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## Real-world Choices Your Targets Make at Point of Purchase: A Best-Practices Approach to Using Decision Tree-Based Research

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There are two major issues most organizations face in understanding the choices consumers make at the shelf – regardless of economic conditions. One is how to optimize the product line (with respect to preference/market share). The other issue – understanding the decision process consumers engage in at the shelf – requires insight into the hierarchy of that process. Typically, decisions related to these issues are (and should be) supported by a variety of information sources, with sales data and marketing research chief among them.

Obviously, sales data provides quick insights into weaker or declining performance, but it doesn't address where share is likely to go when products are removed from the line or an out-of-stock situation exists, what preference share a new product is likely to gain, or what the product/size/flavor switching is likely to be from which existing products. Discrete Choice Analysis (DCA), or Choice-Based Conjoint (CBC), is the best solution for overall optimization issues. While these can be complex and relatively costly studies, optimization is a high-risk and costly option requiring maximum precision and the ability to simulate a variety of different market scenarios – both of which are satisfied by a well-

designed DCA marketing research project.

However, DCA models do not provide easily accessible insights about the ordering, or hierarchy, of a consumer's decision process. Insights into this process help businesses understand which product/size/flavors should be retained or given more shelf space, and which ones less so. If a product is unavailable at shelf due to an out of stock or delisting, what are people likely to purchase instead – same brand but different size/flavor, or same size/flavor but a different brand? All of this can be quantified using cost-effective survey research that includes a technique called Decision Trees.

Decision Trees can help support product line decisions by providing insight into the hierarchy of the purchase decision process – how the tree branches (e.g., brand trumps form, scent, or flavor vs. flavor trumps all) – and its relationship to shelf organization issues. Knowledge Networks' approach to Decision Tree analysis provides superior information because it

- provides visual representation of the products under consideration so consumers can easily

- communicate product choices across a large range of options
- is based on a uniquely representative data source, KnowledgePanel®,
- allows us to look at item sets from the brand or product perspectives

### Visual elements, intuitive decision hierarchy simplify the respondent's task

KN uses product images whenever possible, recreating the visual cues that are present in the “at the shelf” shopping experience, which allows us to more accurately assess how people will respond to packaging, size, on-pack offers, and other marketing elements.



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A key aspect of Decision Tree outcome is how well the respondent task is structured during data collection. There is an even wider variety of respondent exercises to capture Decision Tree data. We bring deep knowledge of the design process in creating your Decision Tree, zeroing in on the questions you need answered in the context of a survey experience that elicits hierarchical answers from real people. KN uses its expertise to design the decision process in a manner that makes intuitive sense to

participants. The visual product stimuli are used as the basis for the decision task, allowing respondents to easily communicate the purchase hierarchy while minimizing respondent burden. We also include a verification process within the survey, which permits respondents to review purchase decision information and make any adjustments that are required.

This overall approach to Decision Trees helps keep respondents engaged in the task and reduces the risk of hasty responses that could have a negative impact on the final business decision. In addition, we leverage our standard data quality protocol to identify and remove respondents who are speedsters – those who complete the survey in substantially less time than the balance of the sample.

### Starting with a highly accurate data source

There are a variety of data collection approaches to support Decision Tree analysis – store intercept, virtual shopping, online interviewing – which vary on cost and timing dimensions. The key consideration here is: Is the data used to “feed the tree” based on a representative sample of the target population?

For consumer surveys, our KnowledgePanel® provides unrivaled sample and data quality. It is the only online panel based on a statistically valid sample of the full U.S. population, and includes the offline population, cell phone-only households, and key ethnic groups. The result is a Decision Tree data set that truly represents the opportunities and pitfalls your products may encounter in the real-world

marketplace, because the sample represents all of America.

### A modeling approach that provides macro and micro views of the decision hierarchy

From a modeling perspective, KN's proprietary approach allows us both to develop the structure of the Decision Tree itself, and to prioritize products based on the strength of performance within any of the key dimensions of interest (e.g., brand, form, scent, size). The performance scoring adds useful information to guide product prioritization decisions. Our approach is applicable within any industry and for both consumer and professional respondents.

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For each beer brand, pack size, and container type shown below, consider your likelihood to buy the product at a retail store.

Please drag each one of these products into one of the boxes you see below, depending on your likelihood to buy the product at retail.

You may leave columns blank and move items between columns.

Drag each item to their appropriate spot.

Blue Moon 6-pack Bottles 	Budweiser 6-pack Bottles 	Budweiser 6-pack Cans 	Bud Light 6-pack Bottles 
Bud Light 6-pack Cans 	Budweiser Select 6-pack Bottles 	Coors Banquet 6-pack Bottles 	Coors Light 6-pack Bottles 
Definitely would buy at a retail store	Likely to buy at a retail store	Less likely to buy at a retail store	Would not buy at a retail store

The combination of the highest quality online sample, data quality, visual stimuli, and well designed respondent tasks not only yields the generic basics of Decision Trees, but also adds deeper insights to drive product line decisions. KN's best-practices approach to Decision Trees assures that all of these essential goals can be achieved.