

Accelerating Innovation

How Generative AI is Revolutionizing Product Design

Dave Lundahl, CEO

*International Citrus & Beverage Conference
Clearwater Beach, Florida
September 17-20, 2024*



**INSIGHTS
NOW**

Inspire. Innovate. Win.

Topics of Discussion

1

Gen AI as an
Enabler for
Innovation
Teams

2

5 Step
Prompting
Sequence

3

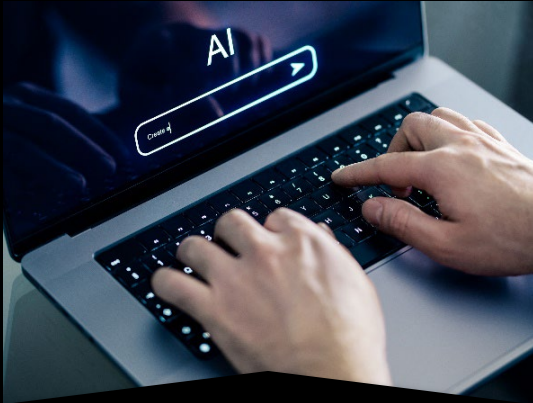
Case Study:
Using Gen AI
in Co-Creation

4

Strengths and
Weaknesses

Some Opportunity Spaces

Gen AI Applications for Innovation Teams



**Creative Content
Development**



**Trend Prediction &
Analysis**



**Product/Process
Improvement**



**New Product
Design & Co-
creation**

Our Focus Today



**New Product
Design & Co-
creation**

Generative AI Tools Available

ChatGPT Copilot Gemini Bard perplexity

InsightsNow.com 5

The image displays five logos for generative AI tools. From left to right: ChatGPT (a black and white interlocking knot logo), Copilot (a colorful, abstract logo with blue, green, yellow, and purple), Gemini (a blue starburst logo), Bard (a blue and purple starburst logo), and Perplexity (a blue geometric logo). The text 'InsightsNow.com' and the number '5' are located at the bottom of the image.

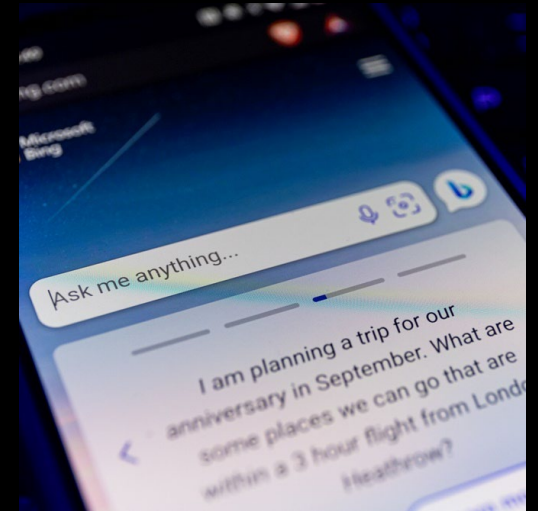
Challenges in **PRODUCT** Innovation

Innovation teams constrained (time, money, human resources) to create winning concepts

Could we apply generative AI to increase creative capacity?

Human-in-the-Loop

To Increase Creative Capacity in Product Innovation



Behavioral Expertise
to Build Consumer
Understanding

Expertise in Co-
Creation to Build
Paper Concepts

Culinary Expertise
to Bring Paper
Concepts to Life

Power of
Generative AI
Microsoft Copilot

Behavioral Framework: Successful new concepts are often **FAMILIAR** with a **TWIST** to nudge or disrupt consumer behavior.

Approach: Train Gen AI Tool to find **TWISTS** that address current gaps, tensions and unmet needs in the marketplace.¹

¹ Requires an in-depth understanding of the **product usage moment**.

Reimagined, New Process for Concept Co-Creation

Collect Insights

Consumer Research: Understand current category and unmet needs for the moments of usage.

Co-Creation

Generative AI: 5 Step Prompting Sequence

Introduce the Problem and Provide General Context

Ask for New Ideas, Guided by Insights

Train AI to Apply a Creative Thinking Tool Aligned with Objectives

Bring New Ideas to Life as Branded Concepts

Visualize New Concept Ideas

Co-Creation Workshop:
Use AI concepts to jump start human creativity in Co-Creation



Screen and Validate Concepts

Screen: Tournament

Validate: Qualitative Review

Validate: Concept LIFT

Get to Winning Product Concepts Faster and Easier



Case Study

**Ocean Spray & InsightsNow
Customized Moments
Landscape Methodology for
Juice Drinks Innovation,
2019¹**

¹ N. Byrnes, et al. 2019. Novel integration of consumer behaviour and analytical sensory to identify consumption moments within juices and juice drinks. Poster, Pangborn Conference, Edinburgh, Scotland

Moments Landscape Analysis

CONSUMERS OF JUICE CONTAINING BEVERAGES

(e.g. juice, juice cocktails, refrigerated fruit smoothies, sparkling fruit juice, fruit juice blends, fruit juices in produce section)

20-minute online survey

TARGET SAMPLE

- US national representative
- Primary Shopper/ Decision Maker
- Females/Males
- Adults Ages 18+



N= 3000

Insights from a Moments Landscape Analysis



THE OPPORTUNITY – THE TARGET MOMENT



CHOICES IN THE MOMENT



ASPIRATIONAL GAPS IN THE MOMENT

Some of the **key insights** gleaned from this research study

The Opportunity:

Largest moment with the biggest gap in unfulfilled aspirations within the refrigerated juice products category.

InsightsNow.com

The Moment:

This opportunity targets the morning, wake-up moment where the desire is highest to maintain healthiness and nutrition. To be successful in this morning, wake-up moment, refrigerated juices must promote high nutritional value and have low sugar levels to start the day off with a focus on health.

InsightsNow.com

Choices in the Moment:

Top picks for this moment are 100% juices and juice blends, juice cocktails, refrigerated fruit smoothies, sparkling fruit juice, fruit juice blends, and fruit juices from the produce section.

InsightsNow.com

Aspirational Gaps:

There is a consumer tension that consumers feel in having to trade away the deliciousness of sweeter refrigerated beverages without adding sugar while delivering high nutritional value.

InsightsNow.com

The Opportunity:

Largest moment with the biggest gap in unfulfilled aspirations within the refrigerated juice products category.

The Moment:

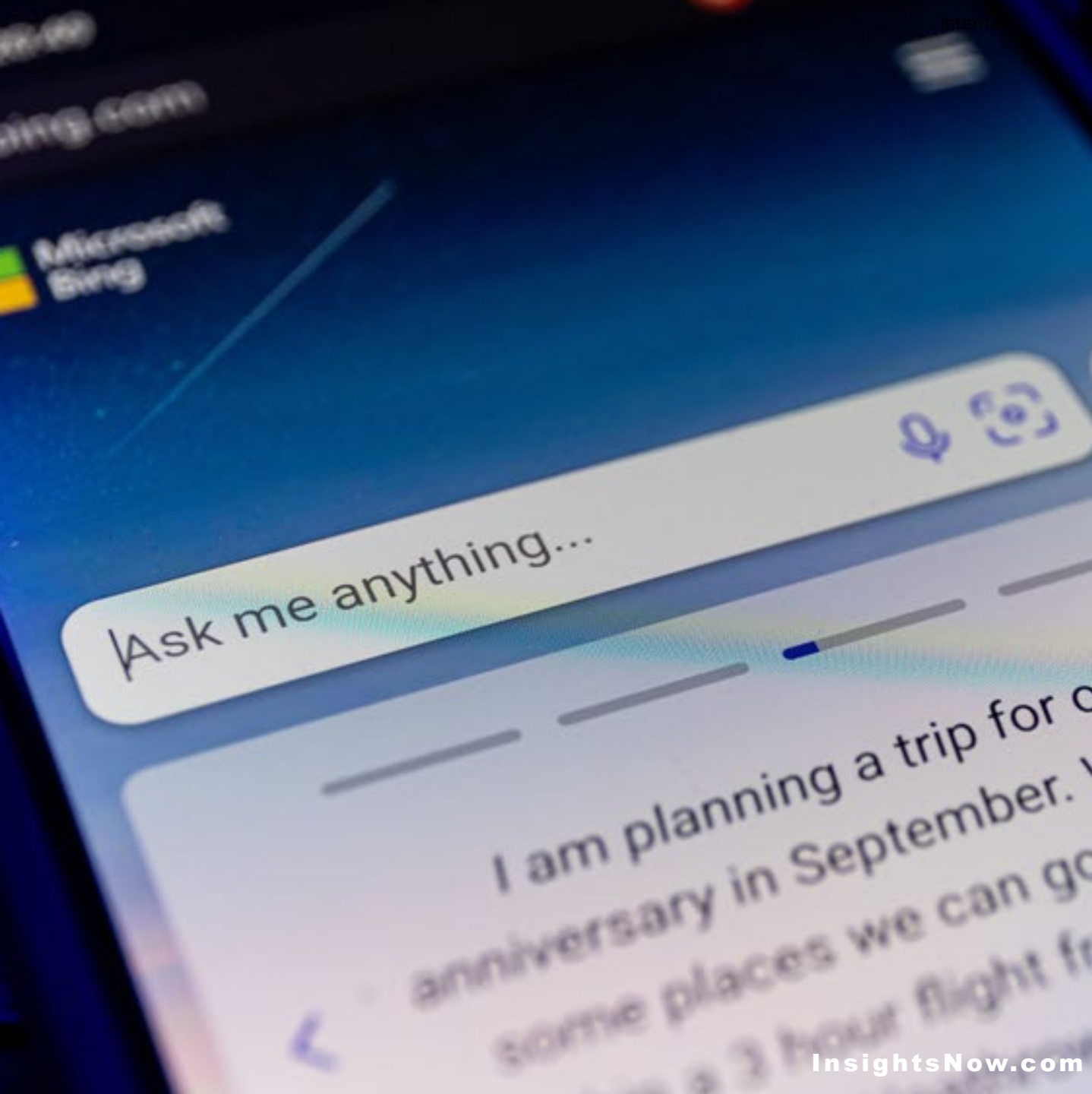
This opportunity targets the morning, wake-up moment where the desire is highest to maintain healthiness and nutrition. To be successful in this morning, wake-up moment, refrigerated juices must promote high nutritional value and have low sugar levels to start the day off with a focus on health.

Choices in the Moment:

Top picks for this moment are 100% juices and juice blends, juice cocktails, refrigerated fruit smoothies, sparkling fruit juice, fruit juice blends, and fruit juices from the produce section.

Aspirational Gaps:

There is a consumer tension that consumers feel in having to trade away the deliciousness of sweeter refrigerated beverages without adding sugar while delivering high nutritional value.



IT'S ALL ABOUT THE PROMPT SEQUENCE!

Prompts:

Conversational language to engage with Large Language Model (Gen AI Tools)

Prompt Sequences:

Series of interrelated prompts in a command or question and answer format to achieve an objective.

What is the **5-Step Prompting** Sequence?

Step 1: Introduction

EXAMPLE PROMPT

I work for a company that sells refrigerated fruit juices. The refrigerated fruit juice category includes juice, juice cocktails, refrigerated fruit smoothies, sparkling fruit juice, fruit juice blends, and fruit juices from the produce section. My focus is on the retail channel. I'd like some help developing innovative new refrigerated fruit juice concepts for consumers based in the United States.



Step 2: Request ideas

EXAMPLE PROMPT

I have some specific insights to use to guide my new concept ideation. I'd like to focus on the largest moment with the biggest gap in unfulfilled aspirations within the refrigerated juice products category. This is the morning, wake up moment where the desire is highest to maintain healthiness and nutrition. To be successful in this morning, wake-up moment, refrigerated juices must promote high nutritional value and have low sugar levels to start the day off with a focus on health. Top picks for this moment are 100% juices and juice blends, juice cocktails, refrigerated fruit smoothies, sparkling fruit juice, fruit juice blends, and fruit juices from the produce section with high nutritional value. There is a consumer tension that consumers feel in having to trade away the deliciousness of sweeter refrigerated beverages without adding sugar while delivering high nutritional value.



Step 2 Output: Insight Guided Ideas

Five Insight-based new product ideas for the morning, wake up moment

- 1. Cranberry-Veggie Boost:** A refreshing blend of cranberry juice with a mix of nutrient-rich vegetable juices like carrot, beet, and spinach. Benefits: High in antioxidants, vitamins A and C, and iron. Perfect for boosting immunity and energy levels in the morning. Tagline: "Start Your Day with a Nutrient Boost!"
- 2. Green Goodness Morning Juice:** A 100% juice blend featuring green vegetables like kale, cucumber, and celery, with a hint of apple and lemon for sweetness. Benefits: Packed with vitamins K, C, and B, along with essential minerals. Great for detoxifying and energizing your body. Tagline: "Green Power for a Healthy Start!"
- 3. Berry-Veggie Sunrise:** A delicious mix of cranberry, blueberry, and a variety of vegetable juices such as sweet potato and bell pepper. Benefits: Rich in antioxidants, fiber, and vitamins. Helps in maintaining a healthy digestive system and provides sustained energy. Tagline: "Rise and Shine with Berry-Veggie Goodness!"
- 4. Citrus-Veggie Morning Blend:** A zesty combination of orange, grapefruit, and vegetable juices like carrot and ginger. Benefits: High in vitamin C and beta-carotene. Perfect for boosting your immune system and starting your day with a refreshing kick. Tagline: "Wake Up with a Citrus-Veggie Kick!"
- 5. Tropical Veggie Delight:** A tropical mix of pineapple, mango, and vegetable juices such as cucumber and spinach. Benefits: Loaded with vitamins A, C, and E, and essential minerals. Ideal for a refreshing and nutritious start to your day. Tagline: Tropical Nutrition for Your Morning!"

Step 3: Creative Structure SCAMPER

S

Substitute

What parts of the existing option can be substituted or swapped out for something new to create a new idea?

C

Combine

What parts of the existing option can be combined or mixed to create a new idea.?

A

Adapt

What could we adapt from another world / category to come up with something new?

M

**Minify/
Magnify**

What could we minify or magnify in the existing product to come up with a new idea?

P

**Put to
Another Use**

What could we put to other uses to come up with a new concept idea?

E

Eliminate

What could we eliminate or take out of the existing product to create a new idea?

R

Reverse

What could we reverse or re-arrange in the current product offering that might lead us to a new concept idea?

Step 3: Training/Applying a Deliberate Creative Thinking Tool

EXAMPLE PROMPT

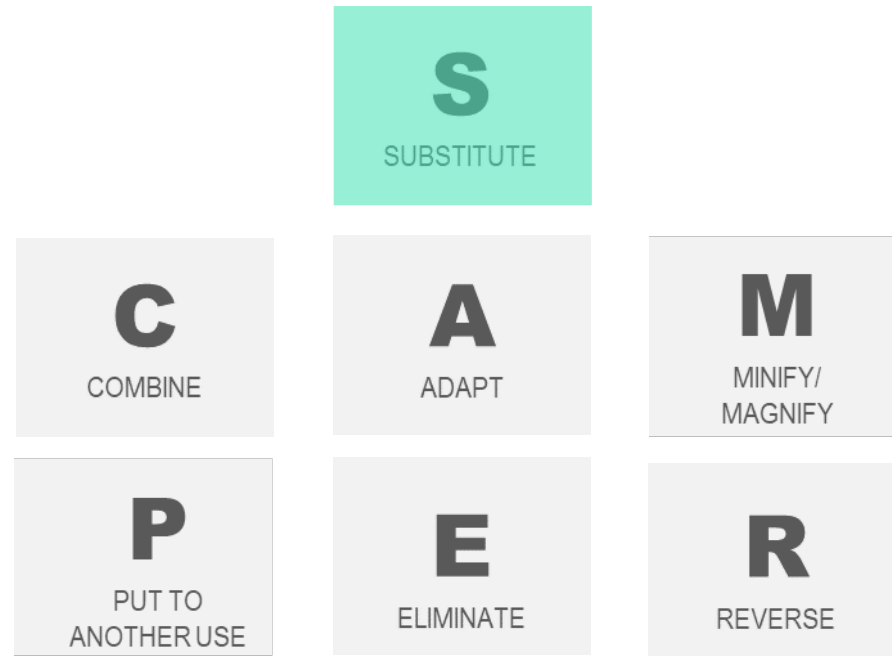
Can you apply SCAMPER to the citrus-veggie morning blend idea?



Step 3: Output

Ingredients: Substitute grapefruit with lime for a different citrus twist.

Packaging: Use eco-friendly, biodegradable packaging instead of plastic bottles.



Step 3: Output

Flavors: Combine the citrus blend with superfoods like chia seeds or spirulina for added health benefits.
Marketing: Combine the juice with a morning wellness routine guide, including tips for a healthy breakfast and exercise.

C
COMBINE

P
PUT TO
ANOTHER USE

S
SUBSTITUTE

A
ADAPT

E
ELIMINATE

M
MINIFY/
MAGNIFY

R
REVERSE

Step 3: Output

Target Audience: Adapt the product for kids by making it sweeter with natural sweeteners like honey or agave.

Serving Size: Offer smaller, single-serve bottles for on-the-go convenience.



Step 3: Output

Texture: Modify the texture by adding pulp for a more natural, homemade feel.

Nutritional Profile: Enhance the nutritional value by fortifying the juice with additional vitamins and minerals.



Step 3: Output

Recipes: Promote the juice as a base for smoothies or as a mixer for healthy cocktails.

Seasonal Variations: Create seasonal versions, like adding cinnamon and nutmeg for a winter blend.

C
COMBINE

P
PUT TO
ANOTHER USE

S
SUBSTITUTE

A
ADAPT

E
ELIMINATE

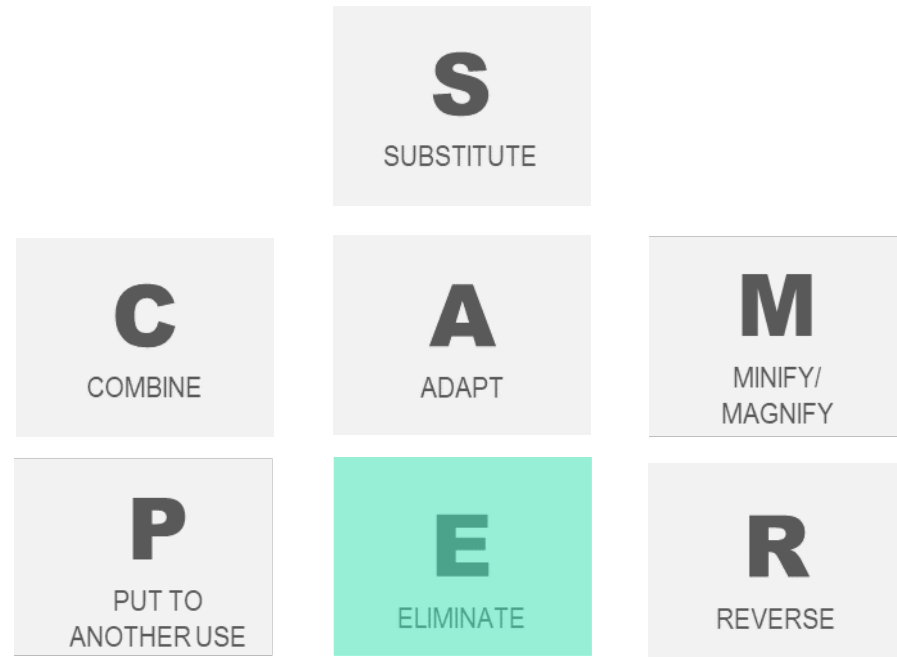
M
MINIFY/
MAGNIFY

R
REVERSE

Step 3: Output

Sugar: Eliminate any added sugars to make it even healthier.

Artificial Ingredients: Remove any artificial flavors or preservatives to appeal to health-conscious consumers.



Step 3: Output

Consumption Time: Market it not just as a morning drink but also as a refreshing afternoon pick-me-up.
Flavor Profile: Reverse the flavor profile by making the vegetable component more dominant than the citrus.



Step 4: Bring ideas to life

EXAMPLE PROMPT

I really like these SCAMPER ideas. Can you generate a product concept for the Adapt idea for the citrus-veggie morning blend idea. Provide a name, target, serving size as well as describe the sensory experience and associated marketing tag line.



Step 4 Output: Branded New Product Ideas

A

Adapt

**Citrus-Veggie Kids
Delight**

Target Audience: Adapt the product for kids by making it sweeter with natural sweeteners like honey or agave.

Serving Size: Offer smaller, single-serve bottles for on-the-go convenience.

Description: A sweeter version of the citrus blend with natural sweeteners like honey.

Sensory Experience:

Sight: A bright, cheerful orange color.

Smell: A sweet citrus aroma with a hint of honey.

Taste: A sweet and tangy flavor with the natural sweetness of honey, making it appealing to kids.

Texture: Smooth and easy to drink, perfect for kids.

Tagline: “A Sweet Start to a Healthy Day!”

Step 5: Visualize New Ideas

EXAMPLE PROMPT


I am looking to create an image of bottle of Ocean Spray juice with custom graphics that represent the citrus -veggie kids delight concept.



Step 5: Visualize concepts

EXAMPLE OUTPUT

Microsoft Bing | Image Creator



A bottle of Ocean Spray juice with custom graphics representing the Citrus-Veggie Kids Delight concept. The bottle should have a bright, cheerful orange color with a sweet citrus aroma and a hint of honey. The label should include the tagline 'A Sweet Start to a Healthy Day!' and depict a sweet and tangy flavor with the natural sweetness of honey, making it appealing to kids.

Image Creator in Bing | 1024 x 1024 jpg | 1 min ago

Content credentials
Generated with AI · September 12, 2024 at 2:59 AM

Privacy and Cookies | Content Policy | Terms of Use

© 2024 Microsoft

**So, what do you do with the
concepts generated by the AI tool?**

So, what do you do with the **concepts generated** by the AI tool?

**Bring the Human into
Co-Creation**

InsightsNow.com

38

**Concept Screening &
Validation**

InsightsNow.com

41

**Integrate with
Co-Design**

InsightsNow.com

46

Get More Bold

InsightsNow.com

50

Bring the Human into Co-Creation

Reimagined, New Process for Concept Co-Creation

Collect Insights

Consumer Research: Understand current category and unmet needs for the moments of usage.

Co-Creation

Generative AI: 5 Step Prompting Sequence

Introduce the Problem and Provide General Context

Ask for New Ideas, Guided by Insights

Train AI to Apply a Creative Thinking Tool Aligned with Objectives

Bring New Ideas to Life as Branded Concepts

Visualize New Concept Ideas

Co-Creation Workshop:
Use AI concepts to jump start human creativity in Co-Creation

Screen and Validate Concepts

Screen: Tournament

Validate: Qualitative Review

Validate: Concept LIFT

Get to Winning Product Concepts Faster and Easier

Co-Creation Workshops

Having Gen AI as a member of the team does **not** replace the need for a human perspective.



Focus groups react to the AI concepts.



Personification activities to unlock human perspectives



Have participants develop rounds of different prompts to refine concepts.



Use as an activity in a bigger ideation session.

Concept Screening & Validation

Reimagined, New Process for Concept Co-Creation

Collect Insights

Consumer Research: Understand current category and unmet needs for the moments of usage.

Co-Creation

Generative AI: 5 Step Prompting Sequence

Introduce the Problem and Provide General Context

Ask for New Ideas, Guided by Insights

Train AI to Apply a Creative Thinking Tool Aligned with Objectives

Bring New Ideas to Life as Branded Concepts

Visualize New Concept Ideas

Co-Creation Workshop:
Use AI concepts to jump start human creativity in Co-Creation



Screen and Validate Concepts

Screen: Tournament

Validate: Qualitative Review

Validate: Concept LIFT

Get to Winning Product Concepts Faster and Easier

Concept Screening and Validating

Use Consumer Choice to Prioritize Ideas

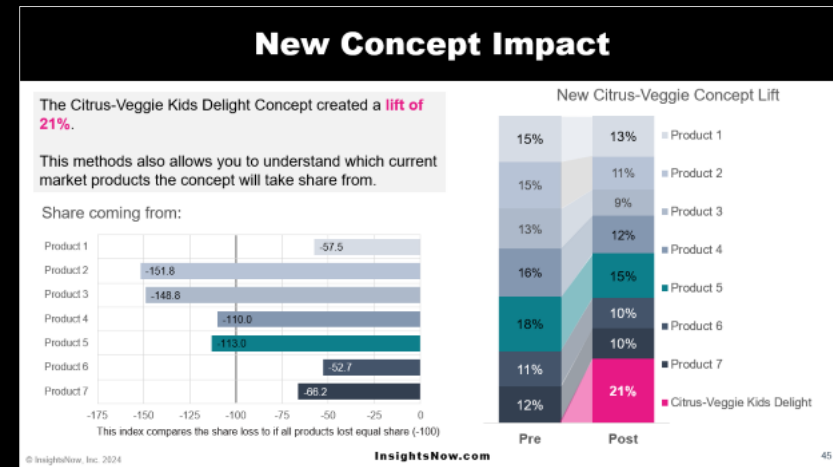
Using our Tournament approach, we can use **consumer choices** amongst a set of ideas to **prioritize** which ideas for the target moment.

Idea	Tournament Index	Win % (Max-Diff Choice)	Ranking (Mean)	Purchase Intent (Top 2 Box %)
Citrus-Veggie Kids Delight	125	12%	1.9	78%
Citrus-Veggie Morning Blend	121	8%	2.1	77%
Citrus-Lime Veggie Twist	115	9%	2.5	77%
... additional ideas screened
Citrus-Veggie Superfood Boost	90	5%	3.7	63%
Citrus-Veggie Smoothie Base	75	2%	4.1	52%
Citrus-Veggie Pure	70	3%	4.4	46%

© InsightsNow, Inc. 2024 InsightsNow.com

Screening “Twists” Among the “Familiar”

With-Context
Measurement of
Competitor
Disruption



Use Consumer Choice to Prioritize Ideas

Using our Tournament approach, we can use **consumer choices** amongst a set of ideas to **prioritize** which ideas for the target moment.

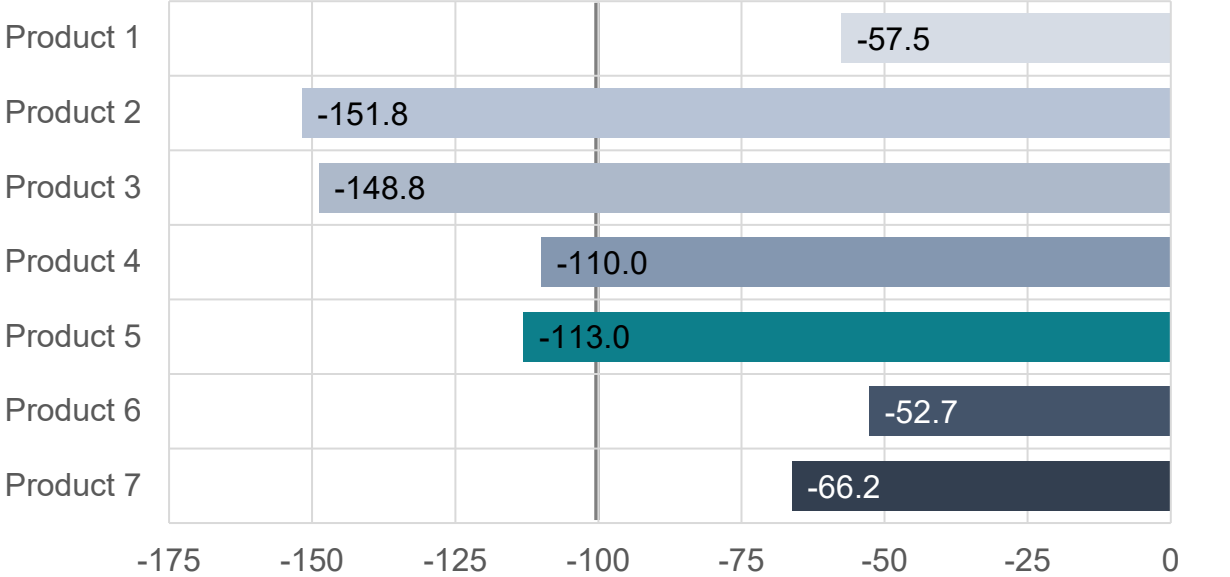
Idea	Tournament Index	Win % (Max-Diff Choice)	Ranking (Mean)	Purchase Intent (Top 2 Box %)
Citrus-Veggie Kids Delight	125	12%	1.9	78%
Citrus-Veggie Morning Blend	121	8%	2.1	77%
Citrus-Lime Veggie Twist	115	9%	2.5	77%
... additional ideas screened
Citrus-Veggie Superfood Boost	90	5%	3.7	63%
Citrus-Veggie Smoothie Base	75	2%	4.1	52%
Citrus-Veggie Pure	70	3%	4.4	46%

New Concept Impact

The Citrus-Veggie Kids Delight Concept created a **lift of 21%**.

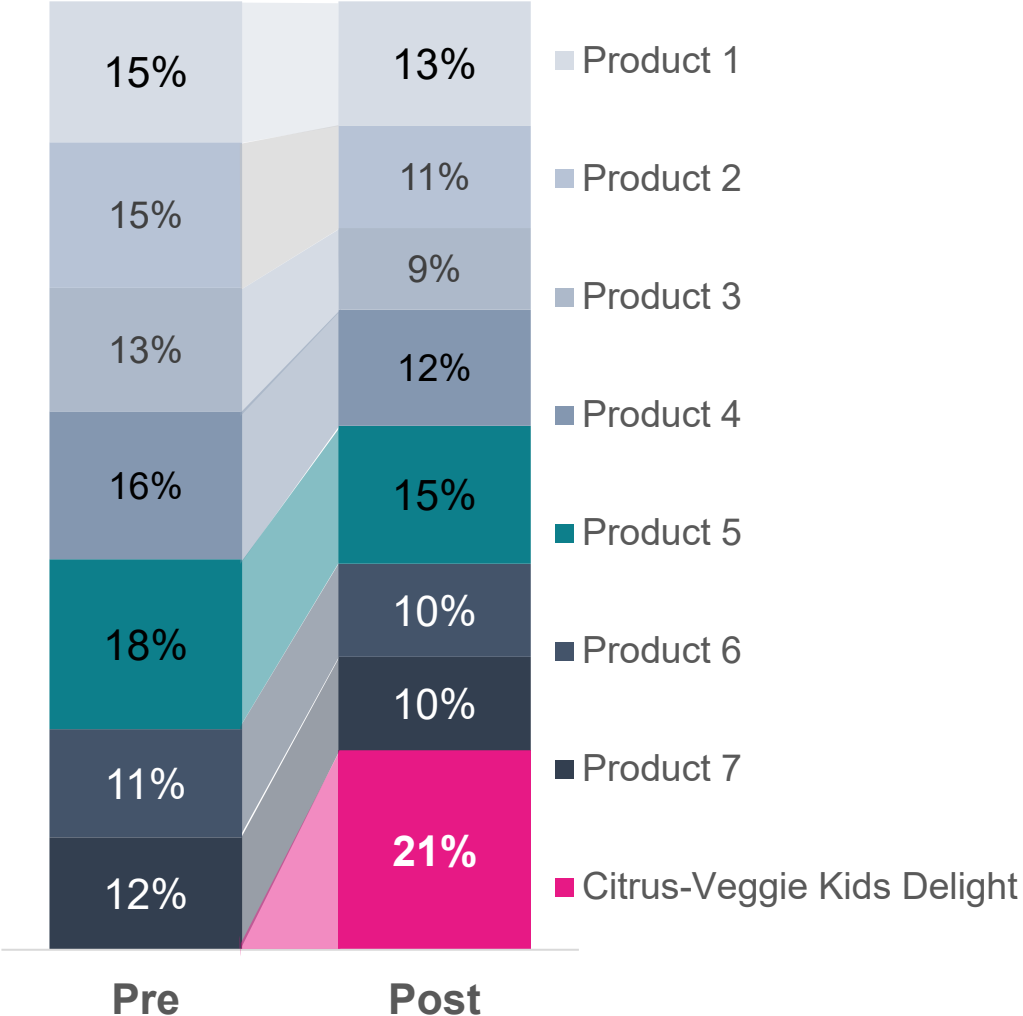
This methods also allows you to understand which current market products the concept will take share from.

Share coming from:



This index compares the share loss to if all products lost equal share (-100)

New Citrus-Veggie Concept Lift



Integrate with Co-Design



AI-Powered Menu Innovation

Combine AI-driven approach to co-creation with rapid prototyping to **redefine creativity** in the culinary world.

During tasting sessions, these **craveable concepts come to life**, allowing you to experience and refine them before they hit the menu.

“By leveraging generative AI, we **elevate creative capacity** with precision, aligning closely with food trends and your guests’ motivations.”

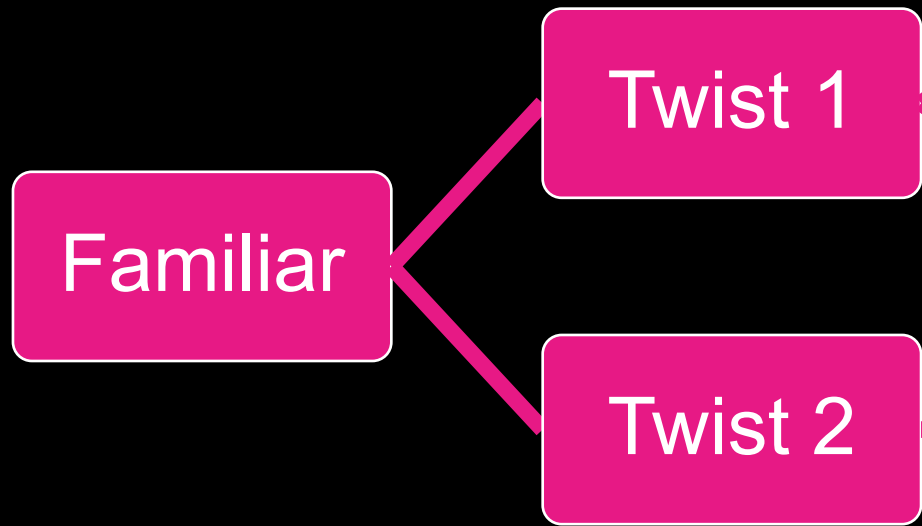
- **Charlie Baggs, Culinologist**



CHARLIE BAGGS
Culinary Innovations

Get More Bold

Familiar
with a twist



Today

2 Years Out
(less bold)

Top 16 Disruptive Forces

Andy Hines (Houston Foresight)

1. Shifting Values (e.g. Make a Difference)

2. Commodity identity continuum
3. Enoughness
4. No more neutral
5. Evolving rights – humans and non-humans

6. Multi org career paths

7. Warriors, giggers and bots

8. Providing Purpose and Passion (e.g. B Certified)

9. Going local – community more powerful foxes

10. The Growth question (agnostic, steady state, degrowth)

11. Circular Economy & Net Plus

12. Integration reality van virtual

13. AI explained (now hype cycle)

14. Truthiness: who can we trust (if wait for truth to prove itself it opens the door for the crazies). He believes this is a bump in the road - sanity will return

15. Data, data everywhere:

16. Augmented humans - machine human hybrids) a bit third wave

Top 16 Disruptive Forces

**1. Shifting Values
(e.g. Make a
Difference)**

**8. Providing Purpose
and Passion (e.g.
B Certified)**

**11. Circular Economy
& Net Plus**

Step 3: More Bold Twists

EXAMPLE PROMPT

These are all great. Please expand this citrus -veggie kids delight concept for a future product that will support helping consumers make a difference in the world with their purchases such as providing a purpose of passion such as supporting a B Corporation or contributing to a circular economy to achieve net plus carbon footprint. Do not include concepts for organic ingredients.

Step 3 Output: Bolder Twists

Citrus-Veggie Kids Delight with a Purpose

Purpose-Driven Mission

Support a B Corporation: Partner with a certified B Corporation that aligns with your values, ensuring that every purchase contributes to social and environmental performance, accountability, and transparency.

Circular Economy Contribution: Implement a program where the packaging is part of a circular economy, focusing on recycling and reusing materials to achieve a net positive carbon footprint.

InsightsNow.com

55

Product Features

Eco-Friendly Packaging: Use recyclable or biodegradable materials for the bottles and labels. Encourage consumers to return used bottles for recycling or reuse.

Carbon Offset Program: For every bottle sold, contribute to carbon offset projects such as tree planting or renewable energy initiatives to neutralize the carbon footprint.

Community Support: A portion of the proceeds from each sale goes to community projects, such as building playgrounds or supporting local schools.

InsightsNow.com

56

Marketing and Branding

Tagline: "A Sweet Start to a Healthy Day and a Better World!"

Label Design: Bright, cheerful orange color with playful graphics that appeal to kids. Include icons or badges that highlight the product's contributions to sustainability and community support.

Storytelling: Share stories on the label and marketing materials about the positive impact of each purchase, such as how many trees were planted or how much plastic was recycled.

InsightsNow.com

57

Consumer Engagement

Interactive Campaigns: Create campaigns where kids and parents can track the impact of their purchases online. For example, a website or app where they can see how many trees have been planted thanks to their juice purchases.

Educational Content: Provide fun and educational content about sustainability and healthy eating on the packaging and through digital channels.

InsightsNow.com

58

Partnerships and Collaborations

Schools and Educational Programs: Partner with schools to promote healthy eating and sustainability. Offer educational workshops or sponsor school events.

Environmental Organizations: Collaborate with environmental organizations to support larger sustainability initiatives and amplify the impact of your efforts.

InsightsNow.com

59

Purpose-Driven Mission

Support a B Corporation: Partner with a certified B Corporation that aligns with your values, ensuring that every purchase contributes to social and environmental performance, accountability, and transparency.

Circular Economy Contribution: Implement a program where the packaging is part of a circular economy, focusing on recycling and reusing materials to achieve a net positive carbon footprint.

Product Features

Eco-Friendly Packaging: Use recyclable or biodegradable materials for the bottles and labels. Encourage consumers to return used bottles for recycling or reuse.

Carbon Offset Program: For every bottle sold, contribute to carbon offset projects such as tree planting or renewable energy initiatives to neutralize the carbon footprint.

Community Support: A portion of the proceeds from each sale goes to community projects, such as building playgrounds or supporting local schools.

Marketing and Branding

Tagline: “A Sweet Start to a Healthy Day and a Better World!”

Label Design: Bright, cheerful orange color with playful graphics that appeal to kids. Include icons or badges that highlight the product’s contributions to sustainability and community support.

Storytelling: Share stories on the label and marketing materials about the positive impact of each purchase, such as how many trees were planted or how much plastic was recycled.

Consumer Engagement

Interactive Campaigns: Create campaigns where kids and parents can track the impact of their purchases online. For example, a website or app where they can see how many trees have been planted thanks to their juice purchases.

Educational Content: Provide fun and educational content about sustainability and healthy eating on the packaging and through digital channels.

Partnerships and Collaborations

Schools and Educational Programs: Partner with schools to promote healthy eating and sustainability. Offer educational workshops or sponsor school events.

Environmental Organizations: Collaborate with environmental organizations to support larger sustainability initiatives and amplify the impact of your efforts.

New Era

Revolutionizing Product Design



New Approach to Concept Co-Creation with Gen AI

○ Strengths

Increase Creative Capacity

Train to Utilize Frameworks

Saves Time

Saves Resources & Money

Get More Bold

Weakness X

Privacy And Compliance

Image Generation

Rabbit Holes

Not Human Creativity

Not Human Assessment



Go Experiment! Use Gen AI to...

- Just get something started!
- Get unstuck!
- Design co-creation workshops!
- Create creavable prototypes!
- Get more bold with twists on twists on twists!



We'd love to help!

Here to help!

LEARN MORE



CONTACT

Dave.Lundahl@InsightsNow.com