

Market Research Analytical Techniques

Technique	What it does	What it is used for	Pros	Cons
Conjoint Analysis / Choice Modeling	Allows consumers' preferences for a product or service to be broken down into tradeoffs among its individual attributes for the context in which overall judgements are made.	Optimizing product configurations; Studying price elasticities for demand; Simulating market response to new or modified offerings; Diagnosing competitive strengths and weaknesses.	<ul style="list-style-type: none"> • Of all survey research techniques, this most closely replicates the real-world purchase process. • Flexibility: can run "what if" scenarios including scenarios not explicitly tested. • Great for new product development and pricing. 	<ul style="list-style-type: none"> • Models preference share rather than market share. • There are limits to the number of features that can be included in a study.
Structural Equation Modeling (SEM)	Also called causal modeling, it hypothesizes causal relationships among variables and tests the causal models with a linear equation system. It allows the inclusion of latent variables (which are intangible concepts such as intelligence, loyalty, or satisfaction, and are difficult to measure).	Customer satisfaction and loyalty studies; Driver analysis.	<ul style="list-style-type: none"> • Can model latent variables. • Can utilize data of differing scales. • Path diagrams make the results easier to understand and communicate to management. 	<ul style="list-style-type: none"> • Models can be complex. • Tends to need large sample sizes.
Factor Analysis	Identifies a set of underlying dimensions ("Factors") within a set of variables, revealing unobserved structure in the data.	Reducing the number of variables for analysis; Identifying conceptual or benefit dimensions underlying expressed product perceptions and preferences.	<ul style="list-style-type: none"> • Simplifies large or complex sets of variables/attributes. • Can be used to understand how the customer thinks. • Commonly used on subjective measures such as attitudes, beliefs, and product attribute ratings. 	<ul style="list-style-type: none"> • Subjective interpretation of the results is a component. • Is often a companion to other analyses such as segmentation, rather than an end itself.
Discriminate Analysis	Examines how two or more groups (generally respondents) differ from one another on the basis of a number of predictor variables.	Understanding and modeling differences between / among groups (e.g., buyers vs. non-buyers of different brands); Predicting market behavior based on demographic and psychographic variables.	<ul style="list-style-type: none"> • Can be thought of as regression for categorical dependent variables. • Can include variables of differing scales. • Prediction: a powerful tool for finding segments in databases for sales and direct marketing efforts. 	<ul style="list-style-type: none"> • Without careful implementation, models will not perform as well on "new" data as they do on initial data.
Cluster Analysis	Uses any of several techniques to classify people, objects, or variables into more homogeneous groups.	Identifying / describing market segments; Developing typological findings and describing target markets.	<ul style="list-style-type: none"> • Allows a deeper understanding of the market. • Can greatly aid messaging and new product development by targeting homogeneous groups. 	<ul style="list-style-type: none"> • Subjective interpretation of the results is a component. • The technique is mathematical and therefore has no underlying model against which to test statistical hypotheses.
Regression Analysis (Simple and Multiple)	Studies the dependence of a single, interval scale variable (such as market share) on one (simple) or more (multiple) variables.	Forecasting sales, market share, profitability; Modeling buying patterns and impact of market programs; Estimating elasticity and response functions.	<ul style="list-style-type: none"> • Tremendous predictive modeling tool. • A tried and true methodology. • Diagnostics can be used to evaluate the success of the model. 	<ul style="list-style-type: none"> • Susceptible to outliers and highly correlated data.
Perceptual Mapping / Multi-dimensional Scaling	Illustrates the relationships between variables and groups of objects or people by placing them in a multi-dimensional space ("map").	Uncovering "hidden order" in data (e.g., clusters, perceptual dimensions, competitors); Evaluating positioning and image; Facilitating product or advertisement placement.	<ul style="list-style-type: none"> • Output is graphical, which makes it easy to understand and communicate with management. • Can be used on nearly all types and scales of data. • Excellent for positioning research. 	<ul style="list-style-type: none"> • Limited to three dimensions.
Price Sensitivity Measurement	Establishes "least resistance" price and the range of acceptable pricing.	Setting price levels; Developing competitive pricing strategies.	<ul style="list-style-type: none"> • There are several techniques available for measuring price sensitivity. • The number of price points that can be tested is limited. 	<ul style="list-style-type: none"> • Typically overstates purchase likelihood. • Does not replicate the real-world purchase process.