

## Measurement Process

Measurement is defined as determining the amount or intensity of some characteristic of interest to the researcher. A measurable characteristic is called a property.

**Measurement property**, in general may be viewed as subjective and objective properties. Objective properties are physically verifiable characteristics such as age, income, number of bottles purchased, store last visited, and so on. For example, we conduct a study on Laundry detergent. Some of the obvious but non-functional properties we might measure are weight, volume, texture, color, odor, cost, etc. Functional properties might include dirt-removing power, effect on colors, speed of cleaning action, and skin irritation power.

**Subjective properties** are those which cannot be directly observed because they are largely influenced by a person's judgments or impressions. A study to conduct job satisfaction among the employees, we may seek to measure attitudes toward work, attitudes toward the job environment, perceptions of fair treatment and compensation, and absenteeism.

**Measurement Process** -The measurement process is depicted in Figure, will give a step by step activity to be taken by the marketing researcher. We will explain this with a brief marketing research example; Let us assume, we are interested to study the 'store customer experience'.

**Step-1: Concept of Interest** The step of any measurement process begins with concept of interest we are interested to study. The concept is based on the identification of an appropriate research objective. It will guide to fix the concepts very closely. Let us consider the store management is interested to know what makes customers buy repeatedly from the store.

- Measurement begins by identifying a concept of interest for study.
- A concept is an abstract idea generalized from particular facts.

**Step-2 Develop a Construct** Once, the concept to be studied is identified researcher has to develop an accurate and elaborate comprehension of the target construct and needed theoretical background and supportive factors. The value of specific constructs depends on how useful they

are in explaining, predicting, and controlling phenomena. In the current example, the concept – loyalty is a ‘function’ of various factors like atmospherics, store personal, complaint handling behaviour, variety, merchandising, location and many more to list. Each such factor is considered as a construct

**Step-3 Conceptual Definitions** Once, we identify the constructs, to understand them better, one need how it is conceptually / theoretically defined. For the marketing researcher to define the constructs in unambiguous terms, useful general principles are:

- Provide clear, concise conceptual definition of the construct
- Should not be subject to multiple interpretations – it should convey the same meaning to everyone.
- Should not be overly technical (technical terms with narrow meanings)
- Should define construct positively, not by the denial of other things; negation of one thing does not imply the affirmation of something else
- Should not be circular or tautological or self-referential

**Step-4 Operational Definition** The next state of measurement is evolving an operational definition for the constructs identified. In many occasion, the marketing researcher cannot make use of the construct originally defined in theoretical manner. We need to identify the various observable characteristics of the construct chosen. For example, in spite of many definitions for a store image, which is a dimension of store loyalty, one can consider the following definition for store-image.

**Step-5 Measurement Scales** The next step involves identifying the appropriate scales to measure the constructs involved in the study. The most common reason for developing scaling is for scoring purposes. When a participant gives their responses to a set of items, we often would like to assign a single number that represents - that is the person’s overall attitude or belief. A scale that is developed for marking research purpose may have any number of dimensions within it.

**Step-6 Reliability and Validity** The next crucial and little bit technical exercise is assessment of the reliability and validity of the instrument developed for the marketing research product.

**Reliability:** Is the degree to which measures are free from random error and, therefore, provide consistent data.

**Validity:** Validity addresses the issue of whether what we try to measure was actually measured.