

## UNIT 9

### ATTITUDE MEASUREMENT

This unit covers the essential techniques and scales used by market researchers to quantify people's **attitudes**—their relatively enduring evaluations, feelings, and behavioral tendencies towards an object, person, or idea.

#### 1. GENERAL METHODS OF COLLECTING ATTITUDE DATA

These are the broad approaches used to gather information about attitudes:

- **Self-Report (or Verbal Report):** The most common method, where individuals are directly asked about their attitudes. This includes surveys and questionnaires utilizing various scales (e.g., Likert, Semantic Differential).
  - **Pro:** Direct, easy to administer, and cost-effective.
  - **Con:** Prone to **social desirability bias** (people say what they think they *should* feel) and limited by the respondent's **willingness** and **ability** to articulate their true attitude.
- **Observation:** Observing a person's behavior (e.g., purchasing patterns, product usage, website clicks) to infer their attitude.
  - **Pro:** Measures actual behavior, avoiding self-report biases.
  - **Con:** Behavior doesn't always reflect the underlying attitude perfectly; interpretation can be subjective.
- **Physiological Measures (or Indirect Methods):** Using biological responses to gauge an emotional or attitudinal reaction, often unconsciously. Examples include Galvanic Skin Response (GSR), pupil dilation, or fMRI.
  - **Pro:** Provides objective, non-verbal data about involuntary responses.
  - **Con:** Equipment is expensive; responses can be ambiguous (e.g., increased heart rate could mean fear *or* excitement).

#### 2. SPECIFIC METHODS OF COLLECTING ATTITUDINAL DATA

These refer to the structured tools, primarily scaling techniques, used to quantify attitudes. Scales convert subjective attitudes into measurable data (numerical scores) for statistical analysis. They are known as comparative and non-comparative scales.

#### 3. COMPARATIVE SCALES

Comparative scales require respondents to directly compare one stimulus object (e.g., brand, product feature) against another or a set of others. The resulting data is typically **ordinal** (ranks/order).

##### 3.1 Paired Comparison

- **Definition:** The respondent is presented with two objects at a time and asked to select one based on a criterion (e.g., "Which brand do you prefer?").
- **Explanation:** If a researcher has 'N' items, a total of  $N(N-1)/2$  comparisons must be made. For example, with 4 brands (A, B, C, D), the pairs are A-B, A-C, A-D, B-C, B-D, C-D (6 comparisons).
- **Use:** Best for a small number of brands; ensures a thorough comparison.

### 3.2 Rank Order

- **Definition:** The respondent is presented with several objects simultaneously and asked to rank them according to a specific criterion (e.g., 1st, 2nd, 3rd, etc., based on preference).
- **Explanation:** Simple and yields clear ordinal data on preference.
- **Use:** Common, intuitive, and easy to administer.

### 3.3 Constant Sum

- **Definition:** Respondents are asked to allocate a fixed number of points (e.g., 100 points) among several characteristics or objects based on their importance or preference.
- **Explanation:** The sum of the points for all items must equal the constant (e.g., 100). This technique forces trade-offs and provides **ratio-level** data (e.g., a brand with 60 points is twice as preferred as one with 30).
- **Use:** Ideal for measuring the **relative importance** of product attributes.

### 3.4 Q-Sort

- **Definition:** A scaling technique that uses a sophisticated **rank order procedure** to sort a large number of statements or objects (usually 60 to 140) into groups based on specified criteria.
- **Explanation (Simpler):** Respondents are given a set of cards (e.g., statements about a product) and asked to place them into categories (e.g., "Most Agree," "Neutral," "Least Agree"), often forming a quasi-normal distribution.
- **Use:** Primarily used for classifying attitudes, opinions, or personality traits.

## 4. NON-COMPARATIVE SCALES

Non-comparative scales (also called **monadic scales**) evaluate a single object independently. The resulting data is typically **interval** or **ratio**.

### 4.1 Likert Scale

- **Definition:** Respondents indicate their degree of agreement or disagreement with a series of statements related to the attitude object.
- **Standard Format:** Typically a 5-point scale (e.g., 1 = Strongly Disagree to 5 = Strongly Agree), though 7-point scales are also common.
- **Use:** Measures the **intensity** of feeling toward a statement. The overall attitude score is often the sum or average of scores across all related statements.
  - *Example:* "I find this product easy to use." (Strongly Disagree / Disagree / Neither Agree nor Disagree / Agree / Strongly Agree)

### 4.2 Semantic Differential

- **Definition:** Respondents rate an object on a series of bipolar (opposite) adjectives or phrases.

- **Format:** A multi-point rating scale (usually 7-point) where the endpoints are labeled with antonyms.
- **Use:** Ideal for creating a "**profile**" of a brand or product by plotting the mean scores for all pairs.
  - *Example:*
    - Powerful → 1 2 3 4 5 6 7 Weak
    - Modern → 1 2 3 4 5 6 7 Old-fashioned

### 4.3 Stapel Scale

- **Definition:** A unipolar (one-adjective) rating scale that measures both the direction and intensity of an attitude simultaneously.
- **Format:** Typically a 10-point scale ranging from +5 to −5, without a neutral zero point. The adjective/phrase appears in the middle.
- **Explanation (Simpler):** It is a simplified alternative to the Semantic Differential, as it only requires one descriptor.
- **Use:** Useful when it's difficult to find truly opposite adjectives for a Semantic Differential scale.
  - *Example:*  
+5+4+3+2+1Excellent Customer Service−1−2−3−4−5

## 5. WHICH SCALE TO USE?

The choice of scale depends on the **research objective**, the **level of detail** required, and the **type of statistical analysis** planned.

Objective/Criterion	Recommended Scale Type	Reason
Simple Preference/Order	Rank Order, Paired Comparison	Quick, yields ordinal data.
Relative Importance	Constant Sum	Forces trade-offs, yields ratio data.
Intensity of Agreement	Likert Scale	Easy to construct and understand.
Brand/Product Profile	Semantic Differential	Visually represents the object's image on multiple dimensions.
Need for Advanced Statistics	Likert, Semantic Differential, Constant Sum	Yields Interval or Ratio data, suitable for most multivariate analysis.
Respondent Literacy/Time	Rank Order, Paired Comparison	Simpler and faster to complete.

## 6. MEASURING EMOTIONS

Measuring emotions goes beyond simply measuring the cognitive (belief) and conative (action) components of attitude, focusing on the affective (feeling) component. Measuring emotion refers to the process of capturing a person's immediate emotional state (e.g., joy, fear, excitement) in response to a stimulus (e.g., an advertisement, a product trial). The key techniques of measuring emotions are:

- **Self-Report:** Using scales to describe feelings, such as the PAD (Pleasure-Arousal-Dominance) scale or specific lists of emotions (e.g., "How did this ad make you feel?" with options like "Happy," "Anxious," "Bored").
- **Physiological Measures:** Used heavily in Neuromarketing:
  - **Facial Coding:** Analyzing micro-expressions (like a slight frown or smile) to detect underlying emotions.
  - **EEG/fMRI:** Measuring brain activity to map emotional responses.
  - **Eye Tracking:** Measuring gaze duration and pupil dilation, which correlates with interest and arousal.

## 7. PERCEPTUAL MAPPING

Perceptual mapping is a visual technique used to display the perceptions of respondents about various brands or products on two or more dimensions (usually two). The position of each brand/product on the map is determined by its similarity to other products and its perceived attributes. It's like a geographical map for brands. Close brands are seen as similar by consumers, and distant brands are seen as different. The axes are typically key attributes (e.g., Price vs. Quality, Modern vs. Traditional).

Usually derived from ratings (e.g., Semantic Differential data) or similarity judgments (e.g., Paired Comparison data) using Multidimensional Scaling (MDS) or Factor Analysis. Some uses of perceptual mapping are as follows:

- **Identifying Competition:** Brands close together are direct competitors.
- **Detecting Gaps:** Empty areas on the map indicate potential opportunities for new products (market niches).
- **Monitoring Brand Positioning:** Showing how consumers perceive the brand relative to its stated goals.

### Perceptual Map Analysis: Key Indian Automobile Brands

A perceptual map visually represents consumer perceptions of competing products or brands. For the Indian automobile industry, the two most critical dimensions (axes) that drive consumer choice are typically Affordability/Value and Perceived Quality/Technology/Safety.

### Chosen Axes for the Map

For this analysis, we will use the following two axes:

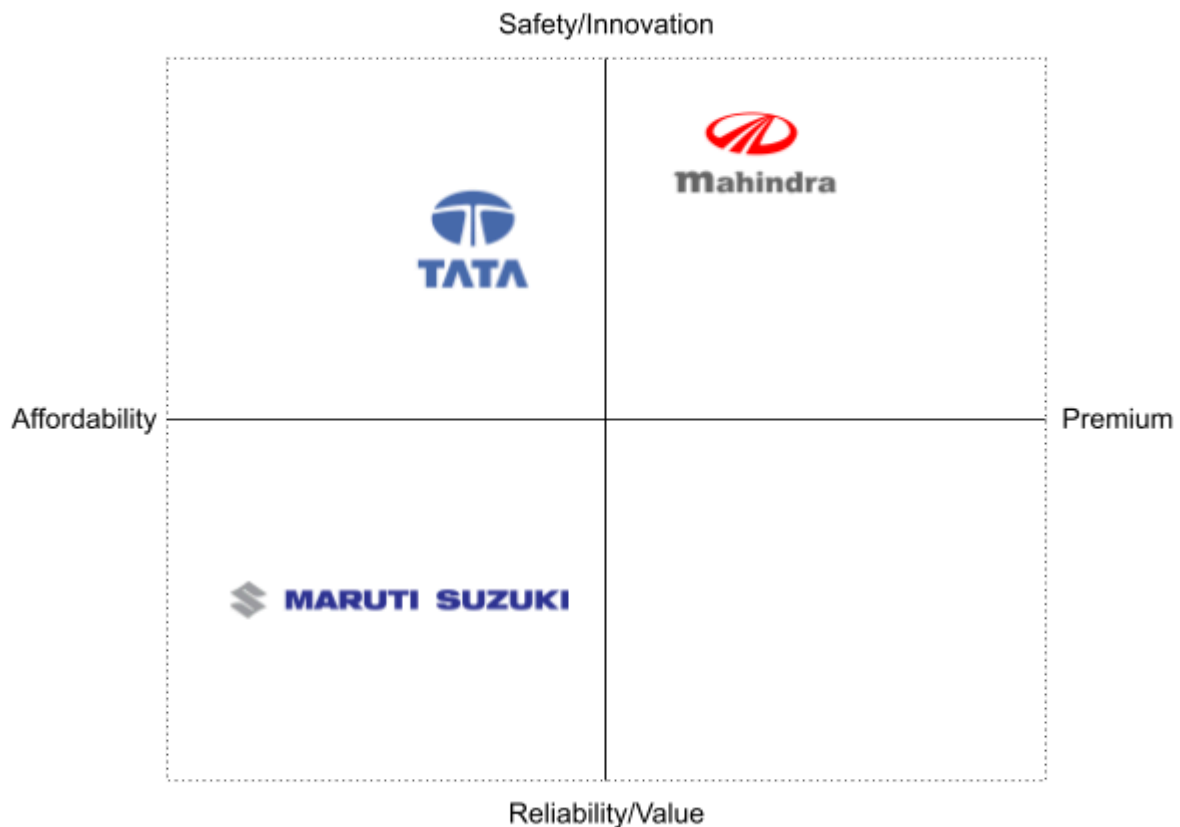
Axis	Description
<b>X-Axis: Affordability vs. Premium</b>	<b>Left (Affordable/Mass Market):</b> Brands known for high volumes, low cost of ownership, and entry-level models. <b>Right (Premium/Aspiration):</b> Brands associated with higher prices, feature richness, and luxury segments.
<b>Y-Axis: Reliability/Value vs. Safety/Innovation</b>	<b>Bottom (Reliability/Established Value):</b> Brands traditionally focused on mechanical dependability and simple, proven designs. <b>Top (Safety/Innovation/Modern Tech):</b> Brands that heavily market safety ratings (e.g., Global NCAP) and feature cutting-edge technology (e.g., EVs, advanced infotainment).

### Brand Positioning Coordinates (Conceptual)

The following table represents the approximate conceptual coordinates of major Indian automobile brands based on general consumer perception.

Brand	X-Axis (Affordability vs. Premium)	Y-Axis (Reliability /Value vs. Safety/Innovation)	Quadrant Description
<b>Maruti Suzuki</b>	Low-to-Mid (Affordable)	Low-to-Mid (Value Focus)	<b>Mass Market Value Leader</b> (Bottom-Left/Center). Known for affordability and wide service network, but historically less focused on premium features or high-tech innovation compared to newer entrants.
<b>Tata Motors</b>	Mid-to-High (Affordable/Mid-Range)	High (Safety/Innovation)	<b>Value-Safety/Innovation Leader</b> (Top-Left/Center). Positioned strongly in the mass market but is aggressively pushing high safety ratings and EV technology, moving it higher up the Y-axis.
<b>Mahindra</b>	Mid-to-High (Mid-Range/Utility)	High (Safety/Ruggedness)	<b>Premium Utility/Safety</b> (Top-Right/Center). Targets the SUV and utility segment with an emphasis on rugged build, unique design, and recent pushes toward high safety. Sits slightly more premium than Tata.

## Visual Representation of the Map



## Strategic Implications

- **Tata Motors' Strategy:** They occupy a highly desirable strategic space—offering high safety and innovation (Top Y-axis) at a competitive, mass-market price point (Left X-axis). This positions them as disruptors to the traditional value proposition.
- **Maruti Suzuki's Strategy:** While holding the largest volume share, their challenge is to move **up** the Y-axis (improving the perception of safety and technology) without sacrificing their core positioning on the **Affordability** X-axis.
- **Mahindra's Strategy:** They own the 'rugged, capable SUV' segment. Their strategic goal is often to push further to the right (more **Premium**) to compete with luxury foreign brands in the utility space.