

Rapid Product Navigation: A Consumer-Driven Process To Develop an Optimal Product

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Introduction

- Ever-increasing constraints on resources
 - Reduced budgets
 - Very short product development timelines
- Question: How can we most efficiently develop the best product possible?
 - Rapid product navigation (RPN) developed to meet these demands

Other Approaches

- Descriptive analysis
- Iterative CLT/HUT's
- Design of experiments

What's missing?

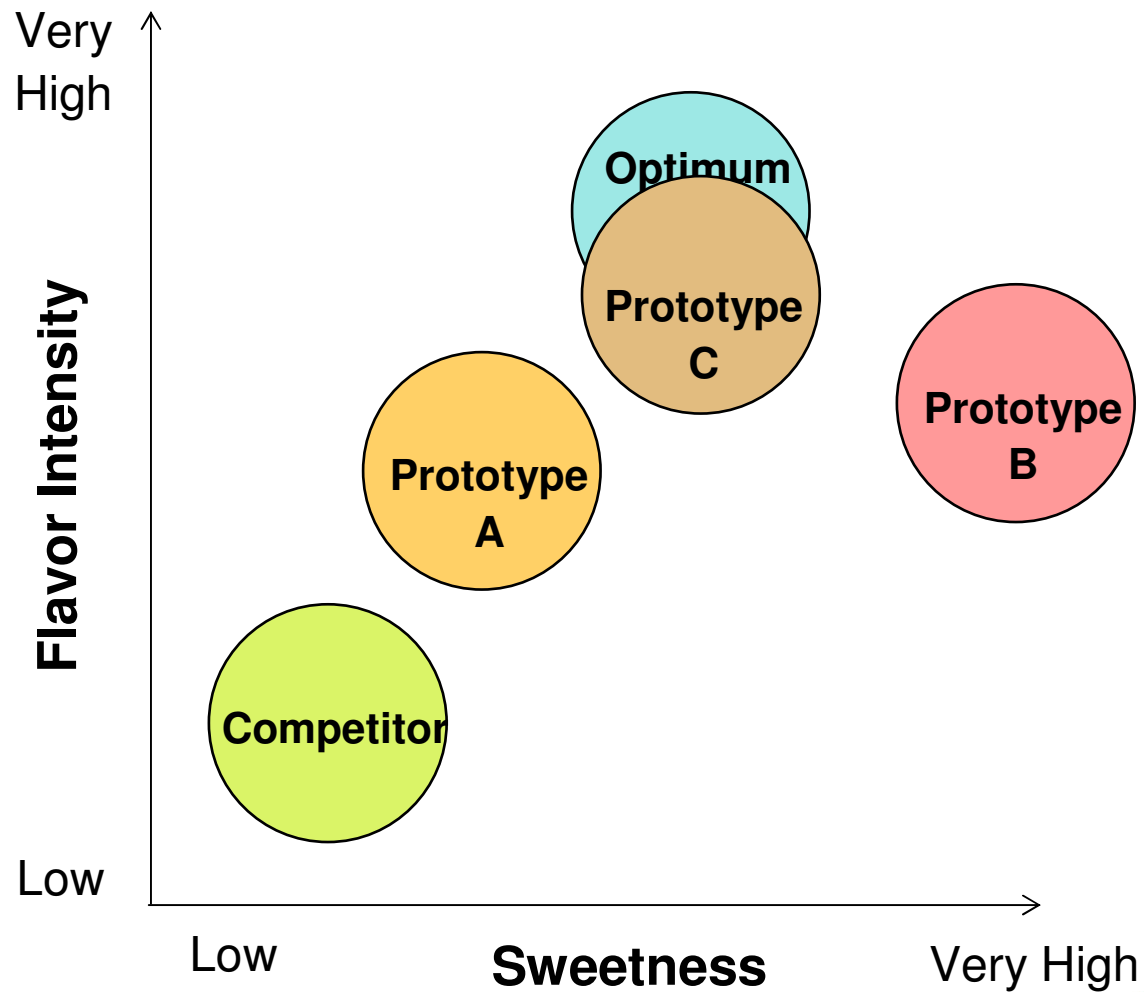
The Voice of the Consumer

Rapid Product Navigation

- Occurs as a series of qualitative discussion groups that are:
 - Consumer-driven



Example Product Map



Rapid Product Navigation

- Occurs as a series of qualitative discussion groups that are:
 - Consumer-driven
 - Rapid
 - Highly-effective & powerful

Case Study

Note: Due to proprietary concerns, actual research data and findings could not be presented. This case study is fictional, but was devised based on actual research experiences with RPN.



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Case Study

- Company ABC's marketing department wanted to launch a new moist smokeless tobacco (MST) product
 - Brand Y line extension into the Flavor F segment
 - Flavor F segment dominated by competitor's Product X

Preliminary Product Screening

- Before RPN, must know:
 - Starting prototype for navigation
 - Design elements to be explored
 - Potential consumer segments
- Start very broad and narrow down
 - Reduces the possibility of missed product opportunities
- Method depends on the product category and number of prototypes

Results from Product Screening

- Starting prototype for RPN:
 - Prototype A
- Design elements:
 - Tobacco blend
 - Balance of overall flavor intensity & sweetness
 - Ingredient K
- Potential consumer segments:
 - Only one – adult consumers of Competitor Product X



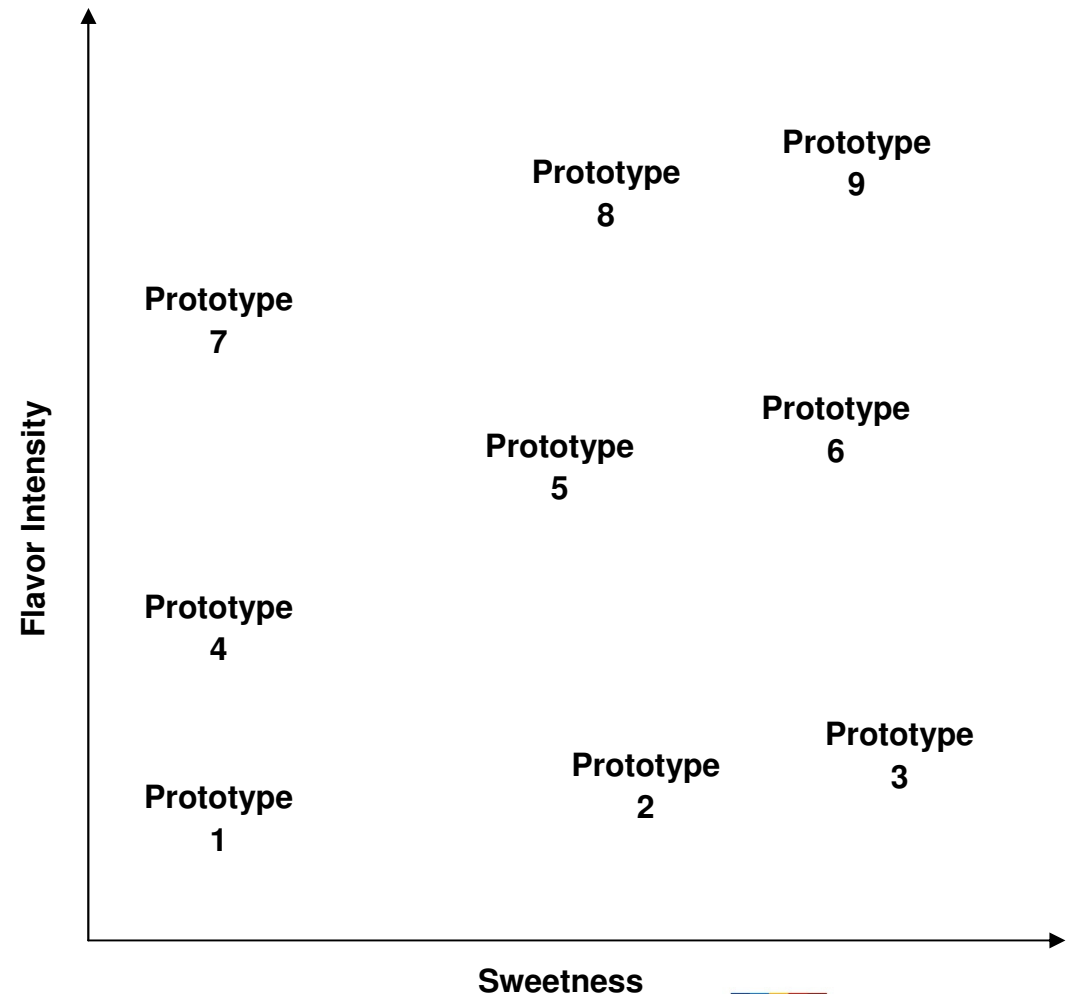
Product Design Matrix

- Products available for the RPN
- 4 factors of interest → matrix of 36 prototypes
 - But will simplify this example to two factors → 9 prototypes

Factor	Levels
Sweetness	Low, Moderate, High
Flavor Intensity	Low, Moderate, High

Qualitative Product Space (QPS)

- How to navigate products using consumer language?
- Translate the product design matrix into a sensory product space
- Prototypes mapped by project team



Recruiting Participants

- 4 groups of 6-8 Competitor Product X adult consumers were recruited
 - Number of groups needed may vary based on:
 - # design elements to be explored
 - # products per group session – depends on
 - Duration of normal product use
 - Potential for carryover
 - # possible consumer segments
 - Recommend 6-8 participants per group

Discussion Flow

Introduction

- Introduce QPS map by placing their own brand on the map
- Warm-up sample to eliminate the first-order effect

Stimulus-Response

- Product evaluations followed by discussion
- Discuss liking, key attributes, comparison to other products, improvements needed
- Place product in QPS map

Summary

- Rank products and discuss rationale
- Identify improvement opportunities
- Complete QPS map by identifying the “ideal” space



RPN Group Discussions

Most important:

- Each group is really 6-8 simultaneous, individual assessments
 - Not looking for group consensus

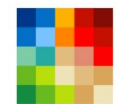
Rapid Product Navigation

Two approaches to navigating the qualitative product space:

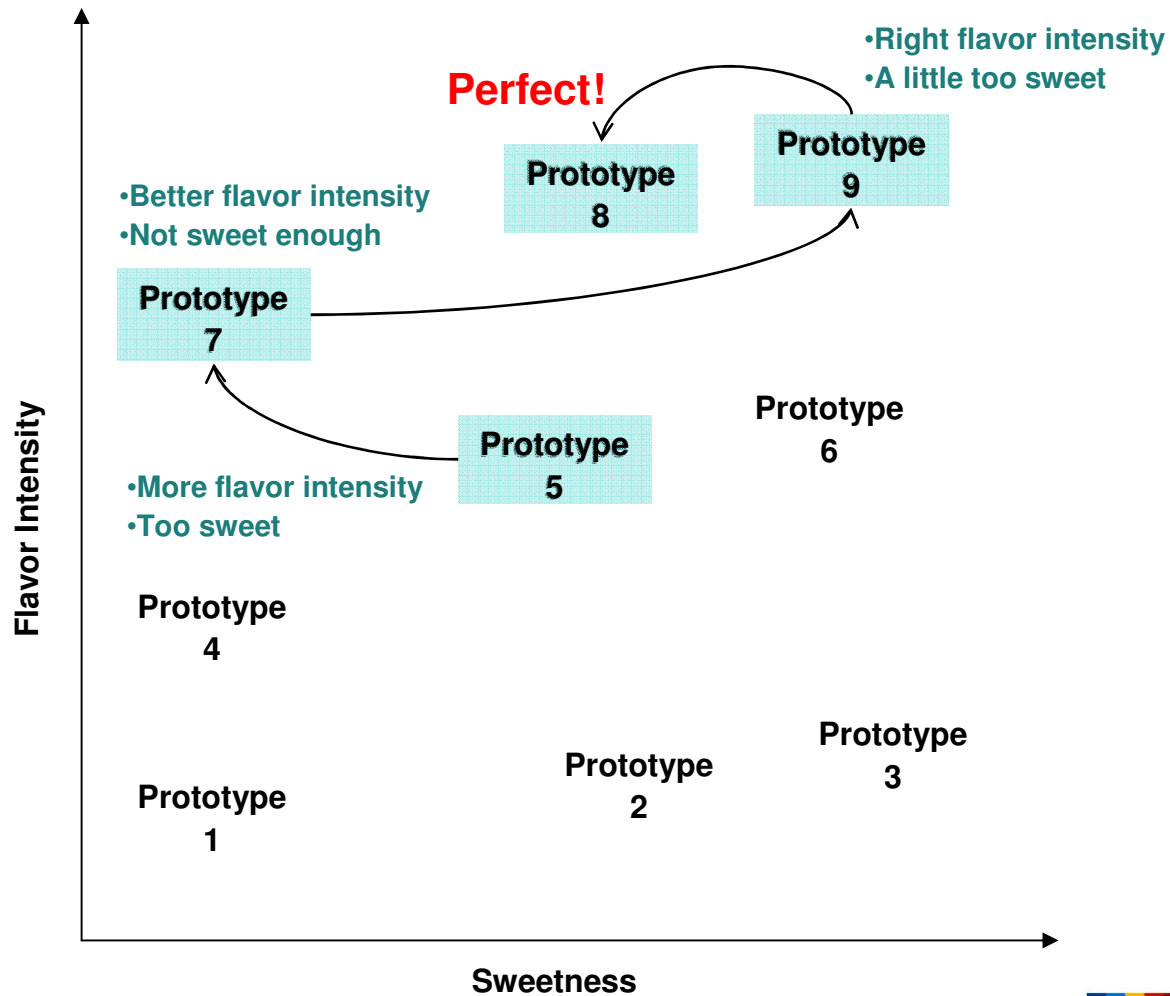
- Within a discussion group
- Across discussion groups

Within-Group Navigation

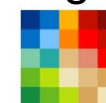
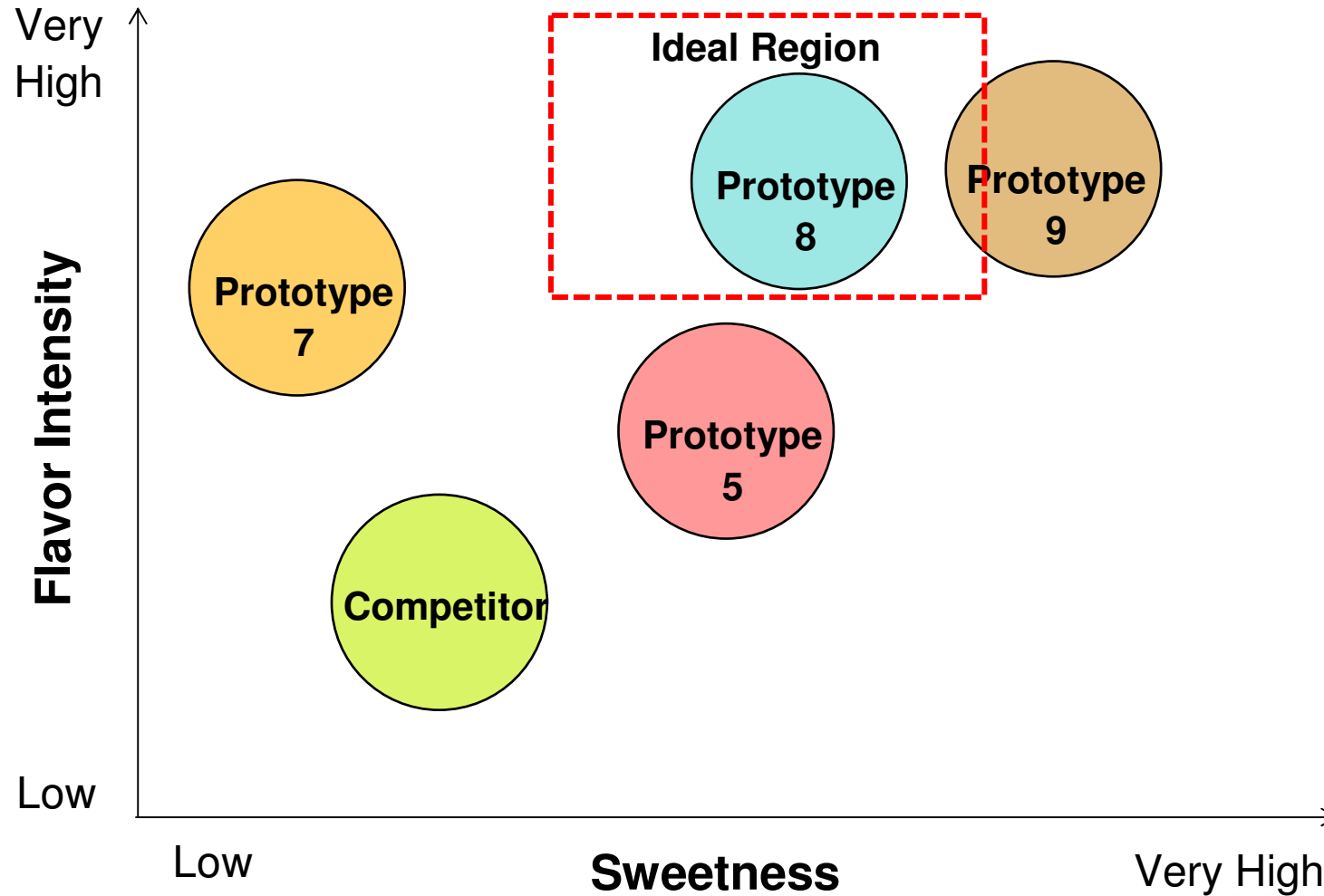
- Decide the next prototype based on feedback from the previous prototype
 - Use for simpler projects with few factors
 - Repeat process across multiple groups for confidence in results



Within-Group Navigation



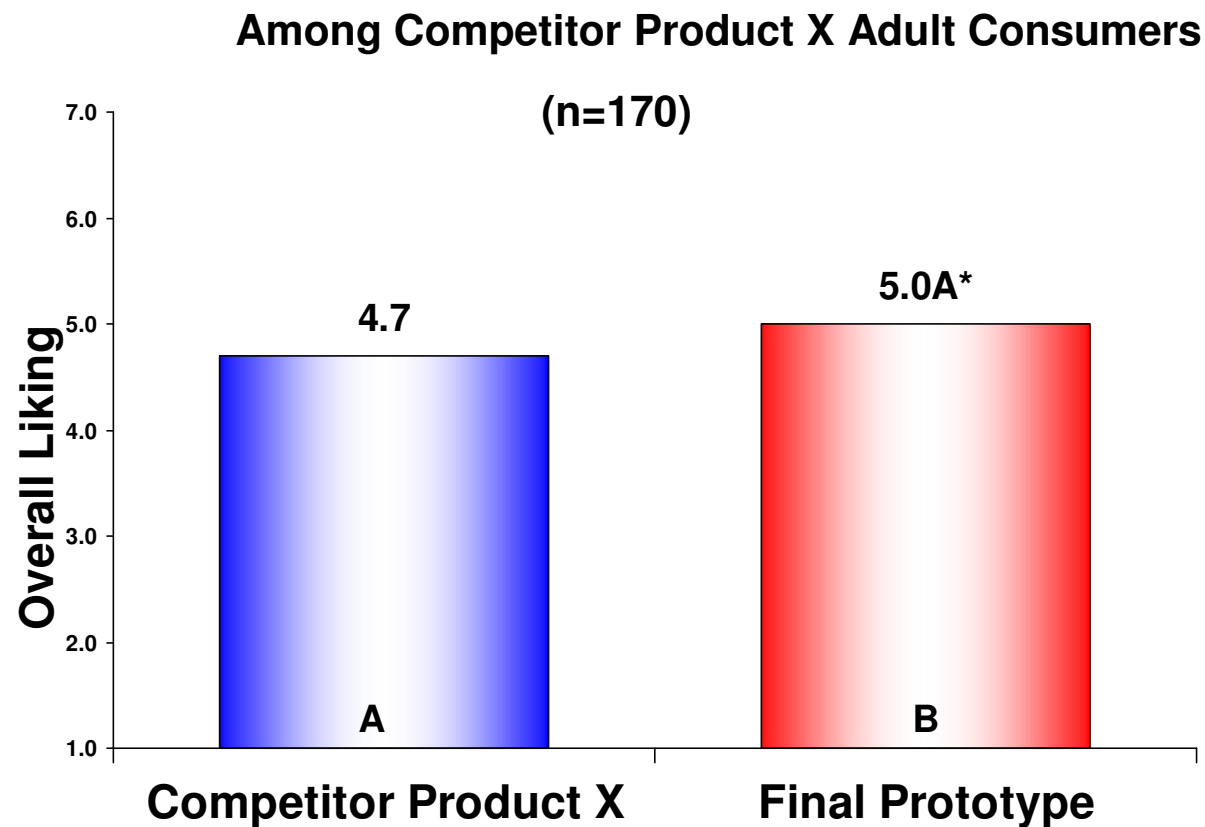
Final Product Map



Design Validation

- Validated results in a quantitative blind home use test
 - Understanding of the key design elements gained during the group discussions drives the questionnaire development
 - Confirm acceptability prior to quantitative test
 - Small-scale HUT
 - Follow-up interviews may provide additional information on minor changes needed

Quantitative Home Use Results



Across-Group Navigation

- Decide prototypes for next group based on feedback from previous group
- Use for complex projects with multiple factors
- Confirm decisions across multiple groups for confidence in results



Conclusion



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Conclusion

- Rapid, consumer-driven, highly-effective & powerful
- Reduced 18-24 month development time to 6 months or less
- Adapted for both new product development & product modifications
 - Demonstrated multiple successes across product categories
- Increased understanding
- Built strong collaborative partnerships with Product Development

For More Information

- Article in press in Food Quality and Preference
- Now available online

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