

Analytical Model - An explicit specification of a set of variables and their interrelationships designed to represent some real system or process in whole or in part

Associative Techniques - A type of projective technique in which the respondent is presented with a stimulus and asked to respond with the first thing that comes to mind

Buyer Behavior - A body of knowledge that tries to understand and predict consumers' reactions based on an individual's specific characteristics

Cartoon tests - Cartoon characters are shown in a specific situation related to the problem. The respondents are asked to indicate the dialogue that one cartoon character might make in response to the comments of another character

Causal design - A design in which the independent variables are manipulated in a relatively controlled environment

Causal Research - A type of conclusive research whose major objective is to obtain evidence regarding cause-and-effect relationships

Causality - When the occurrence of X increases the probability of the occurrence of Y.

Competitive intelligence - The process of enhancing marketplace competitiveness through a greater understanding of a firm's competitors and the competitive environment

Conceptual Map - A way to link the broad statement of the marketing research problem with the management-decision problem

Conclusive Research - Research designed to assist the decision maker in determining, evaluating, and selecting the best course of action for a given situation

Concomitant variation - A condition for inferring causality that requires that a cause, X, and an effect, Y, occur together or vary together as predicted by the hypothesis under consideration

Cross-Sectional Design - A type of research design involving the one-time collection of info from any given sample of population elements

Customer Relationship Management (CRM) - A decision support system that is used for managing the interactions between an organization and its customers

Customized Services - Companies that tailor research procedures to best meet the needs of each client

Data Mining - Technique involving the use of powerful computers and advanced statistical and other software to analyze large databases in order to discover hidden patterns in the data

Data warehouse - A centralized database that consolidates company-wide data from a variety of operational systems

Database marketing - The practice of using CRM databases to develop relationships and highly targeted marketing efforts with individuals and customer groups

Decision Support System (DSS) - An info system that enables decision makers to interact directly with both databases and analysis models. The important components of a DSS include hardware and a communication network, database, model base, software base, and the DSS user

Demand artifacts - Responses given because the respondents attempt to guess the purpose of the experiment and respond accordingly

Depth Interview - An unstructured, direct personal interview in which a single respondent is probed by a highly skilled interviewer to uncover underlying motivations, beliefs, attitudes, and feelings on a topic

Descriptive Research - A type of conclusive research that has its major objective the description of something-usually market characteristics or functions

Design control - A method of controlling extraneous variables that involves using specific experimental designs

Direct Approach - A type of qualitative research in which the purposes of the project are disclosed to the respondent or are obvious given the nature of the interview

Environmental context of the problem - Factors that have an impact on the definition of the marketing research problem, including past info and forecasts, resources and constraints of the firm, objectives of the decision maker, buyer behavior, legal environment, economic environment, and marketing and technological skills of the firm.

Ethnographic research - The study of human behavior in its natural context that involves observation of behavior and setting along with depth interviews

Experience survey - Interviews with people knowledgeable about the general topic being investigated

Experiment - The process of manipulating one or more independent variables and measuring their effect on one or more dependent variables, while controlling for the extraneous variables

Experimental design - The set of experimental procedures specifying (1) the test units and sampling procedures, (2) independent variables, (3) dependent variables, and (4) how to control the extraneous variables

Experimental group - The group exposed to the manipulated independent variable

Exploratory Research - A type of research design that has as its primary objective the provision of insights into and comprehension of the problem situation confronting the researcher

External Data - Data originate external to the organization

External suppliers - outside marketing research companies hired to conduct a complete marketing research project or a component of it

External validity - A determination of whenever the cause-effect relationships found in the experiment can be generalized

Extraneous variables - variables, other than the independent variables, that influence the response of the test units

Field Environment - An experimental location set in actual market conditions

Full-service suppliers - Companies that offer the full range of marketing research activities

Graphical Models - Analytical models that provide a written representation of the relationships between variables

Grounded Theory - An inductive and more structured approach in which each subsequent depth interview is adjusted based on the cumulative findings from previous depth interviews with the purpose of developing general concepts or theories

History - Specific events that are external to the experiment but that occur at the same time as the experiment

Humanistic inquiry - A special form of personal observation in which the researcher is immersed in the system under study

Hypothesis - An unproven statement or proposition about a factor or phenomenon that is of interest to the researcher

Indirect approach - A type of qualitative research in which the purposes of the project are disguised from the respondents

Instrumentation - An extraneous variable involving changes in the measuring instrument or in the observers or scores themselves

Internal data - Data available within the organization for which the research is being conducted

Internal validity - A measure of accuracy of an experiment. It measures if the manipulation of the independent variables, or treatments, actually caused the effects on the dependent variables.

Internet services - Companies that specialize in conducting research on the Internet

Interviewer bias - The error due to the interviewer not following the correct interviewing procedures

Key-Informant Technique - Interviews with people knowledgeable about the general topic being investigated.

Laboratory environment - An artificial setting for experimentation in which the researcher constructs the desired conditions

Lead-User survey - Surveys that involve obtaining information from the lead users of the technology

Longitudinal Design - A type of research design involving a fixed sample of population elements that is measured repeatedly. The sample remains the same over time, providing a series of pictures that, when viewed together, portray both the situation and the changes that are taking place

Mail panel - A large and nationally representative sample of households that have agreed to periodically participate in mail questionnaires, product tests, and survey research

Management-Decision Problem - The problem confronting the decision maker. It asks what the decision maker needs to do

Marketing Information System (MIS) - A formalized set of procedures for generating, analyzing, storing, and distributing pertinent info to marketing decision makers on an ongoing basis.

Marketing Research - The systematic and objective identification, collection, analysis, dissemination, and use of info that is undertaken to improve decision making related to identifying and solving problems (also known as opportunities) in marketing

Marketing Research Problem - The marketing research problem asks what info is needed and how it can best be obtained

Marketing Research Process - A set of six steps that defines the tasks to be accomplished in conducting a marketing research study: problem definition, developing an approach to the problem, research design formulation, fieldwork, data preparation and analysis, and report preparation and presentation.

Matching - A method of controlling extraneous variables that involves matching test units on a set of key background variables before assigning them to treatment conditions

Mathematical Models - Analytical models that explicitly describe the relationships between variables, usually in equation form

Maturation - An extraneous variable attributable to changes in the test units themselves that occurs with the passage of time

Mechanical observation - An observational research strategy in which mechanical devices, rather than human observers, record the phenomenon being observed

Mortality - An extraneous variable attributable to the loss of test units while the experiment is in progress

Nonresponse bias - Bias that arises when actual respondents differ from those who refuse to paraptet in ways that affect the survey results

Non-sampling Errors - Errors that can be attributed to sources other than sampling; they can be random or non-random

Objective Evidence - Unbiased evidence that is supported by empirical findings

Objectives - Goals of the organization and of the decision maker that must be considered in order to conduct successful marketing research

Observation - The recording of behavioral patterns of people, objects, and events in a systematic manner to obtain info about the phenomenon of interest

Panel - Consists of a sample of respondents, generally households that have agreed to provide info at specified intervals over an extended period. Same as longitudinal.

Personal observation - An observational research strategy in which human overseers record the phenomenon being observed as it occurs

Picture-response technique - A projective technique in which the respondent is shown a picture and asked to tell a story describing it

Pilot Surveys - Surveys that tend to be less structured than large-scale surveys in that they generally contain more open-ended questions and the sample size is much smaller.

Prepaid incentive - Coupons, money, or some other incentive to participate that is included with the survey or questionnaire

Primary Data - Data originated by the researcher to address the research problem.

Problem audit - A comprehensive examination of a marketing problem to understand its origin and nature

Problem Definition - A broad statement of the general problem and identification of the specific components of the marketing research problem.

Problem-Definition Process - The process of defining the management-decision the management-decision problem and the marketing research problem.

Problem-identification research - research undertaken to help identify problems that are not necessarily apparent or that are likely to arise in the future

Problem-Solving Research - research undertaken to help solve specific marketing problems

Projective Technique - An unstructured and indirect form of questioning that encourages respondents to project their underlying motivations, beliefs, attitudes, or feelings regarding the issues of concern

Association Tests

Completion technique - A projective technique that requires the respondent to complete an incomplete stimulus situation (sentence & story)

Construction technique - A projective technique in which the respondent is required to construct a response in the form of a story, dialogue, or description

Expressive techniques - Projective techniques in which the respondent is presented with a verbal or visual situation and asked to relate the feelings and attitudes of other people to the situation

Qualitative Research - An unstructured, exploratory research methodology based on small samples intended to provide insight and understanding of the problem setting.

Random assignment - Involves randomly assigning test units to the experimental and control groups. It is one of the most common techniques used to control for the effect of extraneous variables on the dependent variables

Random Sampling Error - The error due to the particular sample selected being an imperfect representation of the population of interest

Randomization - A method of controlling extraneous variables that involve randomly assigning test units to experimental and control groups by using random numbers. Treatment conditions also are randomly assigned to experimental groups

Research Design - A framework or blueprint for conducting the marketing research project that specifies the procedures necessary to obtain the information needed to structure and/or solve the marketing research problem

Research Questions - Refined statements of the specific components of the problem

Response Rate - The percentage of the total attempted interviews that are completed

Role playing - Respondents are asked to play the role or assume the behavior of someone else

Sample control - The ability of the survey mode to effectively and efficiently reach the units specified in the sample

Secondary Data - Data collected for some purpose other than the problem at hand.

Selection bias - An extraneous variable attributable to the improper assignment of test units to treatment conditions

Sentence completion - A projective technique in which respondents are presented with a number of incomplete sentences and asked to complete them

Social desirability - The tendency of the respondents to give answers that might not be accurate but that might be desirable from a social standpoint
Statistical control - A method of controlling extraneous variables by measuring the extraneous variables and adjusting for their effects through statistical methods
Statistical regression - An extraneous variable that occurs when test units with extreme scores move closer to the average score during the course of the experiment
Story completion - A projective technique in which respondents are provided with part of a story and required to give the conclusion in their own words
Structured data collection - Use of a formal questionnaire that presents questions in a prearranged order
Survey - An interview with a large number of respondents using a predesigned questionnaire
Survey method - A structured questionnaire given to a sample of a population and designed to elicit specific info from respondents
Syndicated Services - Companies that collect and sell common pools of data designed to serve the info needs of multiple clients
Test units - Individuals, organizations, or other entities whose response to independent variables or treatments is being studied
Theory - A conceptual scheme based on foundational statements, which are assumed to be true
Third-person technique - A projective technique in which the respondent is presented with a verbal or visual situation and asked to relate the beliefs and attitudes of a third person to the situation
Verbal Models - Analytical models that provide a written representation of the relationships between variables
Word association - A projective technique in which respondents are presented with a list of words, one at a time. After each word is presented, respondents are asked to give the first word that comes to mind

Management Decisions Problems vs Marketing Researcher Decision Problems

Ex: (Should new product be introduced? Should advertising campaign be changed? Should we increase price?) [to determine customer preference, effectiveness of current advertising, determine price elasticity]

Pre-experimental designs - Designs that do not control for extraneous factors by randomization

One-shot case study - A pre-experimental design in which a single group of test units is exposed to a treatment X, and then a single measurement on the dependent variable is taken

One-group pretest-posttest design - A pre-experimental design in which a group of test units is measured twice, once before and once after the treatment

Static group - A pre-experimental design in which there are two groups: the experimental group (EG) which is exposed to the treatment, and the control group (CG). Measurements on both groups are made only after the treatment, and test units are not assigned at random

True experimental designs - Experimental designs distinguished by the fact that the researcher can randomly assign test units to experimental and control groups and also randomly assign treatments to experimental groups

Pretest-Posttest control group design - A true experimental design in which the experimental group is exposed to the treatment but the control group is not. Pretest and posttest measures are taken on both groups. Test units are randomly assigned

Posttest-only control group design - A true experimental design in which the experimental group is exposed to the treatment but the control group is not and no pretest measure is taken. Posttest measures are taken on both groups. Test units are randomly assigned

Quasi-experimental designs - Designs that apply part of the procedures of true experimentation, while lacking full experimental control

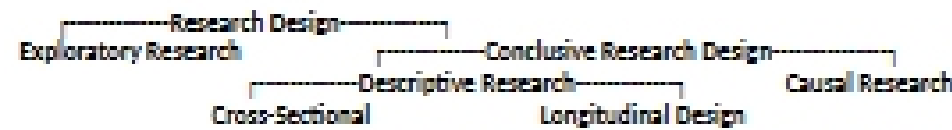
Time series Design - A quasi-experimental design that involves periodic measurements on the dependent variable for a group of test units. Then, the treatment is administered by the researcher or occurs naturally. After the treatment, periodic measurements are continued in order to determine the treatment effect.

Multiple Time Series design - A time series design that includes another group of test units to serve as a control group

Statistical Design - Designs that allow for the statistical control and analysis of external variables

Factorial design - A statistical experimental design used to measure the effects of two or more independent variables at various levels and to allow for interactions between variables

Interactive testing effect - An effect in which a prior measurement affects the test unit's response to the independent variable



Qualitative

Focus Groups - Pros {Generate fresh ideas, client participation, quick results, provide info for next research process} Cons {Expensive, Group think, moderator's skill, interpretive results, misused as representative of population}

Online Focus Groups - Pros {geographical reach, travel time, reach hard to reach participants} Cons {Group Dynamics, control over environment}

Individual Depth Interviews - Unstructured personal interview by skilled interviewer. Uncover motivations, beliefs attitudes. Pros {Eliminate social pressure} Cons {quality/completeness of results depend on interviewer skills, difficult to analyze}

Projective Tests -

Quantitative

Survey Research - Pros {Questionnaire use, Reliability, Simplicity} Cons {Willingness, designs of questionnaire}

Computer Assisted Telephone CATI - Pros {Built in logic, Branching, sample control, control over field force, good response rate, moderate cost} Cons {Physical stimuli, limited time, limited to simple questions}

Personal Interviews - mostly for executives Pros {sample control, physical stimuli, questionnaire length, question type} Cons {cost, control over field force, response rate}

Mail Intercept Interviews - Pros {face-to-face, physical stimuli} Cons {Social desirability, representative sample, interview bias, quality of data}

Computer Assisted Personal Interviewing CAPI - Pros {complex questions, physical stimuli, good response rate, control over environment} Cons {Social desirability, Moderate data}

Mail Interviews - Pros - {low cost, low social desirability, no interviewer bias, good sample control} Cons {Data entry, no control over environment, low response rate}

Email Survey - Pros {cost, no interviewer bias, low social desirability, immediate response, branching/flexibility} Cons {low sample control, low response rate}

Criteria for Selecting a Survey Method: structure of questionnaire (branching, complex questions), physical stimuli, representative sample, cost, time, response rate

Improving Response Rate: Prior Notification, monetary value (post-pay vs pre-pay)

Observation - systematic process of recording patterns of occurrences or behaviors without communication (questioning) people involved. Pros {Physical behavior, bias} Cons {Physical Behavior (what but not why), does not represent population}

Observer Bias is small when observation is clearly defined and structured large when observations are not clearly defined and unstructured

Causality Necessities - 1) Concomitant Variation (correlation) 2) Time order Occurrence (X precedes Y) 3) Absence of other possible causes (variation in Y is only because X)

One Shot Case Study $X_1 \rightarrow O_1$ (Change one thing, observe what happens, measure change)

One-Group Pretest/Post-test Design $O_1 \rightarrow X \rightarrow O_2$ [Effect = $O_2 - O_1$]

Static Group Comparison EG: $X_1 \rightarrow O_1$ (ex: Introduce advertisement in one city and compare with another)
CG: O_2

Pretest - Posttest Control Group Design EG: (Randomization) $O_1 \rightarrow X_1 \rightarrow O_2$ [Effect = $(O_2 - O_1) - (O_4 - O_3)$]
CG: (Randomization) $O_3 \rightarrow O_4$

Posttest Only Control Group EG: (Randomization) $X_1 \rightarrow O_1$ [Effect = $O_1 - O_2$]
CG: O_2

Time Series Designs $O_1 \rightarrow O_2 \rightarrow O_3 \rightarrow O_4 \rightarrow X \rightarrow O_5 \rightarrow O_6 \rightarrow O_7 \rightarrow O_8$

Multiple Time Series Designs EG: $O_1 \rightarrow O_2 \rightarrow O_3 \rightarrow O_4 \rightarrow X \rightarrow O_5 \rightarrow O_7 \rightarrow O_8$
CG: $O_1 \rightarrow O_2 \rightarrow O_3 \rightarrow O_4 \rightarrow O_6 \rightarrow O_7 \rightarrow O_8$