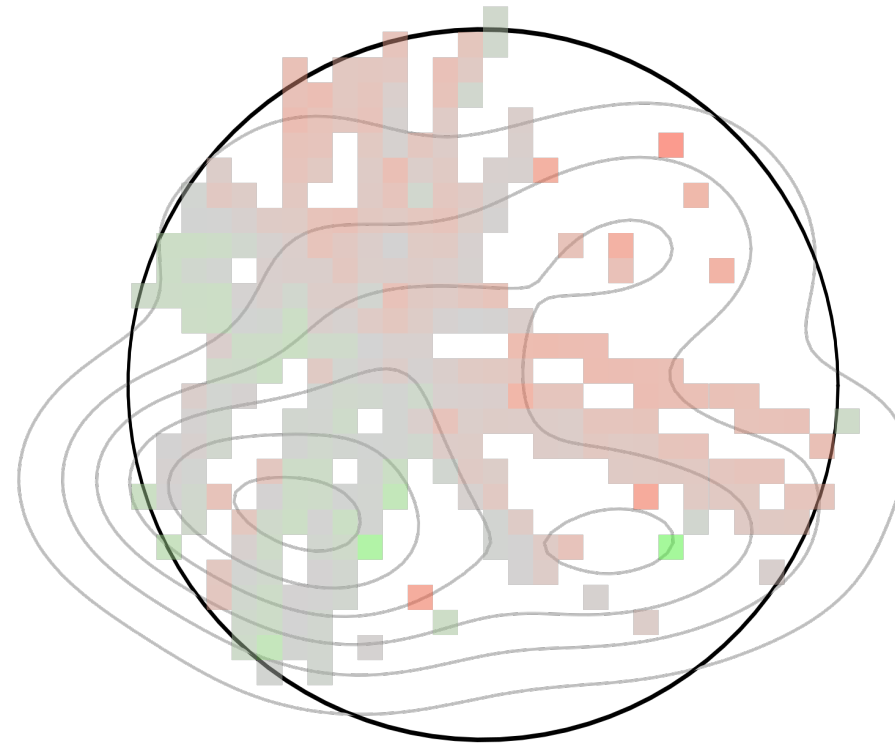
Mapping Markets

Pixels



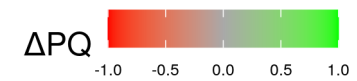
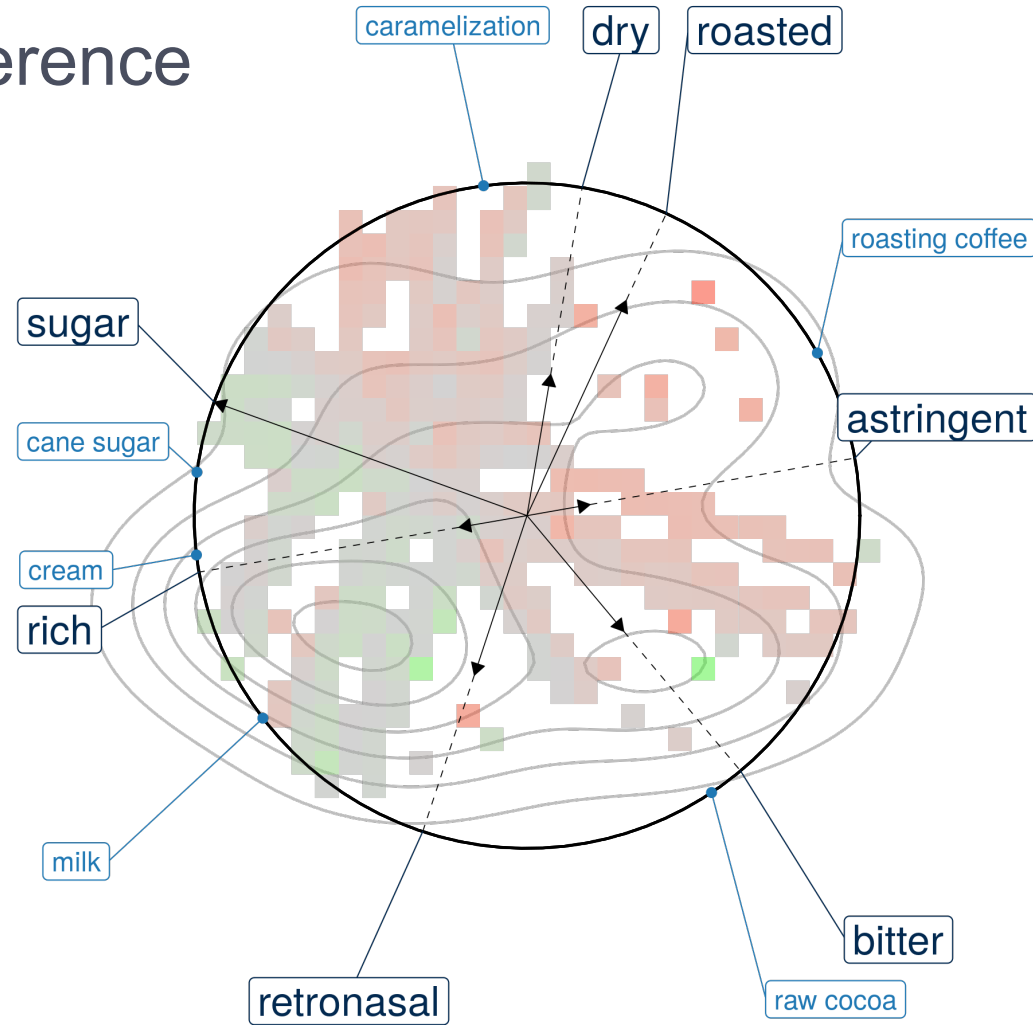
Mapping Markets

Contours



Mapping Markets

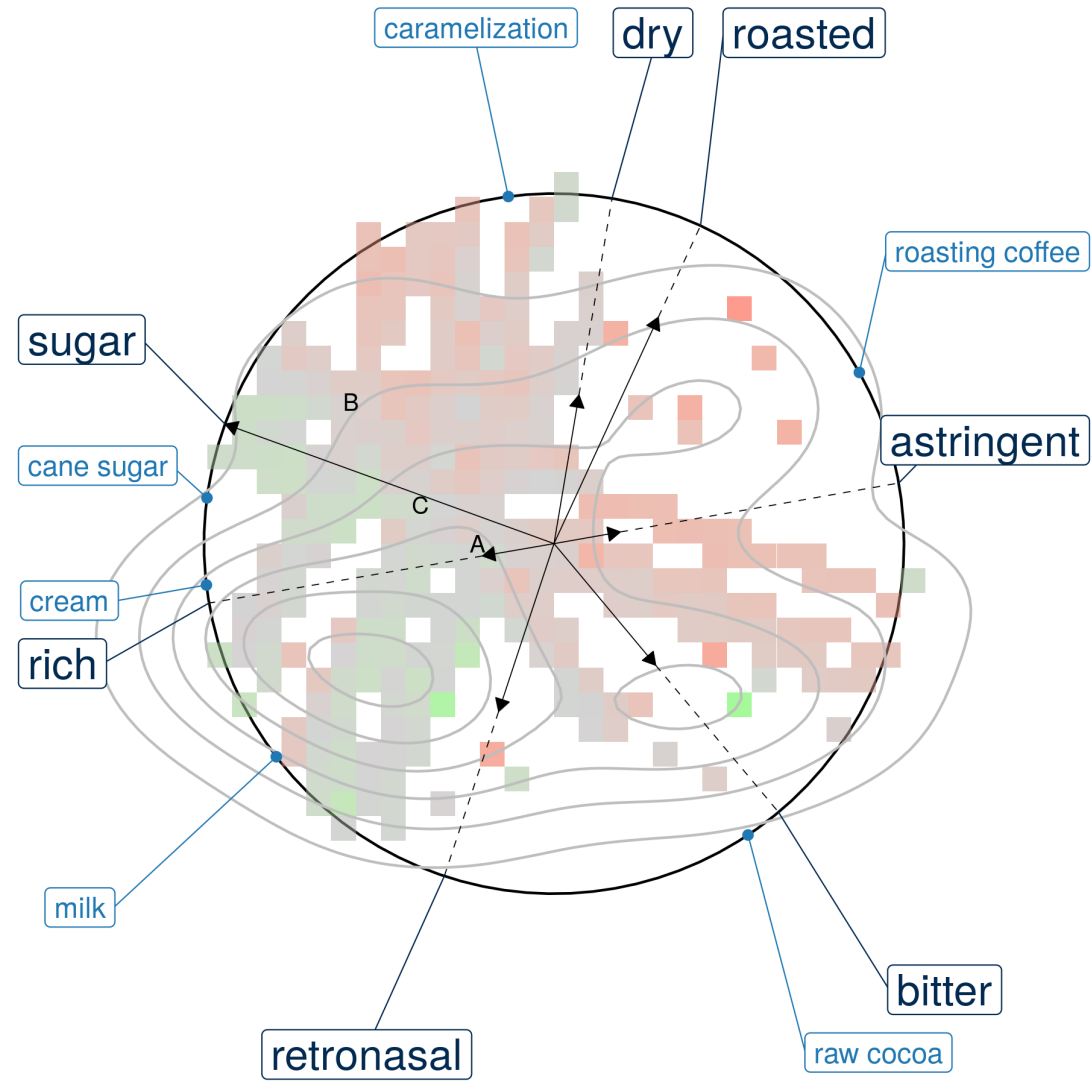
Drivers of Preference



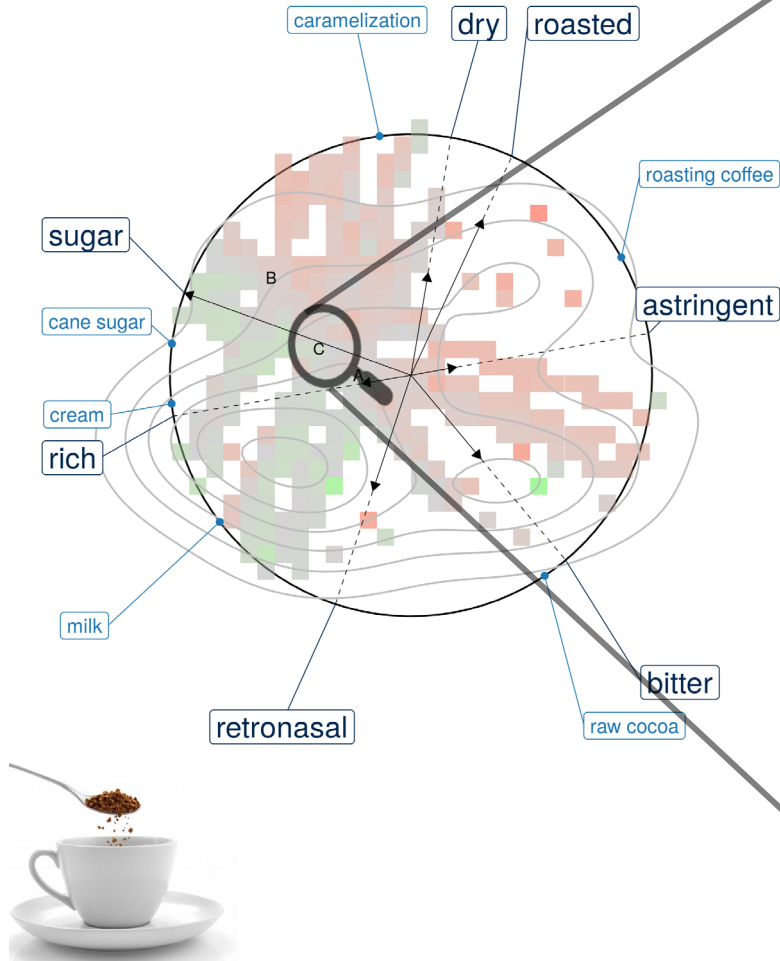


Mapping Markets

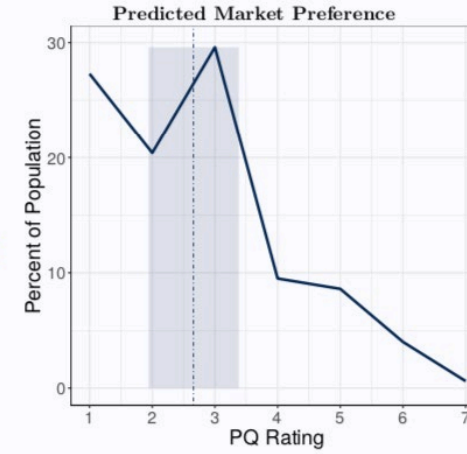
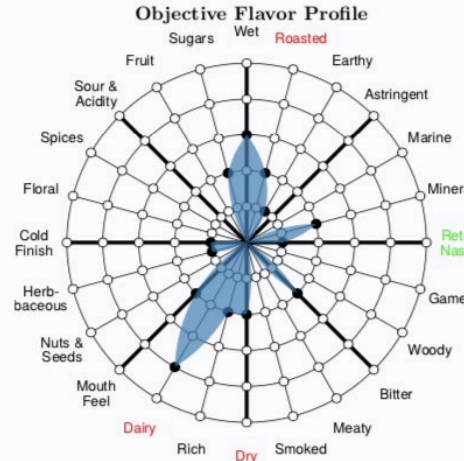
Products



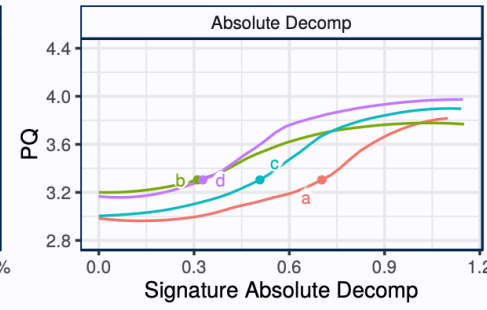
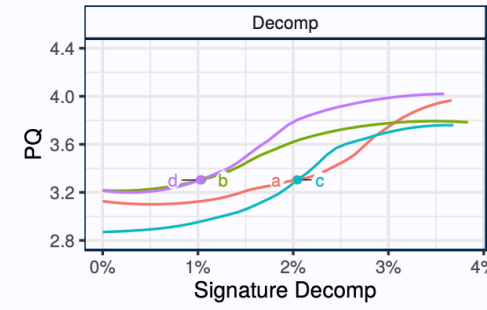
On-Market Product



Overview of Flavor Profile



Signatures in Rich: a caramel b dark_chocolate c milk_chocolate d toffee

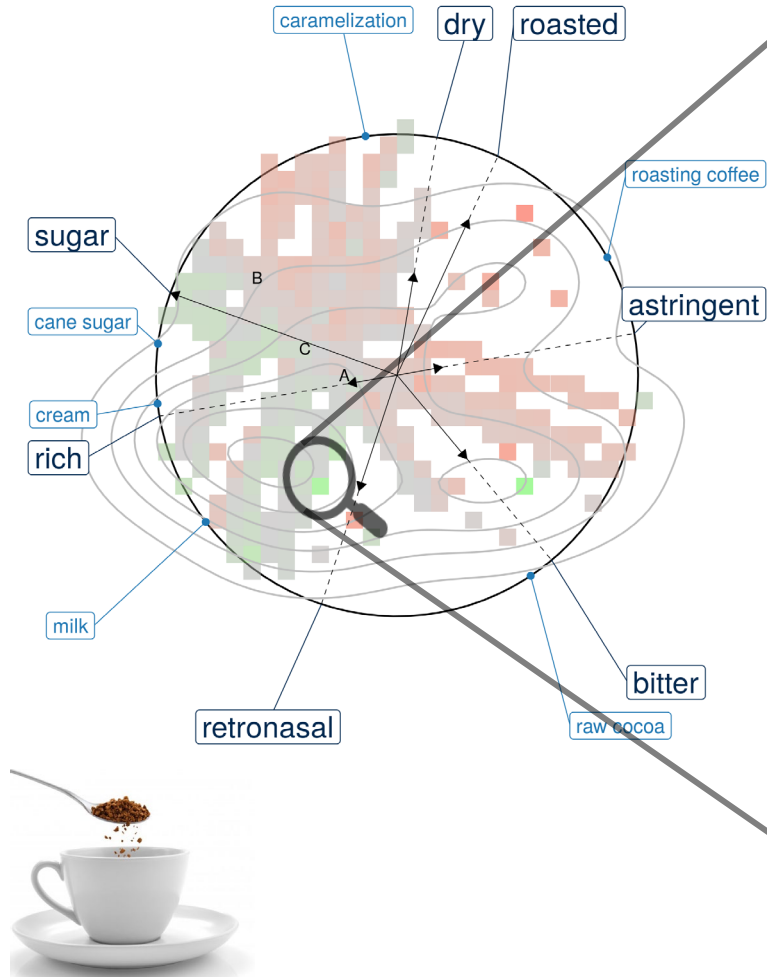


dairy - 27% (7.66)	
referenceFlavor	Decomp
milk	7% (2.05)
cream	6% (1.78)
caramel	5% (1.27)
butter	4% (1.07)
buttermilk	2% (0.49)
cheese	1% (0.38)
condensed milk	1% (0.32)
boiled milk	1% (0.30)

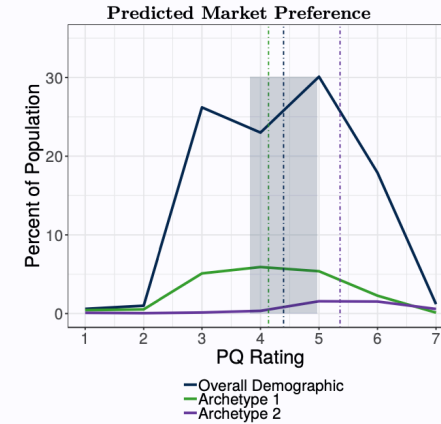
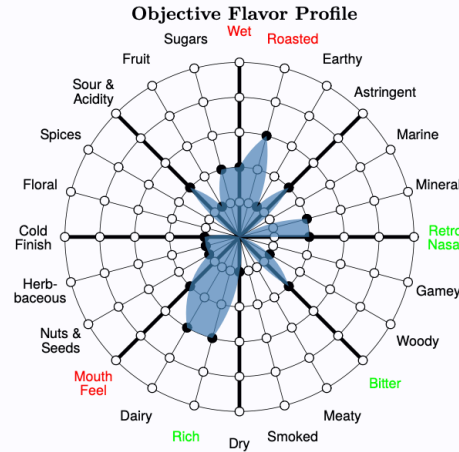
roasted - 19% (5.31)	
referenceFlavor	Decomp
roasting coffee	5% (1.51)
caramelization	4% (0.98)
toast	3% (0.71)
malt	2% (0.60)
roast nuts	2% (0.45)
malted barley	1% (0.37)
bread	1% (0.36)
roasted wheat	1% (0.33)

sugar - 18% (4.95)	
referenceFlavor	Decomp
cane sugar	4% (0.99)
caramel	3% (0.95)
artificial sugar	3% (0.70)
vanilla	2% (0.63)
brown sugar	2% (0.48)
toffee	2% (0.47)
sweet n low	1% (0.41)
white sugar	1% (0.32)

Product Opportunity



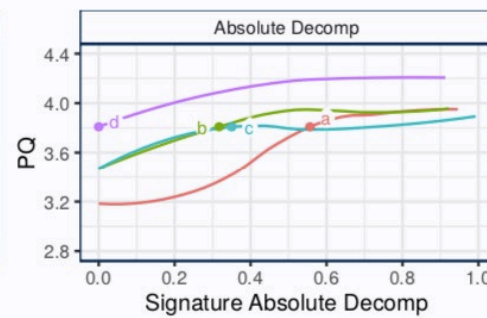
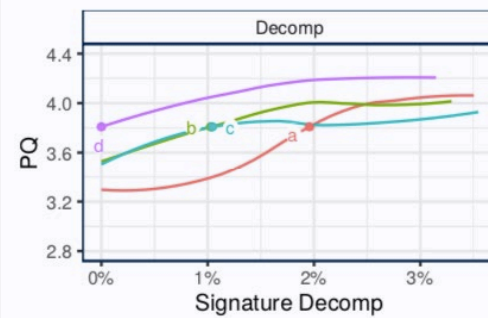
Overview of Flavor Profile



dairy - 44% (10.98)	
referenceFlavor	Decomp
milk	9% (2.30)
cream	9% (2.19)
caramel	6% (1.38)
butter	4% (1.02)
cheese	3% (0.77)
lactic acid	2% (0.50)
buttermilk	2% (0.48)
yogurt	2% (0.40)
soy milk	2% (0.39)
condensed milk	1% (0.34)
boiled milk	1% (0.32)
sour cream	1% (0.32)
cooked milk	1% (0.29)
soft cheese	1% (0.28)

Signatures in Rich

a caramel b milk_chocolate c oil d toffee



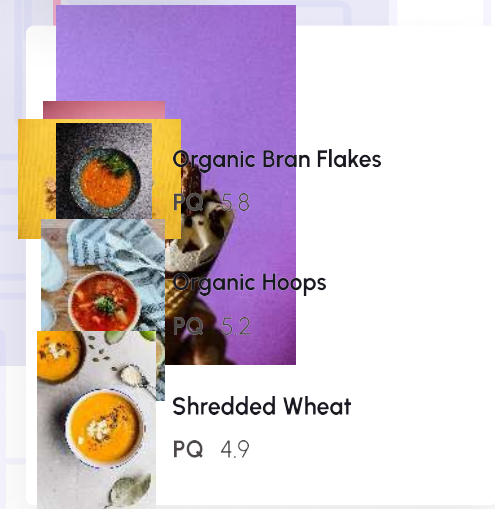
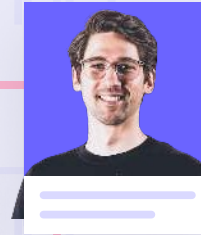
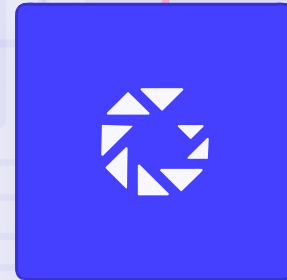
rich - 4% (1.24)	
referenceFlavor	Decomp
caramel	2% (0.57)
oil	1% (0.35)
milk chocolate	1% (0.32)

earthy - 2% (0.40)	
referenceFlavor	Decomp
generic earthy	2% (0.40)

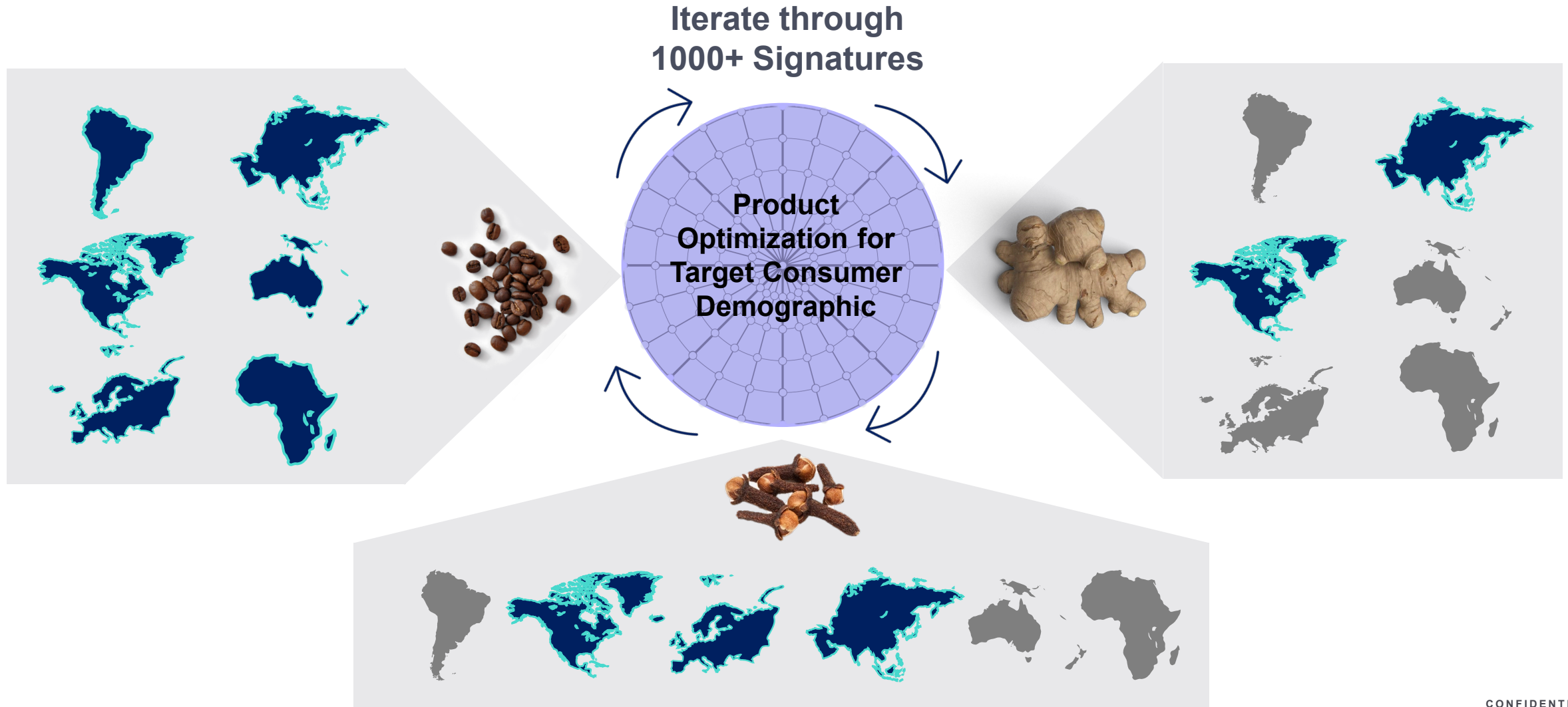
herbaceous - 2% (0.40)	
referenceFlavor	Decomp
generic herbaceous	2% (0.40)

Super-Human Performance in Creativity

AI for Optimization

A vertical stack of product recommendations. The top item is 'Organic Bran Flakes' with a PQ of 5.8. The middle item is 'Organic Hoops' with a PQ of 5.2. The bottom item is 'Shredded Wheat' with a PQ of 4.9. Each item includes a small image of the product.

Gastrograph AI Optimization



Hint of “Toasted Malt” Cola



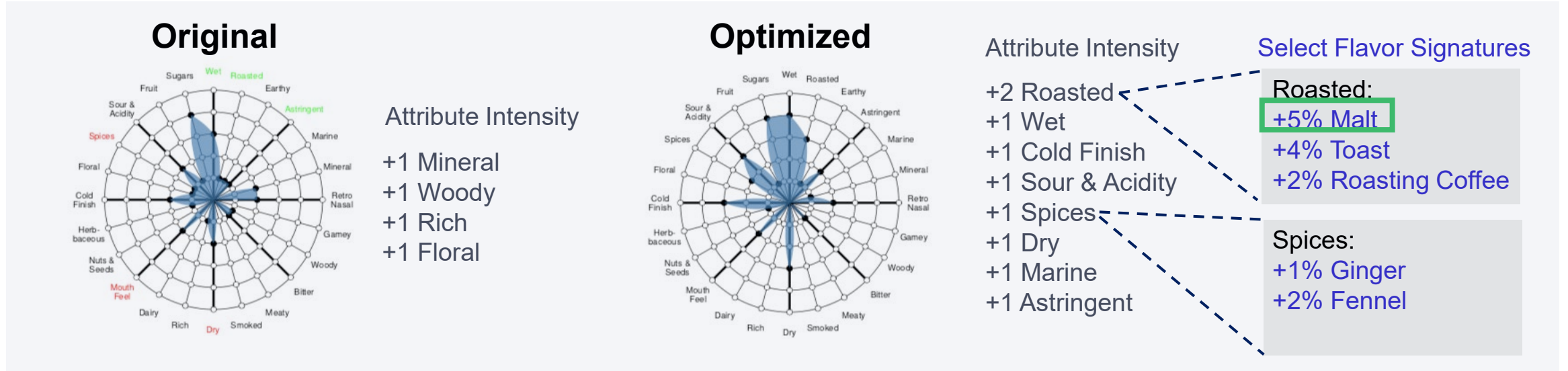
✓ Novel Flavor Combination

✓ High-Preference White Space

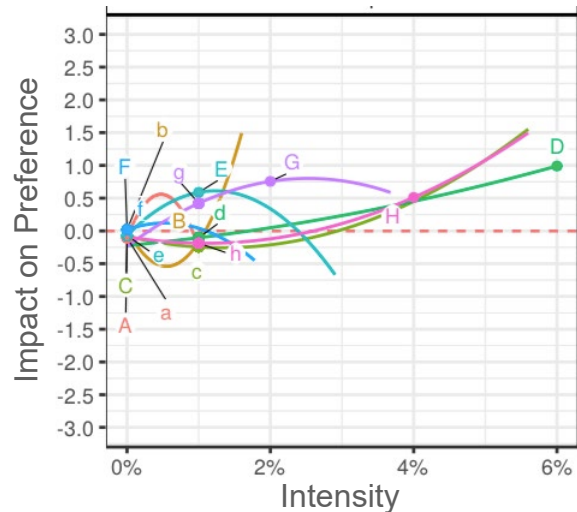
✓ Detailed Flavor Profile



“Toasted Malt” Cola Optimization – Actionable Insights



Preference Gradient Modeling



- Signatures in Roasted
- a beer_grain
 - b bread
 - c caramelization
 - d malt**
 - e rice_hulls
 - f roasted_wheat
 - g roasting_coffee
 - h toast

Product:
 a Original
 A Optimized

Flavor Signatures

Attribute	Reference Flavor	Original	Optimized	Delta
Roasted	malt	1%	6%	5%
Roasted	toast	0%	4%	4%
Roasted	roasting_coffee	0%	2%	2%
Roasted	rice_hulls	0%	1%	1%
Sugar	cola	9%	10%	1%
Sugar	cane_sugar	8%	10%	2%
Sugar	toffee	0%	2%	2%
Sugar	caramel	9%	6%	-3%
Spice	ginger	3%	4%	1%
Spice	clove	2%	3%	1%
Spice	fennel	0%	2%	2%

Marin Eusterman

Product Marketing Manager | TraceGains



Artificial Intelligence and New Product Development

Artificial Intelligence in the news

F Forbes

Can I Invest In OpenAI?
Putting Artificial Intelligence
In Your Portfolio



15 hours ago

ChatGPT shows how to make a dish with leftover ingredients,
netizens react

ChatGPT has been the talk of the town for a while now. Many people are stunned by this artificial intelligence (AI) and its abilities.

14 hours ago

Federal News Network

DoD builds AI tool to speed
up 'antiquated process' for
contract writing



1 day ago

F Forbes

How Product Management Can Drive Educational
Technology

With the emergence of artificial intelligence and digitization, ... formula for product management, as every new product brings with it new...



The Guardian

Google v Microsoft: who
will win the AI chatbot
race?

Artificial Intelligence and TraceGains

Match complex global intelligence data to your supply chain

Matching tool

Using the matching tool

1. Download and complete the template
2. Upload
3. Run Matching Tool

1. Download and complete the template

What would you like to match?

Ingredients

2. Upload Template

3. Run Matching Tool

The matching tool has [view this page.](#)

- 8/12/2022 - DietarySupp
- 7/18/2022 - Ingredient

Manage Suggestions

Ingredients Suppliers

688 RESULTS Search suggestions...

<input type="checkbox"/>	Intelligence Ingredient	Item(s) 1	<input type="checkbox"/>	Confidence Level
<input type="checkbox"/>	Oat Rolled Grains <input type="button" value="edit"/>	<input type="checkbox"/> #4 Rolled Oats	<input type="checkbox"/>	High
<input type="checkbox"/>	Raspberry Flavor <input type="button" value="edit"/>	<input type="checkbox"/> (see 1000529) Raspberry Flavor-ettes	<input type="checkbox"/>	High
<input type="checkbox"/>	Acetic Acid <input type="button" value="edit"/>	<input type="checkbox"/> 0.22mm Acetate for CraftMark	<input type="checkbox"/>	Medium
<input type="checkbox"/>	Wheat Flour <input type="button" value="edit"/>	<input type="checkbox"/> 00 Wheat flour	<input type="checkbox"/>	High
<input type="checkbox"/>	Traditional Margarine <input type="button" value="edit"/>	<input type="checkbox"/> 15432VEN Margarine Palm Soybean Oil No Trans	<input type="checkbox"/>	High
<input type="checkbox"/>	Natural-Flavor Peanut <input type="button" value="edit"/>	<input type="checkbox"/> 1M Natural Flavor Peanut Drop-50389	<input type="checkbox"/>	High
<input type="checkbox"/>	Food Packaging Material (Food Related) <input type="button" value="edit"/>	<input type="checkbox"/> 2.5 mil blue film - blank and with print	<input type="checkbox"/>	Medium
<input type="checkbox"/>	Distilled Vinegar <input type="button" value="edit"/>	<input type="checkbox"/> 200 Grain (20%) White Distilled Vinegar	<input type="checkbox"/>	High

TraceGains Network - Customer Advisory Group

Location Documents

Document types Locations Search location docs

Location	Type	Effective	Expiration
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Bioterrorism Letter	1/8/2018	<input type="button" value="1/8/2019"/>
<input type="checkbox"/> [IGTest] National Sugar Marketing - Amalgamated Sugar - Nyssa Terminal	Supplier Questionnaire	1/15/2020	<input type="button" value="1/14/2022"/>
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Supplier Questionnaire	10/13/2022	10/12/2024
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Sustainability (Level 1)	4/30/2020	4/30/2023
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Food Defense Plan Statement	1/30/2023	1/29/2025
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Recall Plan	1/30/2023	1/30/2024
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Letter of Guarantee	1/30/2023	1/28/2
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	3rd Party Audit Report	1/27/2020	<input type="button" value="1/29/2"/>
<input type="checkbox"/> TraceGains Network - Customer Advisory Group	Allergen Control Policy	1/28/2020	<input type="button" value="1/27/2"/>

Standardized digital data within documents

Supplier Questionnaire

Supplier: TG Test Supplier Group
 Location: Test Location - Denver HQ
 Location Address: 1300 W 120th Ave Westminster, CO 80234
 Effective Date: 15 January 2020
 Expiration Date: 14 January 2022

Please answer the questions below for your organization. Add comments where additional information is necessary. Required fields indicated with a red asterisk.

General Programs

Facility Compliance

Select all that apply:

Food (U.S. 21 CFR Part 110, 117)

Dietary Supplements (CGMP) rule (U.S. 21 CFR Part 111)

Drug (U.S. 21 CFR Parts 210 and 211)

FSMA

Is your facility registered with FDA (as required by Bioterrorism Act of 2002)?

If exempt from FDA FSMA regulations, specify why:

Is your facility subject to the FSMA Preventive Controls for Human Food Rule?

Does your facility import ingredients?

GFSI

Is your facility currently certified to a GFSI-recognized certification program?

Non-GFSI

If your facility is NOT GFSI-certified, do you have an annual Third Party GMP Audit?

Which audit standard or schema?

Does your facility have documented corrective actions and preventative measures to address deficiencies noted in Third Party GMP Audits?

Does your facility perform monthly in-house prerequisite programs or HACCP audits utilizing a

Networked Product Development Suite

Networked Specification Management

- Author and manage specifications with configurable templates.
- Link specifications to networked ingredient and supplier data, including global networked intelligence.
- Intelligent recommendations based on requirements and supplier capabilities.

Networked Formula Management

- Digital audit trail for version histories and roll-backs.
- Tie to your ingredient supply chain and connect to global intelligence data.
- Share formulas and intelligence to keep teams on track.

Networked Finished Goods

- View partners and partner locations associated with your ingredients, specifications, and formulas.
- Track finished goods against both your customers and manufacturing partners.
- Only purpose-built solution for unlocking the potential of co-man and co-packing relationships.



Win a Gift Card...

Take our survey and be entered to win a \$50 gift card!



Live Q&A

Type your questions into the chat box!



Thank You

Together we do more

