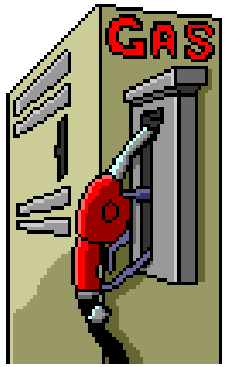
Essentials of Marketing: Marketing Research for New Product Launch

Eric T. Bradlow
Chairperson, Wharton Marketing Department
/ice-Dean, Analytics at Wharton



Essentials of Marketing: Don't Spend Billions Building What YOU Think The Customer Wants

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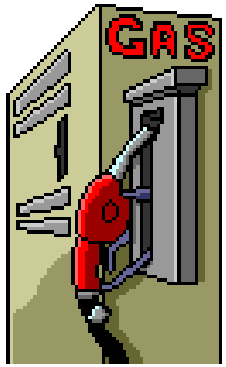

Essentials of Marketing: Marketing Insights Meets Marketing Strategy

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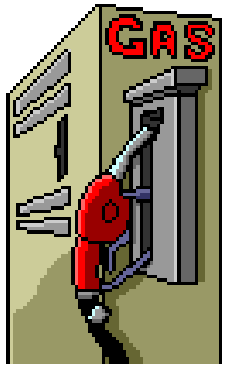


The Economic Imperative

Current Business Performance = 10.7% Share

\+

Planned Performance Improvements
- •Value Drivers
- •Capital Investment Programs

=

Business Potential with Existing Strategy

GAP

Business Performance Objectives
- •12% ROI
- •12% Revenue Growth

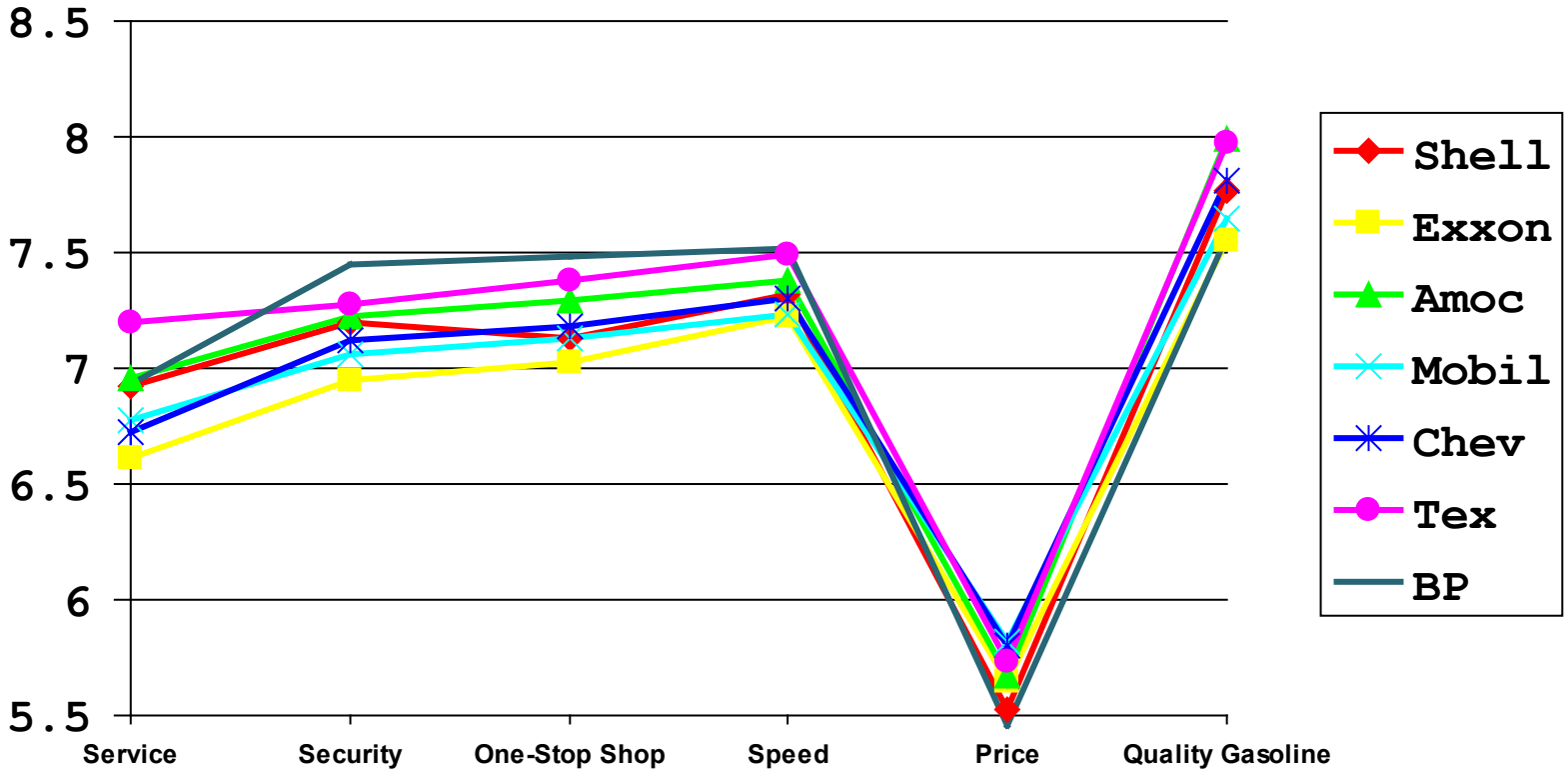
Is this realistic?

- Commodity Market
- Mature Market
- Sustainable
- Will it start a war?

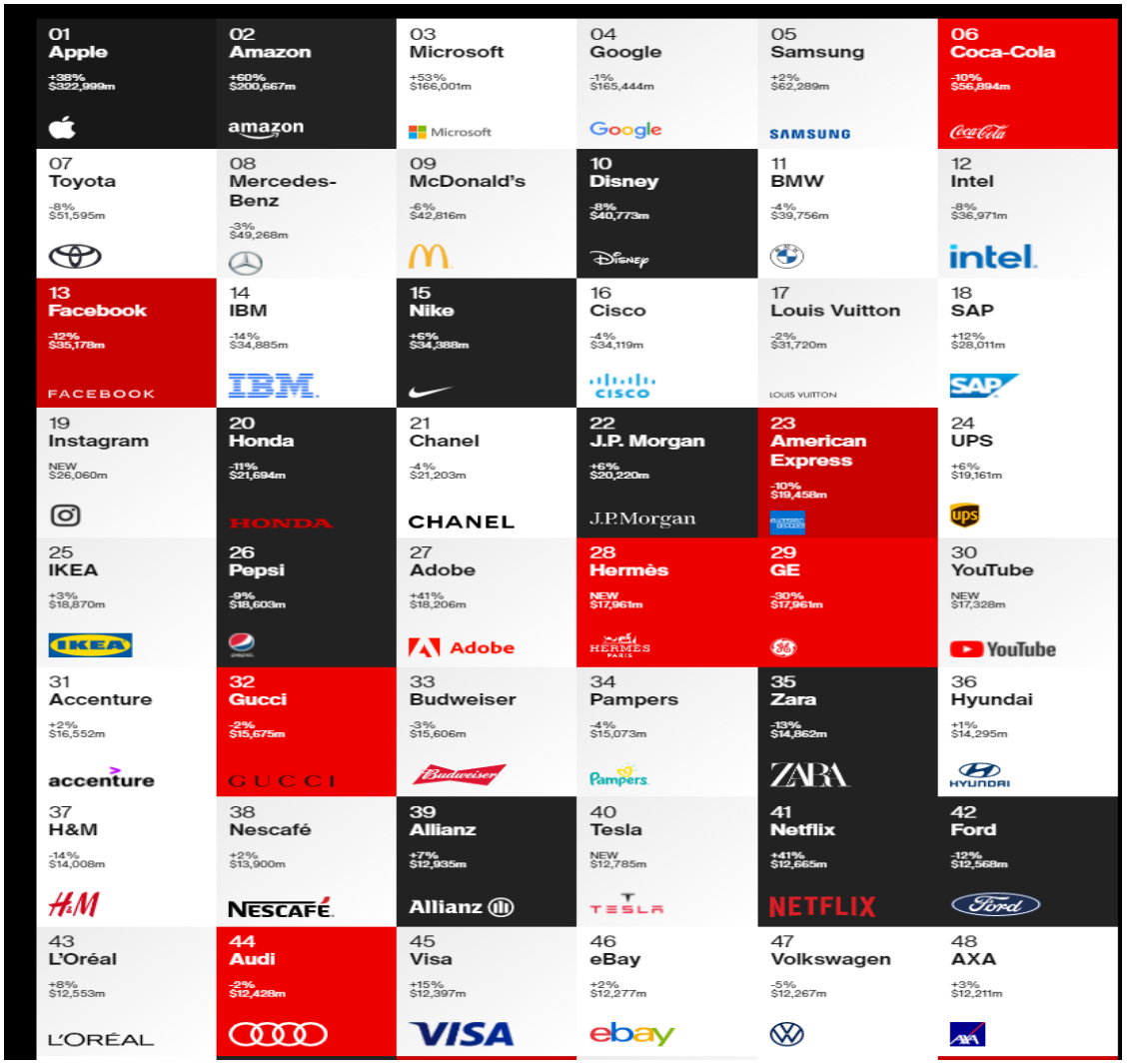
Redefine Strategy!!

However, the data suggested two major challenges in developing a new strategy

The Majors Across all Markets: Relatively Undifferentiated Market



Best Global Brands 2020



How would you measure Brand Equity?

Any thoughts about what you might do if you were Shell?

A Beginning of a Solution:

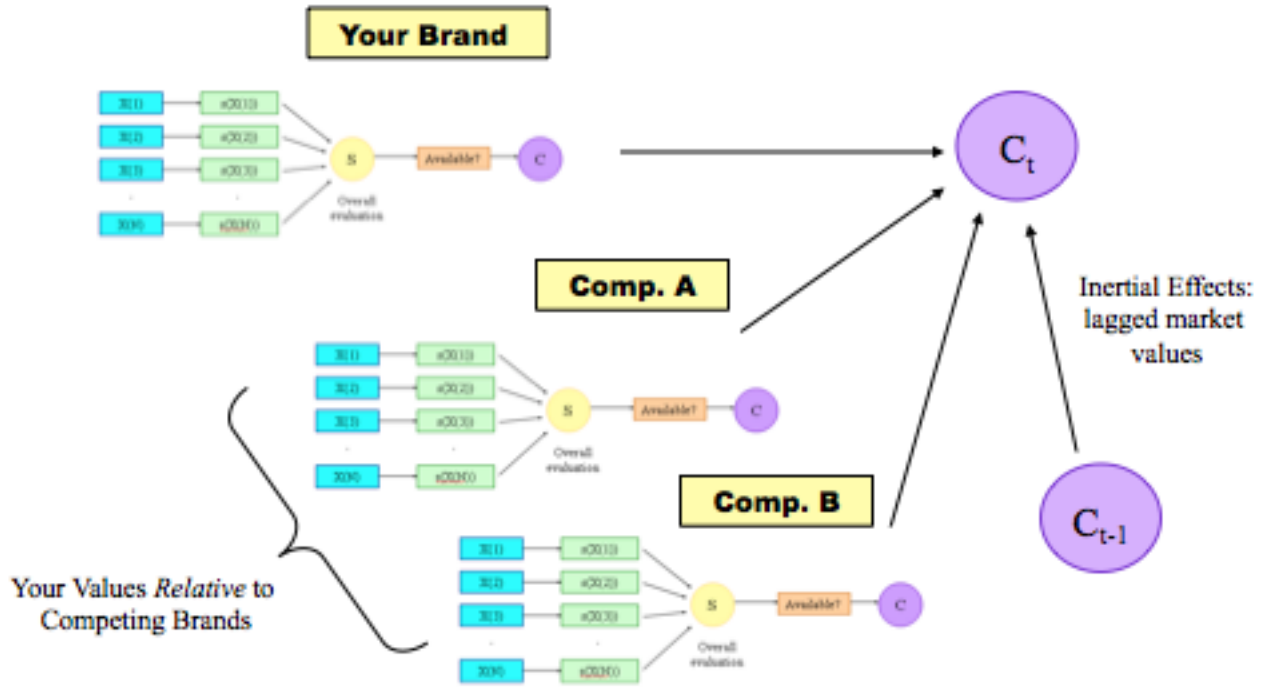
What do you hate about gas stations?

Takeaway #1

Physical Attributes ≠ Product

Takeaway #1

Physical Attributes ≠ Product



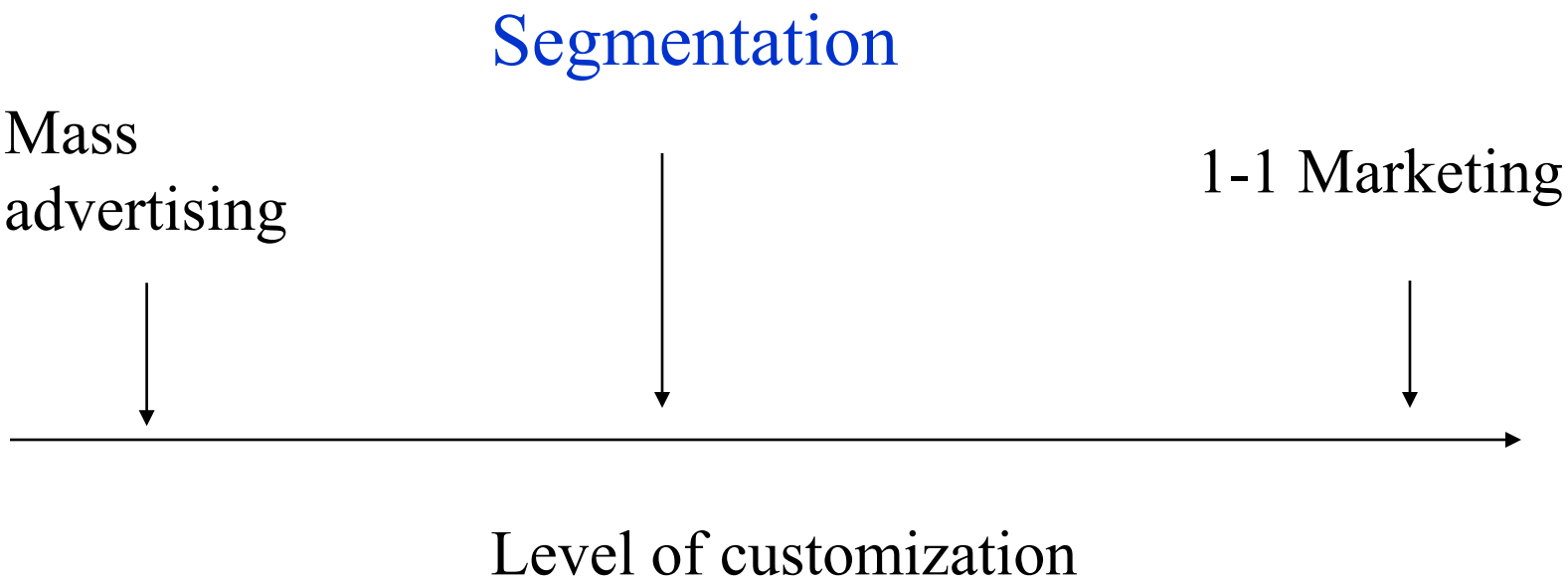
Takeaway # 2

Celebrate Heterogeneity

Takeaway #3

40% of 30% > 10.7% of 100%

The idea behind segmentation



So, how are they going to implement a segmentation scheme?

Shell starts collecting data!!

Shell's Customer Segmentation Study Methodology

- Surveyed 5000 respondents in 6 markets
- Questions included
  - Behavior Patterns
  - Desired Features
  - Frustrations
  - Brand Ratings
  - Psychographics
  - Demographics

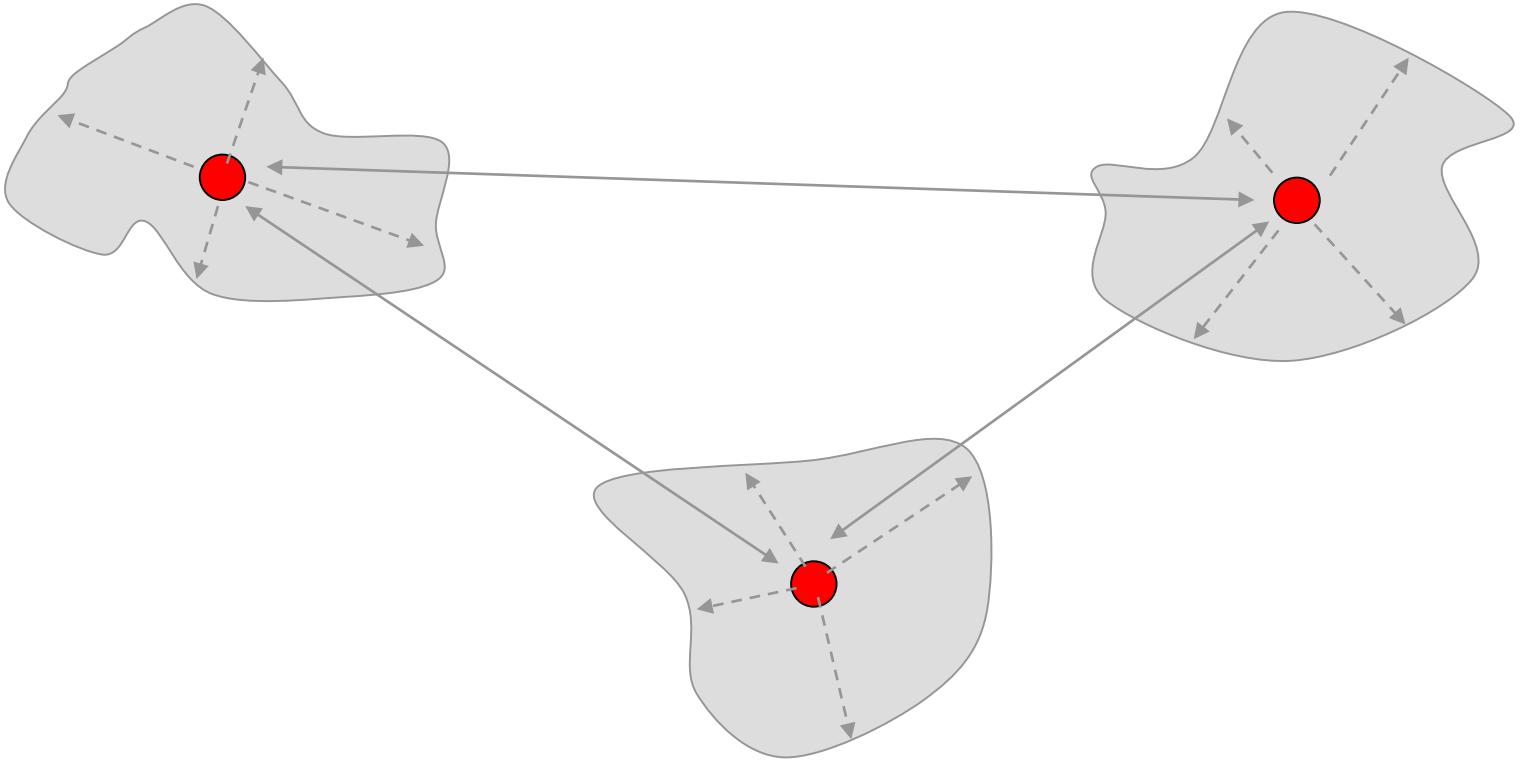
- Statistically identified 10 distinct "clusters" of customers with different needs/attitudes (based on needs)

- Studied survey results from each cluster
- Developed name & personality for each cluster

- Understand perceptions of clusters

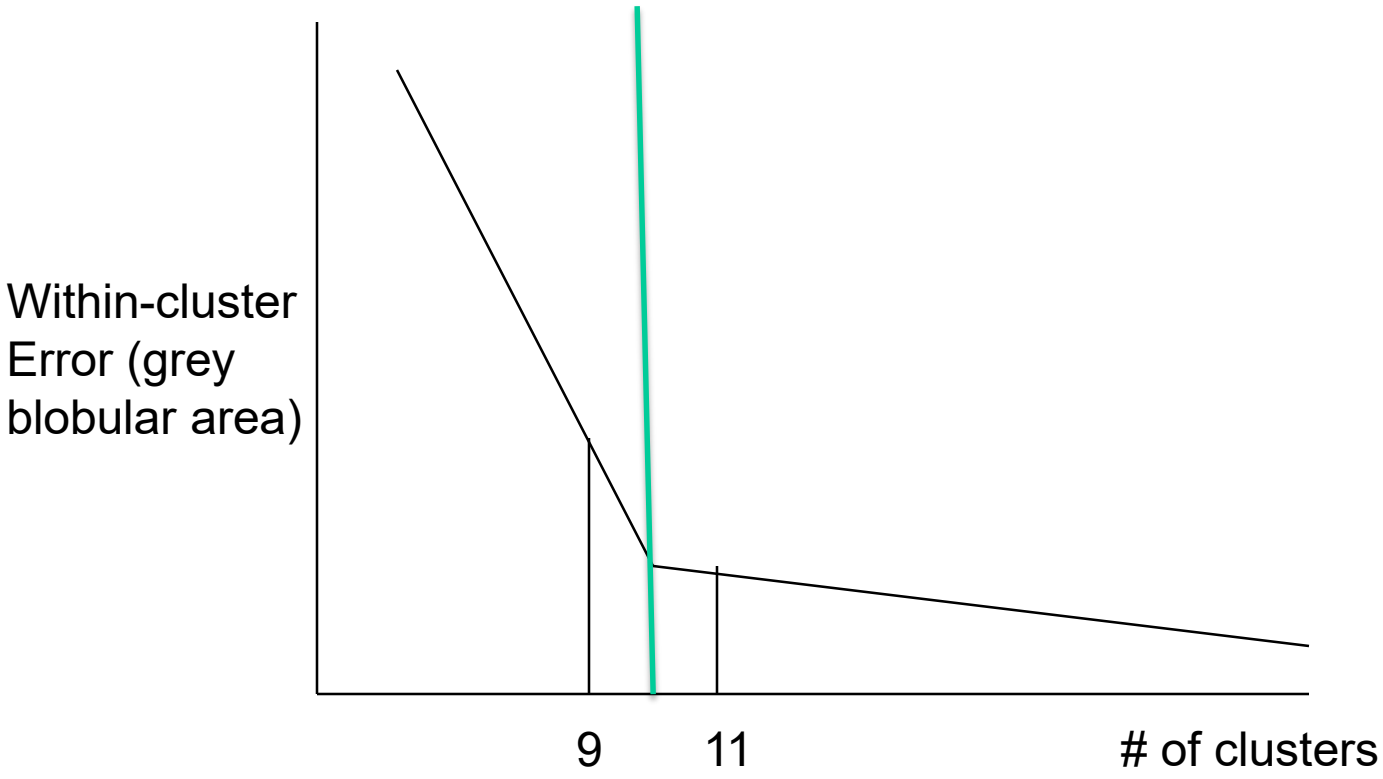
- Conducted in-depth inteviews and focus groups to understand key issues.

Illustration in two dimensions: Select bases that maximizes this ratio

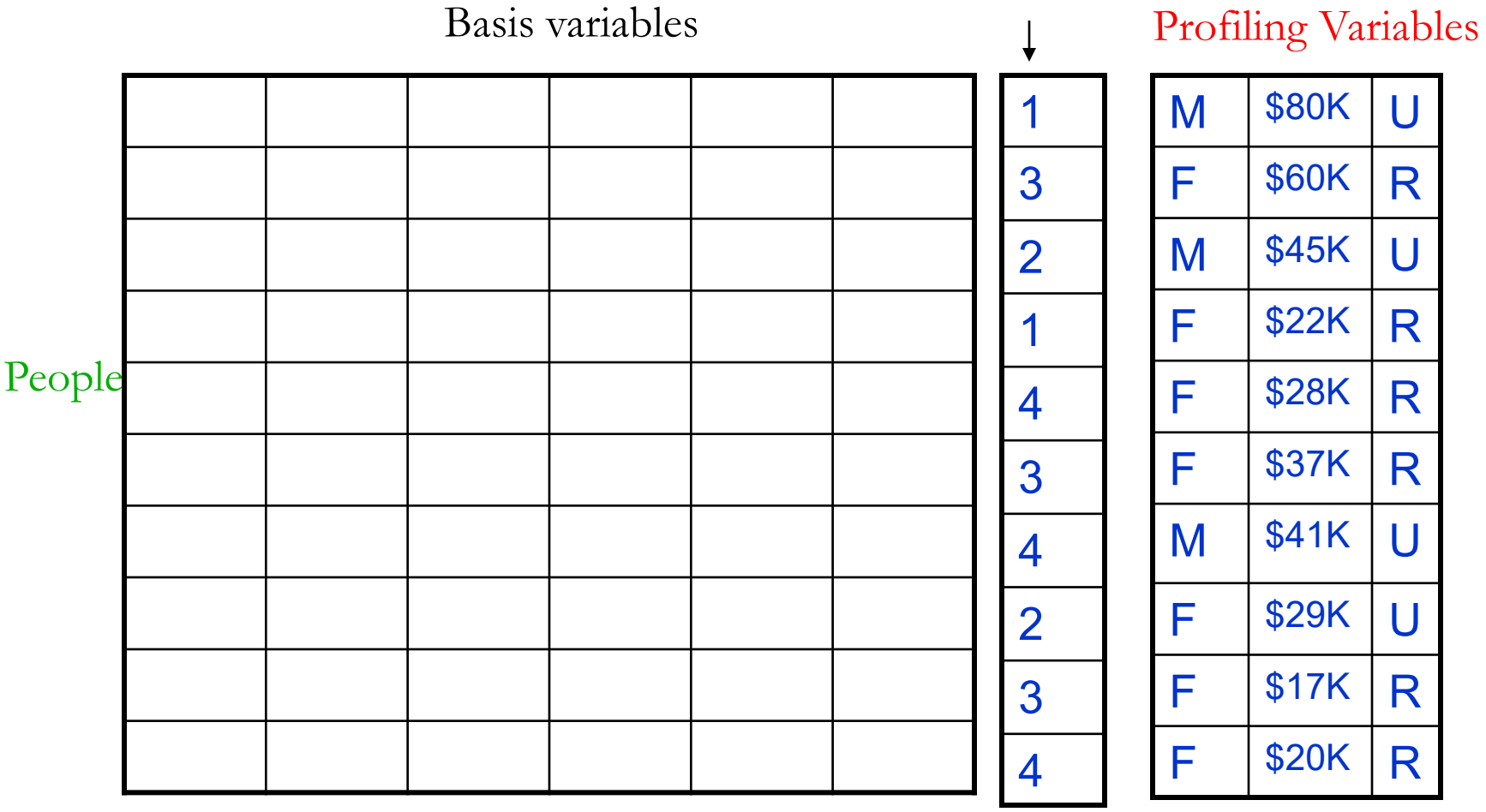


$$\max_{\forall \text{possible configurations}} \left\{ \frac{\text{between group variance}}{\text{within group variance}} \right\}$$

Determining the number of clusters (elbow plot)



Basic idea behind clustering



Using Discriminant Analysis/Classifiers with Cluster Analysis Output

- Challenge is that you don't have the basis variables for people not in the sample: so what can you do?

- Treat the group assignment as an outcome (Y)

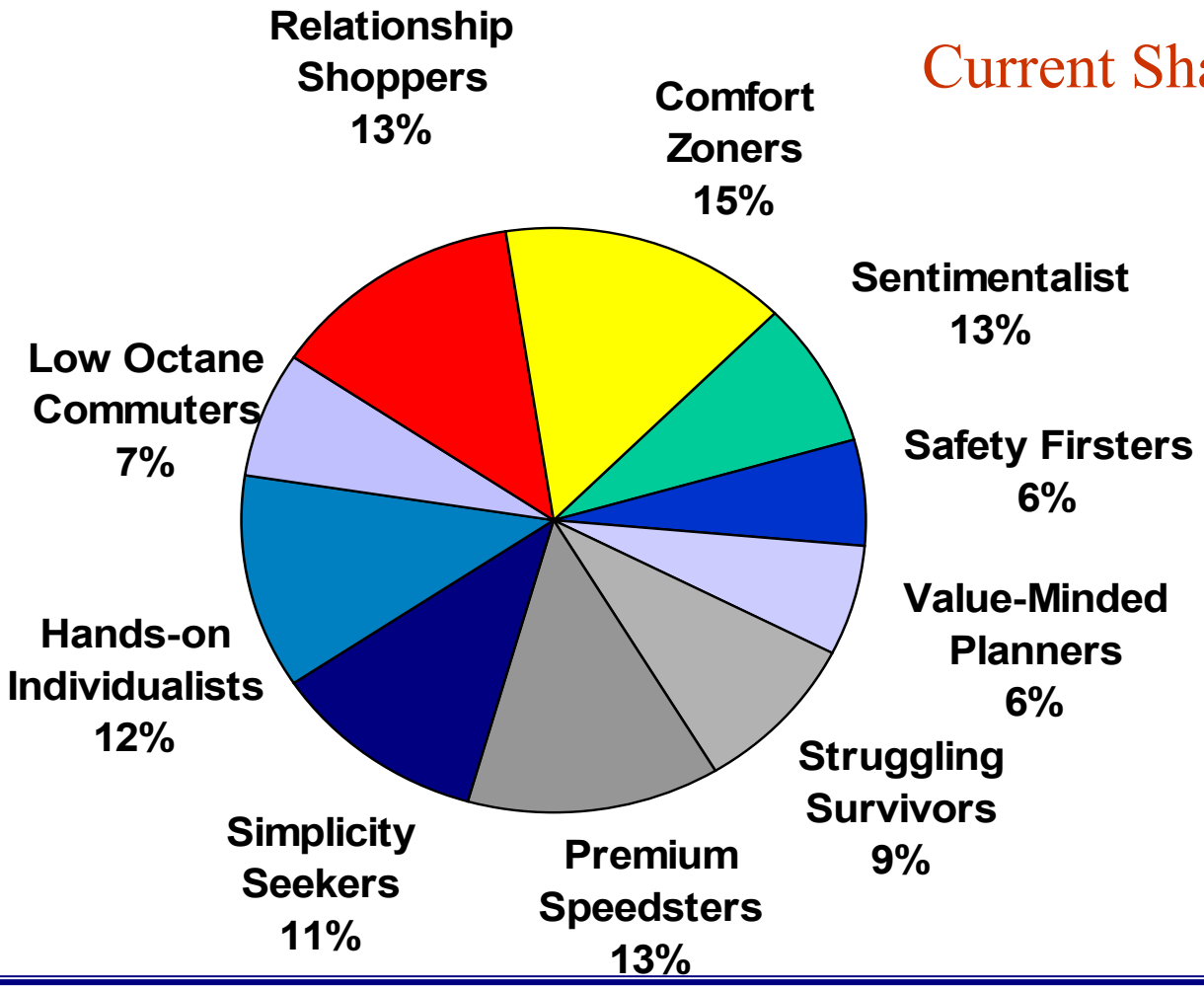
and use a classifier, e.g. discriminant analysis to

predict the group assignment based on observables (e.g. the profiling variables which are easy to get)

- In the jargon of the industry, this is called a "typing tool"

Group Assignment	Profiling Variables		
1	M	$80K	U
3	F	$60K	R
2	M	$45K	U
1	F	$22K	R
4	F	$28K	R
3	F	$37K	R
4	M	$41K	U
2	F	$29K	U
3	F	$17K	R
4	F	$20K	R

So which segment(s) should Shell go after??



Current Share = 10.7%

How to Select Segments to Target

Market Attraction

- Segment size
- Amount and strength of growth
- “Value” of segment
- Synergies between segments

Company Fit

- Current position in segment
- Ease of entry into segment

Competitive Environment

- Number and strength of competitors
- Ease of competitive entry into segment

Shell's Plan

- Sought to choose an identity (group of segments) that was:
  - Unique in the market
  - Not easily copied, and
  - Attractive based on based on margins, volume, and Shell's capabilities to meet those segments
    - ex: Leave low price to independents

Quick and Easy Shell

Premium Speedsters

Safety Firsters

Simplicity Seekers

So, what innovations would you try?

- **Vending at pumps**
- **Unmanned stations**
- **Cash accepted at pump**
- **Bar code payment**
- **Frequent filler plans**
- **Drive through “mini-marts”**
- **Additional convenience store products/services**
- **Robotic gas pump**
- **Remote (workplace) delivery**

The problem: How can Shell anticipate how customers and competitors will respond to a product innovation before the start of the PLC?

Standard Approaches: Survey
Ask People What They Would do

- They don’t know
- Can’t tell us with any precision
- They don’t want to say
- Don’t have explicitly formed preferences

Standard Methods (Cont'd)

- Laboratory Simulation
  - external validity
- Test-market/beta testing
  - requires full product development
  - tips competition
  - external validity

The conjoint world

- Attributes
- Attribute levels
- Part-worths
- Attribute importance
- Utility

Attributes

- Conjoint analysis represents products or services as bundles of attributes
- An attribute may be any clearly defined feature or characteristic
- Examples
  - price
  - brand
  - size
  - performance

Attribute selection

- Attributes in conjoint should be
  - clear and unambiguous
  - determining choice
  - actionable
- The total number of attributes should be kept low
  - 6 is the average
  - most studies fall between 4 and 8
- Use qualitative research and pretests to decide on attributes and levels

Comments About Conjoint

- More attributes and levels = more pairs/tasks
- Adaptive Conjoint -> Choose 50-50 pairs
- Has been applied in many settings (Courtyard by Marriott, EZ Pass, Car Design, etc..)
- Can be used as a basis for segmentation
- Bayesian conjoint – individual-level partworths with data sharing
- Monotone constraints
- Key is out-of-sample prediction/validation

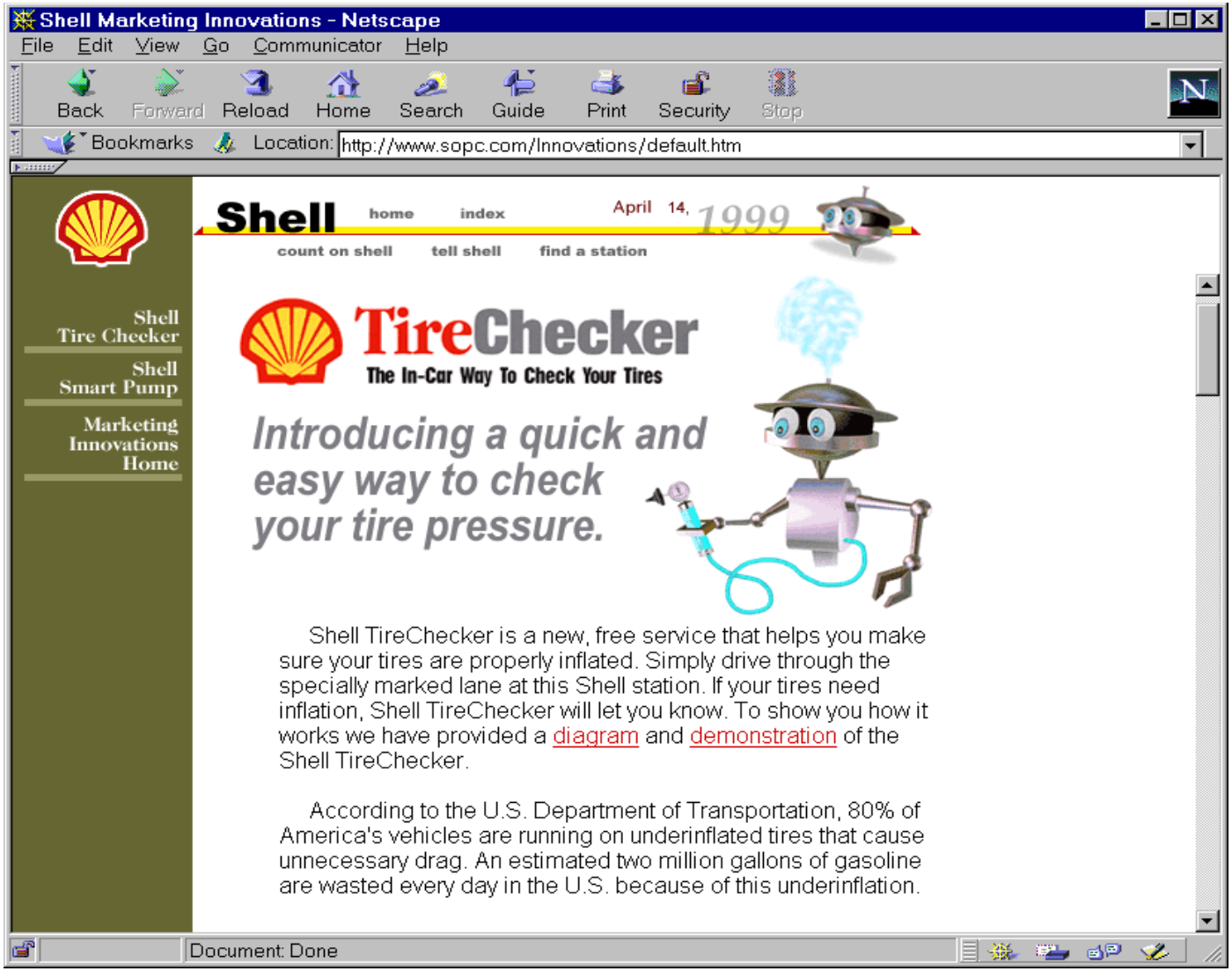
A Solution: Conjoint Analysis Simulator

- Conjoint Analysis used to build a model of how consumers will respond to different identities and different sets of new station attributes;

- Shell executives participated in a war-gaming exercise in which they role-played the major competitors, each making similar identity and station-attribute decisions.

Shell Strategy Simulator.xls

What happened…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TireChecker
The In-Car Way To Check Your Tires
Introducing a quick and easy way to check your tire pressure.
Shell TireChecker is a new, free service that helps you make sure your tires are properly inflated. Simply drive through the specially marked lane at this Shell station. If your tires need inflation, Shell TireChecker will let you know. To show you how it works we have provided a diagram and demonstration of the Shell TireChecker.
According to the U.S. Department of Transportation, 80% of America's vehicles are running on underinflated tires that cause unnecessary drag. An estimated two million gallons of gasoline are wasted every day in the U.S. because of this underinflation.
Document: Done

- Launched the most expensive supporting advertising campaign in the history of gasoline retailing ($30 mm budget, George Lucas directs)

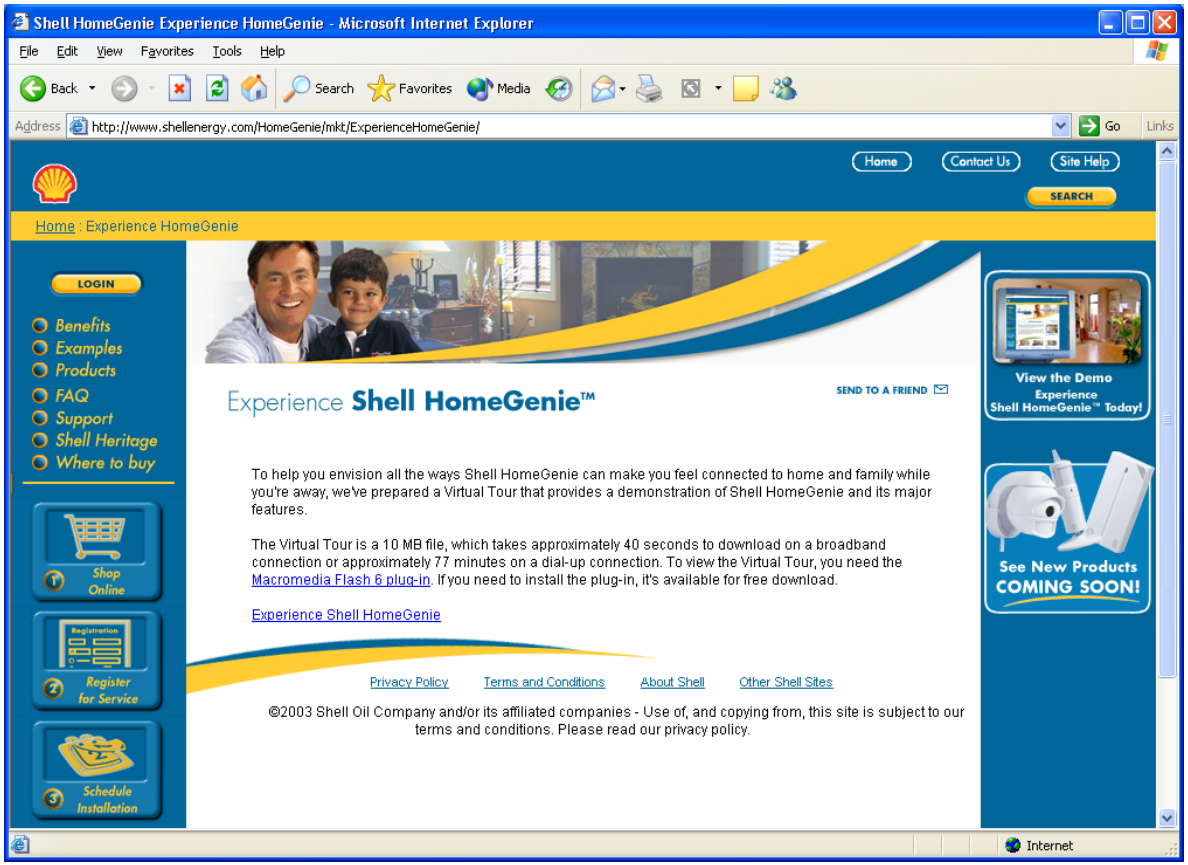
But then…

- Mobil observes Shell's ads, and says, "quick n' easy…what a great idea!"
- Beat them to the market with Speedpass

Shell responded, but appeared to imitate Mobil

Shell easyPay

Shell Repurposes the Technology



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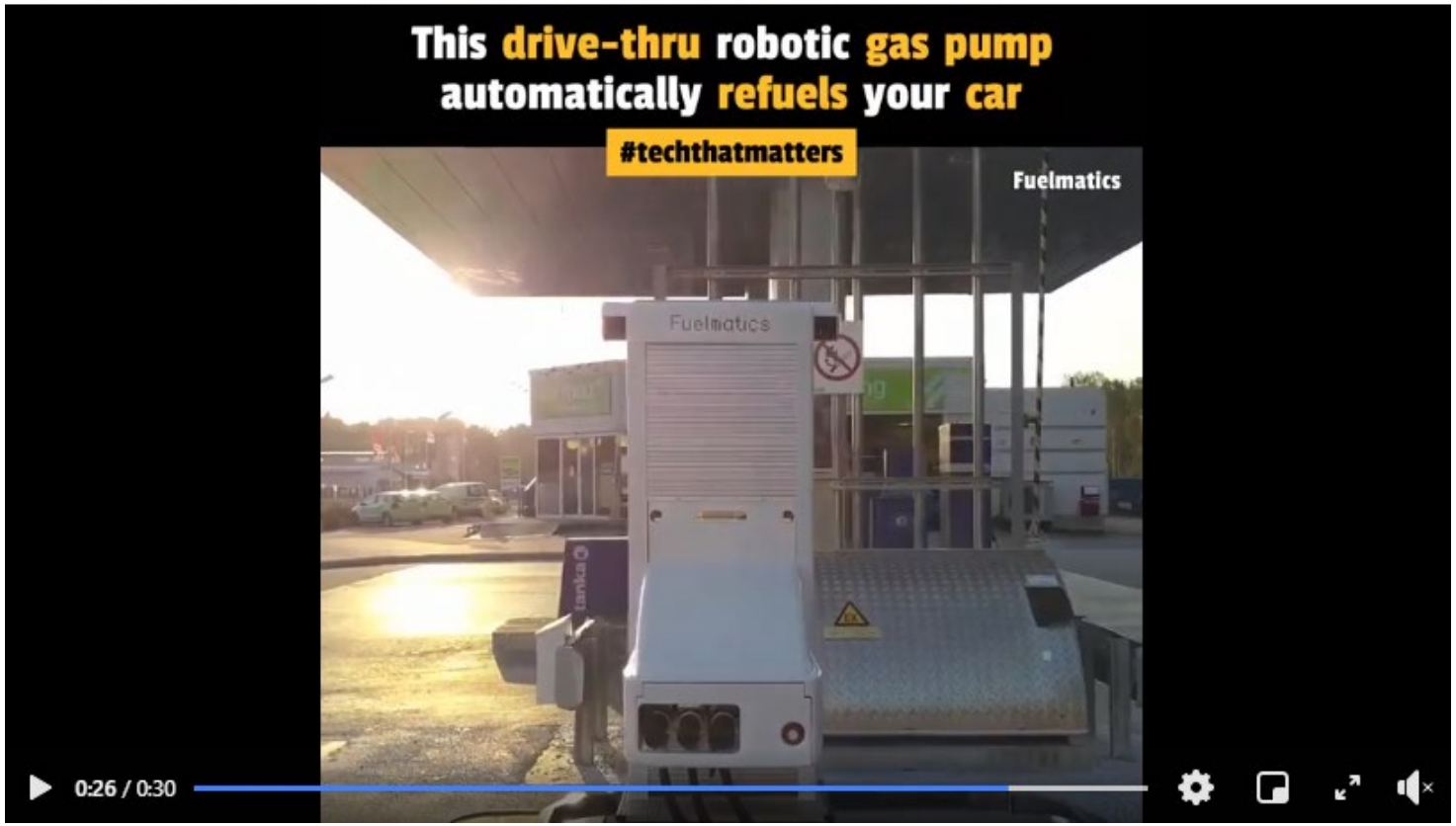

Summary

40% of 30% > 10.7% of 100%

Conjoint analysis for optimal product design