UNLOCKING
HOLISTIC PRODUCT INSIGHTS
WITH **REAL-CONTEXT DIGITAL** RESEARCH

presented by Jiexin Liang, PepsiCo R&D and Daniel Protz, FlavorWiki

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JIEXIN LIANG
R&D SENSORY AND CONSUMER SCIENTIST

Education: PhD, Food Science (Sensory Science & Food Engineering); BS, Chemical Engineering, University of California, Davis

Experience: PepsiCo R&D – Consumer Science, Competitive Intelligence

Expertise: Sensory & Consumer Science, Quantitative & Qualitative Research, In-Context Digital Testing, Competitive Intelligence

Focus: Connecting products and real-world consumers through rigorous sensory to drive proposition performance

Impact: Enable consumer-centric business decisions via sensory research to drive in-market success; Driving research into impact through publications, conferences, and active engagement with scientific communities.

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DANIEL PROTZ
CEO & FOUNDER

Education: BA from Dartmouth College, MBA from Stanford GSB

Experience: Goldman Sachs, Deutsche Bank, Groupon

Expertise: Technology design & implementation

Focus: Inventory, customer service, content publishing, pricing automation

Impact: Supported e-commerce businesses > $1B

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WHY ARE WE EXPANDING OUR APPROACH?

Complementing Traditional Testing

Conventional sensory and CLT methods focus on product attributes; Opportunity in revealing the complexity of real consumer choices and behaviors.

Total Consumer Experiences

True proposition superiority depends on performance within brand cues, packaging, pricing, and competitive alternatives.

Need for Scalable, Agile Learning

Global market dynamics demand faster, scalable research reflecting real consumer behavior for confident decisions.

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HOLISTIC PROPOSITION TESTING

Holistic proposition testing offers an in-market view of how our offerings are chosen, revealing gaps that traditional center-location testing do not capture, and enabling clearer decisions on real-context product insights.

Proposition Elements:

Brand and product expectations

Occasion and need satisfaction

Price and value context

Pack Structure

Product

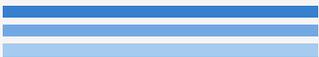**To understand holistic proposition, we are assessing both...**

1

The physical product and pack experience

2

The surrounding consumer context

(e.g., occasion, brand, channel, price)

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WHAT IS UNIQUE ABOUT HOLISTIC PROPOSITION TESTING?

01 In-Market Real-Life Testing
The method relies on consumers purchasing and using products in their daily routines for authentic insights.

02 Monadic Design Approach
Each consumer evaluates a single product, providing thorough end-to-end experience feedback.

03 Competitive Context Insights
Embedding competitive context helps measure product performance against rivals for strategic decisions.

04 Capturing Real-World Usage
The method includes factors like shelf presence, pricing, and post-purchase satisfaction.

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HOLISTIC PROPOSITION METHODOLOGY CAPTURES THE WHOLE CONSUMER JOURNEY

Screening Q's

Before Shopping & Shopping Q's

Before Consumption Q's

During Consumption Q's

After Consumption

0

1

2

3

4

Digital survey to collect & screen by demographic information & current product usage and consumption.

Consumers buy target product at store to get brand, price, and in-store context.

Consumers will provide feedback on product packaging, preparation, and other aspects of the product before consumption.

Consumers will eat the product as they normally would while completing the online survey on sensory, brand, and value aspects of the product.

Consumers are asked to share additional product details like expiration dates, packaging disposal, etc.

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MAKING HOLISTIC TESTING OPERATIONAL AT GLOBAL SCALE

Defining a holistic methodology is the first step. Operationalizing it across markets requires digital infrastructure designed for scale.

Always-On Global Consumer Community

Instant access to a verified, owned global community — continuously maintained and segmented across key demographic, behavioral, and category criteria.

- No ad-hoc recruitment rebuild.
- No variability across markets.
- Consistent competitive-set targeting at scale.

Digitally Standardized & Launch-Ready

A pre-structured digital framework built from validated modules — enabling fast study setup, consistent execution across markets, and reliable, comparable outputs.

- Always ready to deploy.
- Always structured for decision-making.

Mobile-Enabled Real-World Capture

Seamless collection of in-store interactions, purchase decisions, in-home usage, and occasion-based feedback — captured in the moments that shape real consumer choice.

- Time-based journeys
- Photo, video, and structured diagnostics
- Integrated sensory and contextual feedback

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CAPTURING WHAT TRADITIONAL TESTING CANNOT

In-Store Experience

Shopping missions capture:
• Shelf visibility
• Price perception
• Competitive proximity
• Real purchase drivers

In-Home & Occasion Context

Mobile journey design captures:
• When the product is consumed
• Who it's shared with
• What need state it fulfills
• Emotional & functional response

Multi-Dimensional Outputs

Data structured for:
• R&D (sensory & attribute diagnostics)
• Packaging (findability & packaging liking)
• Marketing (occasion & value drivers)
• Commercial (comp performance & repeat intent)

FROM INDIVIDUAL STUDIES TO CUMULATIVE INTELLIGENCE

Longitudinal Learning

Enables:

- Tracking proposition performance across waves
- Monitoring shifts in category drivers
- Identifying emerging expectation gaps
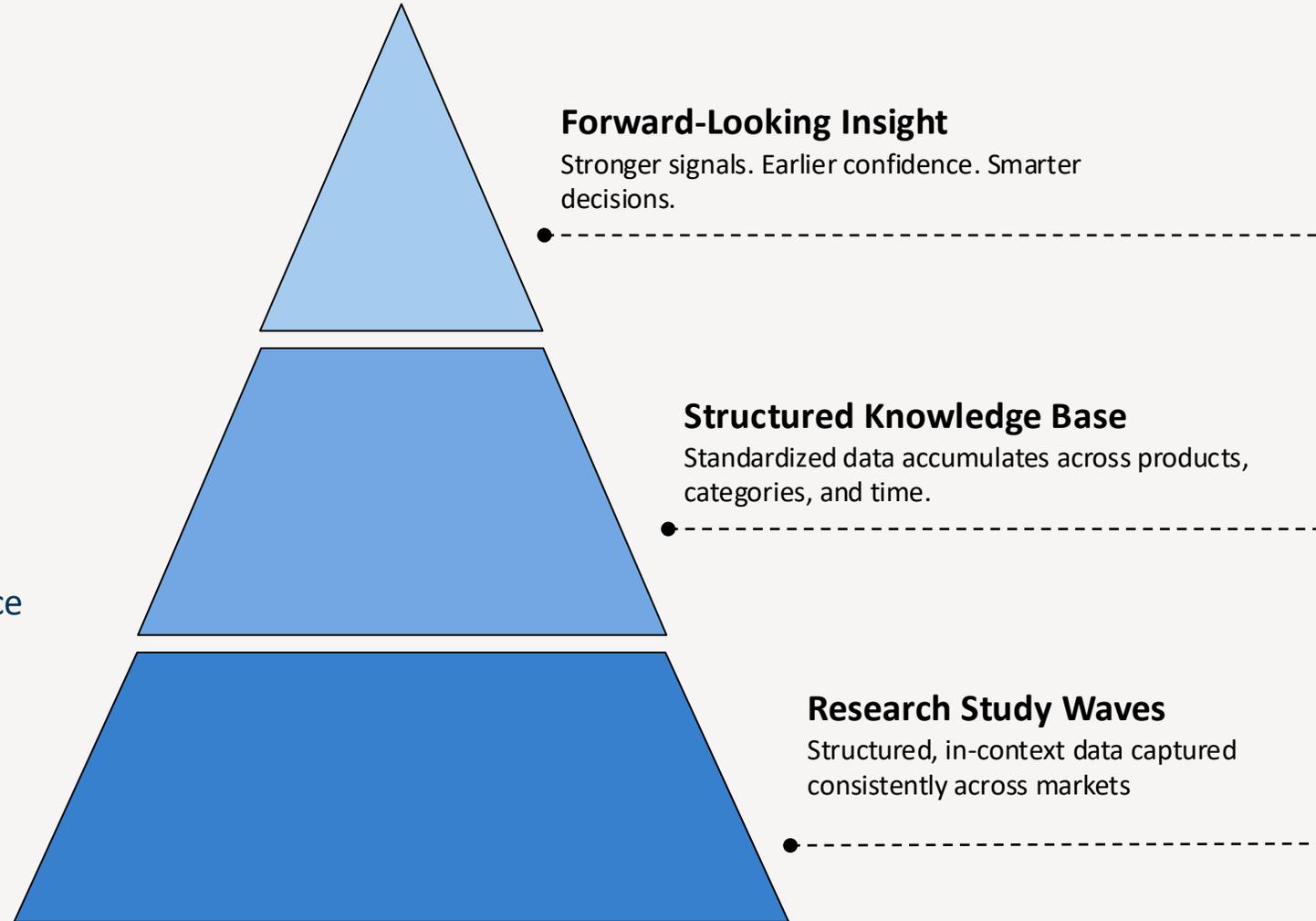- Comparing markets over time

Predictive Development

With accumulated data:

- Benchmark new concepts against historical performance
- Anticipate likely success thresholds
- Inform future formulation and positioning decisions

Scalable testing creates data.
Sustained programs create foresight.

Forward-Looking Insight
Stronger signals. Earlier confidence. Smarter decisions.

Structured Knowledge Base
Standardized data accumulates across products, categories, and time.

Research Study Waves
Structured, in-context data captured consistently across markets

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KEY TAKEAWAYS

Evolving Research for the Next Generation of Growth

1 In-context digital testing complements traditional research

2 Proposition-level assessment reveals overlooked drivers

3 Scalable global programs are possible without sacrificing rigor

4 Strong CPG–platform partnerships accelerate evolution

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