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Marketing and Market Research

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Abstract Marketing and market research are vital business functions. This chapter presents a brief introduction of marketing and market research, and subsequently highlights the contemporary developments that influence current thinking in these areas. By familiarizing marketing academics and practitioners with the state-of-the-art discussions, this chapter aims at improving the knowledge and understanding of marketing and market research, as well as enhancing the rigor of market research applications.

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1 What is Marketing and Market Research?

Business history abounds with stories of successes and failures. There are many brands and products that remained relevant to customers over time and across international markets, as well as iconic companies that have disappeared from the marketplace. Although there are several reasons as to why businesses fail, in many cases the culprit is the inability to identify and meet needs and wants of the market, or simply, failures in marketing and market research.

The American Marketing Association formally defines marketing as “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large” (AMA, 2016). Marketing thus represents a confluence of different actors involved in exchange processes. The objective of businesses is to deliver sought after offerings to the exchange and to obtain desired responses (e.g., positive judgments and feelings) from other parties (Kotler and Keller, 2016). In other words, for businesses, marketing needs to be managed. Kotler and Keller define marketing management as “the art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering, and communicating superior customer value” (2016, p. 27).

How can marketers identify and deliver the offerings customers need and want? This crucial information is generally provided to the marketing managers through a process called market research. Market research can be defined as “the systematic gathering and interpretation of information about individuals or organizations using the statistical and analytical methods and techniques of the applied social sciences to gain insight or support decision making” (Phillips, 2007, p. 38). This definition highlights the two major aspects of market research: it is a function and it is a process.

First, market research serves the function of providing marketing intelligence to the managers for effective decision making. Management can use this intelligence for planning (e.g., assessing the environment or determining opportunities), problem-solving (e.g., decisions regarding marketing activities), or control (e.g., monitoring the status, Churchill & Iacobucci, 2005). Second, market research is a dynamic process that consists of the steps of problem formulation, research design, sampling, data collection, data analysis, and market research report.

Note that “market research” and “marketing research” are two terms that generally create confusion. Hunt (1976) makes the distinction that marketing research is concerned with expanding our knowledge of marketing (e.g., developing new theories), whereas market research is concerned with solving marketing related problems of companies. To maintain consistency, I use the term “market research” throughout this chapter. Nevertheless, the topics presented here are equally relevant in both market and marketing research applications.

The objective of this chapter is to familiarize the readers with emerging issues in marketing and market research. Most of the topics presented here could easily be the subject of an entire chapter or article; I therefore only introduce the main ideas and most widely known publications for each topic. Interested readers are encouraged to follow the references for more thorough information.

2 Marketing and the Contemporary Issues

Marketing is highly susceptible to the rapidly changing environment. Kotler and Keller (2016) identify three transformative forces that shape marketing management today: technology, globalization, and social responsibility.

First, technology, particularly advancements in mobile phones and the Internet, introduced new challenges and opportunities for marketers. Consumers are increasingly spending more time online, mostly using smart phones and tablets, where they receive marketing campaigns, communicate with brands, and make purchases (Winer and Dhar, 2011). Second, rapid globalization, especially in the form of advanced transportation and communication, allowed companies to penetrate into foreign markets and allowed customers to make purchases globally. And third, marketers are increasingly being called to respond to ethical issues, sustainability, and social responsibility in their operations (Kotler and Keller, 2016).

These transformative forces gave rise to new consumer and company capabilities (Kotler and Keller, 2016). For example, consumers can quickly get in touch with companies via social media, compare competing products and prices more easily over the Internet, rapidly obtain information about the experiences of other consumers with a company, and customize and co-create products and services (Winer and Dhar, 2011). Put simply, consumers are more powerful.

Companies also acquired new capabilities. For example, marketers can get richer information about markets, customers, and competitors from the Internet, augment customer-brand relationships over social media platforms, reach the target market on mobile phones, benefit from online brand communities, and supply offerings and marketing promotions tailored to specific customer groups (Kotler and Keller, 2016).

These new marketing realities reshaped fundamental philosophies of marketing. Kotler and Keller (2016) point out that marketing managers are moving forward to the concept of the holistic marketing concept from the marketing concept, and the traditional four Ps of marketing (i.e., product, price, place, and promotion) are being updated with new variables.

2.1 From the Marketing Concept to the Holistic Marketing Concept

The marketing concept, which holds that the key to marketing success is delivering superior value to the target market, has been the dominating marketing philosophy since the 1950s (Kotler and Keller, 2016). Prior to the marketing concept, companies embraced other philosophies such as the product concept (i.e., the key is producing the best product) and the selling concept (i.e., the key is persuading customers to buy the products). With its focus on customer satisfaction, the marketing concept quickly replaced the product and selling dominant perspectives.

The transformative forces of the 21st century gave rise to a new conceptualization of marketing activities called the holistic marketing concept (Kotler and Keller, 2016). As the name suggests, the holistic marketing concept recognizes the necessity of a broad, integrated perspective on marketing programs, processes, and activities. Four components characterize holistic marketing: (1) relationship marketing, (2) integrated marketing, (3) internal marketing, and (4) performance marketing (Kotler and Keller, 2016).

First, relationship marketing aims to develop mutually satisfying, enduring relationships with the stakeholders of the company (e.g., customers, employees, business partners, shareholders, etc.). From the relationship marketing perspective, these long-term relationships create a valuable asset for the company called a marketing network. Thus, stronger the marketing network, the higher the profits.

Second, integrated marketing aims to create value from marketing activities as a whole, such that all marketing activities are designed and implemented as a part of an integrated system. Integrated marketing also requires integrated communication and channel strategies.

Third, internal marketing aims to ensure that appropriate marketing principles are adopted not only in the marketing department, but also throughout the organization. Internal marketing recognizes that all departments in the organization should understand the company's marketing orientation and cooperate to deliver superior value to the customers. This requires significant commitment and involvement from the senior management.

Last, performance marketing aims to understand returns on marketing activities, both financially and nonfinancially. Marketers are increasingly assessing financial returns through intangible assets such as brand equity, customer base, and relationships. Furthermore, in accord with the greater customer focus on social responsibility, marketers are increasingly considering the ethical, social, and environmental impacts of their marketing activities.

2.2 The Updated Four Ps and the Four As

Traditionally, the marketing mix (or marketing tactics) has been conceptualized through the famous four Ps, that is, *product* (the goods and services offered by the company), *price* (the financial value of the goods and services), *place* (channels where the goods and services are available), and *promotion* (activities designed to promote the goods and services). In the face of new marketing realities and the holistic marketing concept, Kotler and Keller (2016) introduced an updated version of the four Ps, which incorporates people, processes, programs, and performance.

First, the *people* concept recognizes the importance of employees for marketing success, thereby reflecting the internal marketing component of the holistic marketing concept. It also suggests that viewing consumers as people and paying attention to their lives more broadly is valuable for marketers. Second, the *processes* concept reflects the value of establishing processes to enhance long term relationships with the stakeholders of the company, thereby corresponding to the relationship marketing component of the holistic marketing concept. Third, the *programs* concept reflects the company's integrated marketing activities (online and offline) directed at the consumers. Last, the *performance* concept reflects financial and nonfinancial implications of the marketing activities, as in the performance marketing component of the holistic marketing concept.

In addition to the updated four Ps, Sheth and Sisodia (2012) presents a novel, customer-oriented framework that outlines the four As of marketing, namely, acceptability, affordability, accessibility, and awareness.

Acceptability refers to the extent to which a company's offerings meet or exceed customer needs and expectations. The two dimensions of acceptability are functional acceptability (objective performance attributes of the offering) and psychological acceptability (subjective image attributes of the offering).

Affordability refers to the extent to which customers can afford the price of an offering. Affordability also has two dimensions: economic affordability (ability to pay) and psychological affordability (willingness to pay).

Accessibility refers to the extent to which customers can easily acquire an offering. The two dimensions of accessibility are availability (the company supplies match the customer demand) and convenience (customers can reach the offering easily).

Awareness, finally, refers to the extent to which customers are informed about the attributes and benefits of a product, such that this awareness persuades them to try the offering or continue buying it. Product knowledge and brand awareness are the two dimensions of awareness.

3 Market Research Process and the Contemporary Issues

Market research is not a static entity, but a dynamic process that consists of sequential steps. Market research process begins with problem formulation, proceeds with research design, sampling, data collection, data analysis, and ends with a market research report. In reality, however, researchers do not follow this order in a lockstep fashion, but rather go back and forth between steps as they refine the decisions made in each step (Churchill and Iacobucci, 2005).

3.1 Formulating Research Problems

The first step of market research process is concerned with research problem formulation. This is a crucial step in the process, because, as we will see in the subsequent sections, most of the decisions made in the rest of the process are highly dependent on the research problem at hand. Put simply, the market research process will be hampered without a clearly formulated research problem.

The nature of research problems is generally different among marketing academics and practitioners. Marketing academics aim at developing new knowledge and making contributions to marketing theory. For example, recent special issues of esteemed marketing journals would give a general idea about research problems marketing academics are currently interested in. Marketing practitioners, on the other hand, aim at assisting managerial decision making by findings solutions to marketing problems or identifying opportunities for the company. For example, what are the customer perceptions of our new product packaging? Or, would our product sell in a new target market? Such problems and opportunities may arise from unanticipated changes in the internal and external business environment (e.g., technological or societal changes), planned changes (e.g., introduction of a new product), or ideas that emerge by chance (e.g., from a customer feedback; Churchill and Iacobucci, 2005).

When formulating problems, researchers are advised to delay research until the problem at hand is clearly defined (Brown et al., 2014). To achieve this objective, researchers should first understand the problem. Meetings and discussions with clients and decision makers are essential components of this step. Such meetings not only enable researchers to obtain background information about the problem and capture the problem from the decision maker's perspective, but also augment engagement of the client in the overall market research process and establish client's expectations from the research (Brown et al., 2014; Malhotra, 2015). The meetings and discussions with decision makers can be structured by conducting a problem audit, which can identify underlying causes of the problem at hand by examining the origin and the nature of the problem and establishing alternative courses of action, preferably with a team consisting of the market researchers and members from the management (Malhotra, 2015). Problem audits can be supple-

mented with secondary data and exploratory research (e.g., focus groups or interviews with industry experts).

Additionally, to better understand the problem, researchers should also comprehend the organization and the industry, or in other words, the environmental context of the problem. To accomplish this task, researchers should take into account past information and forecasts (for the organization and the industry), organizational resources and constraints, organizational objectives, buyer behavior, legal and economic environment, and finally the marketing and technological skills of the organization (Malhotra, 2015).

After soliciting information from decision makers and examining the environmental context to understand the problem, researchers should formulate the problem. At this step, it is important to distinguish between management decision problems and market research problems. While management decision problems are action-oriented and aimed at what the decision maker needs to do (e.g., should we introduce a new product?), market research problems are information-oriented and aimed at providing the information to assist decision-making (e.g., what are the consumer preferences for a new product?; Malhotra, 2015). These two problems are, however, strongly interrelated. In other words, the market research problem can be seen as a restatement of the management decision problem from the researcher's viewpoint (Brown et al., 2014). The market research problem should not only be closely linked to the management decision problem, but also guide the overall research project (Malhotra, 2015).

When defining market research problems, researchers face the challenge of defining the problem very broadly (i.e., failing to define a specific problem to be addressed) or very narrowly (i.e., failing to consider alternative approaches to the problem). Recognizing the shortcomings of overly broad or narrow research problems, Malhotra (2015) suggests that the market research problem should encompass a broad statement, which provides a general description of the problem, and specific components, which guides the subsequent steps of the research project. To illustrate, a broad statement would be "what are the purchase intentions of customers for a new product?", and the corresponding specific components to this broad statement would be "who are our customers?" and "what is the level of brand loyalty among customers?". The overall problem formulation process is summarized in Figure 1.

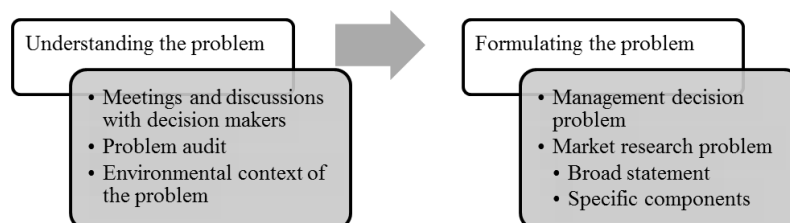


Figure 1: The problem formulation process (adapted from Malhotra, 2015).

3.2 Research Design

Once a clear market research problem is formulated, the next step is to select the appropriate research design to address this problem. Research design can be viewed as an action plan that guides researcher's decisions in the subsequent sampling and data collection steps. Research designs generally serve the objectives of three types of research: (1) *exploratory*, when the objective is to provide insights into understanding a problem or to uncover novel ideas, (2) *descriptive*, when the objective is to describe a phenomenon, and (3) *causal*, when the objective is to establish cause-and-effect relationships (Churchill and Iacobucci, 2005; Malhotra, 2015). Because different designs serve the purposes of different problems, the selection of research design should be solely guided by the research problem.

3.2.1 Exploratory Research Designs

Exploratory research is appropriate when there is little known about the problem at hand. Exploratory research may allow researchers to gain insight into a problem that is not clearly defined, thereby facilitating the formulation of more precise research problems to be examined via more conclusive (descriptive or causal) research designs. A major characteristic of exploratory research is its flexibility in the choice of research methods. Exploratory studies are not strictly structured, and researchers often use secondary data (e.g., literature reviews and data mining) or qualitative research methods based on small samples. The most common qualitative exploratory studies include focus groups, depth interviews, and projective techniques (Malhotra, 2015). A contemporary development in qualitative research methods is *netnography* (Kozinets, 2002).

First, in a focus group, a small, homogenous group of prescreened respondents (8 to 12 individuals) come together to discuss some topic of interest with a (trained) moderator in an unstructured, conversational manner (Malhotra, 2015; Churchill and Iacobucci, 2005). For example, a fast food company can conduct a focus group to explore what customers think about the quality of their products. Focus group is one of the most widely used qualitative market research techniques. The popularity of the method stems from the unexpected findings that emerge from the dynamic, free-flowing discussions within the group (Malhotra, 2015). Thus, focus groups can provide valuable insights into the unclear problem at hand.

A detailed moderator's guide, which outlines the discussion topics, the sequence of questions, and the allocated time, should be prepared before the focus group interview (Malhotra, 2015). A typical focus group session begins with a 5-10 minutes of introduction period, during which the moderator presents the topic of discussion and explains how and why the discussions are being observed and recorded. Afterwards, the moderator facilitates the beginning of a discussion by asking a general question about the topic. This general question is followed by

specific questions to the specific members of the group. Once the discussion permeates the focus group, the moderator recedes to the background, occasionally nudging the dynamic discussion to follow the moderator's guide (Churchill and Iacobucci, 2005).

Given the advancements in communication technologies, focus groups are increasingly taking place online. The online focus groups members can be located anywhere in the world and participate in the discussion over the Internet, yielding immense time and cost benefits. Despite its convenience, online focus groups may not replicate the traditional version because the digital communication may inhibit the synergy that is created when members meet in person (Brown et al., 2014). Online focus groups tend to have fewer members (e.g., 4 to 6), since too many respondents may cause confusion during the online discussions (Malhotra, 2015).

Second, exploratory studies can be conducted through depth interviews. Depth interviews are similar to focus groups; the main difference is that while focus groups are conducted in groups of respondents, depth interviews are conducted with a single respondent. Analogous to focus groups, depth interviews are flexible and mostly unstructured. The main objective of depth interviews is to obtain information from individuals knowledgeable about the topic of research, which could include current customers, members of the target market, managers and decision makers, employees, industry experts, etc. (Brown et al., 2014). Given the strengths in gathering rich and detailed information, depth interviews are suitable for exploratory research.

Third, projective techniques are often used in exploratory research. Projective techniques are different than focus groups and depth interviews, because while the research topic is introduced to the respondents in the latter methods, the purpose of the research is generally disguised in projective techniques (Malhotra, 2015). Hence, in this method, respondents are encouraged to reveal their underlying beliefs, motivations, feelings, thoughts, or behaviors regarding the research topic indirectly, by describing or structuring various ambiguous stimuli (Brown et al., 2014). The main assumption here is that individuals project their internal states while trying to make sense of the given ambiguous situations.

The most common projective techniques include: (1) *word association*, in which respondents react to a list of words with the first word that comes to their mind, (2) *sentence completion*, in which respondents are given incomplete sentences and asked to complete them, (3) *storytelling*, in which respondents are asked to tell a story about a drawing, photograph, picture, or cartoon, and (4) *roleplaying*, in which respondents are asked to play the role of a person in a given scenario (Brown et al., 2014).

An important contemporary development in qualitative research methods that is applicable to exploratory research is *netnography*, which refers to the application of ethnography (the scientific study of social groups) to understand consumer culture (shared beliefs, artifacts, and practices) in online communities (Kozinets, 2002). Online (also called virtual) communities refer to cross-consumer communication groups formed in the Internet, for example in social media, blogs, forums, newsgroups, etc., in which the participants exchange ideas, share information, and

build communities about market-oriented topics (Kozinets, 2002). Such online communities are rich and vibrant sources of consumer data (including conversations, images, videos, audio recordings, avatars, etc.), and researchers can use netnography to tap into these sources in an unobtrusive and covert manner. This is possible because, unlike the other ethnographic methods or qualitative techniques (e.g., interviews or focus groups), netnography does not rely on participant-researcher interaction, rendering it a suitable method for investigating sensitive research topics (Kozinets, 2002).

In conducting a netnography, Kozinets (2002) suggests following five methodological steps. In the first step, *entrée*, researchers identify relevant online communities based on the formulated research questions, the number of discrete members, the amount of activity, and availability of qualitatively rich data in the online community. The second step pertains to *data collection*. Two major types of data are generated in netnography: (1) the data obtained directly from the between-member communications in the online community (e.g., via post and discussions), and (2) the data produced by the researchers' own reflections about the online community (e.g., via field notes). Although researchers can be active participants in the online community, it should be noted that, contrasting ethnography, researchers can also conduct netnography only through observation, without generating personal reflections (Kozinets, 2002). In the third step, *interpretation*, the classified and coded data is interpreted, mainly with respect to the conventional standards of qualitative data analysis. Given that netnography is restricted to the study of specific communities, the reliability and generalizability of the findings can be enhanced with corroborating evidence, for example by analyzing data obtained by other research methods.

Kozinets (2002) also draws attention to the *ethical considerations* step in netnography, recommending that researchers should disclose their presence in the online community, obtain informed consent from the members and safeguard their anonymity, cogitate whether the medium is a private or a public platform, and solicit feedback from the community members. Feedback seeking is called *member check*, and it is the final step of the netnography research process.

3.2.2 Descriptive Research Designs

Descriptive research is used when the objective is to describe characteristics of relevant groups (e.g., understanding demographics of a target market), to determine the proportion of people who behave in a certain way (e.g., the size of customers shopping at the farmer's market), or to make specific predictions (e.g., how much are customers willing to pay for the new product?; Brown et al. 2014). Thus, unlike flexible exploratory research, descriptive research is guided by predefined research problems. Surveys, longitudinal analysis, and observations are the most commonly used descriptive research methods (Malhotra, 2015).

First, surveys are structured questionnaires that are administered to a specific sample from a population, designed to elicit information from respondents regard-

ing their behavior, motivations, intentions, attitudes, demographics, and lifestyle (Malhotra, 2015). Surveys are cross-sectional designs, that is, the data is collected at a single point in time from a representative sample of a specific population (Churchill and Iacobucci, 2005). The survey questionnaires can be administered via telephone, mail, e-mail, web page, or personal interview. Malhotra (2015) suggests that response rates for surveys can be improved by giving an initial notification about the survey, providing incentives, and making follow-up contacts with the respondents.

Second, in longitudinal analysis, a fixed set of variables are measured repeatedly using the same group of respondents, in order to capture the changes taking place over time (Malhotra, 2015). Topics that are relevant to longitudinal designs are, for example, the long-term effect of price promotions or long-term changes in the brand equity (Churchill and Iacobucci, 2005). Longitudinal designs are implemented using panels, which refer to a sample of respondents who are committed to provide information to the researchers about a topic at specified intervals (Malhotra, 2015).

Third, through observations, researchers can obtain information about the research topic by observing and recording respondents' behavioral patterns (Malhotra, 2015). Observational techniques can capture the information that respondents are unaware of or not willing to communicate (Churchill and Iacobucci, 2005). For example, in a survey, consumers may indicate that they spend equally on fresh and frozen food; however, simply observing consumers' behavior in the supermarket may reveal a different pattern.

Observations can be *personal* (i.e., data is collected by a trained observer) or *mechanical* (i.e., data is collected by special devices, such as traffic counters, optical scanners, or eye-tracking and voice pitch analysis tools), and observations can take place in the field or in the labs (Churchill and Iacobucci, 2005; Malhotra, 2015). Although observational designs minimize interviewer biases and eliminate errors in self-reported behavior, observations do not provide insight into the underlying motivations of a behavior and can only be used to examine frequent behaviors of short duration (Malhotra, 2015). Furthermore, unstructured observations can also be used for exploratory research purposes (Brown et al., 2014).

3.2.3 Causal Research Designs

The objective of causal research is establishing cause-and-effect relationships. Similar to descriptive research, causal research is based on specific problems; unlike descriptive research, which can describe groups or inform about associations between variables, causal research is concerned with causality, that is, the extent to which the occurrence of a variable increases the probability of the occurrence of another variable (Malhotra, 2015). There are three basic types of evidence for causality: (1) concomitant variation, (2) time order of variables, and (3) elimination of alternative explanations (Churchill and Iacobucci, 2005).

Concomitant variation refers to the extent to which two variables (say the cause, X, and the effect Y) vary together (correlate) in the way predicted by the research hypothesis (Churchill and Iacobucci, 2005). Concomitant variation provides support for causality, but does not prove it: for example, a third variable may be the causal factor for both X and Y (Churchill and Iacobucci, 2005; Malhotra, 2015). The time order of variables principle states that, if X causes Y, the occurrence of X should precede the occurrence of Y, and the elimination of alternative hypothesis principle states that, researchers should control for other possible causal factors to establish that it *is* X, not another variable, that causes Y (Churchill and Iacobucci, 2005). These three types of evidence for causality can be obtained from experimentation, which is the most common method of causal research.

In an experiment, the researcher manipulates and controls one or more independent variables and observes the effect of this manipulation on the dependent variable (Churchill and Iacobucci, 2005). To illustrate, if we are testing a hypothesis of “X causes Y” (e.g., new packaging increases attitudes toward the product), the researcher can manipulate the levels of X (e.g., X present or absent; product with and without new packaging) and observe the variation in Y (change in attitudes toward the product). There are two types of experiments: field experiments, which are conducted in natural settings (e.g., actual market conditions), and laboratory experiments, which are conducted in artificial settings in which the researcher constructs the special conditions (Malhotra, 2015).

A key aspect of experimentation that sets it apart from other designs is the random assignment of participants to experimental and control groups. Random assignment attempts to minimize the influence of other variables by distributing them equally across different groups (Malhotra, 2015). While experimental groups are exposed to the manipulated independent variable, the control group is not, thereby providing a point of comparison when investigating the effects of manipulated independent variables on the dependent variable (Malhotra, 2015).

Two types of validity, namely internal and external validity, are crucial in experimentation. Internal validity is concerned with the extent to which we can attribute the observed effects to experimental manipulations (and not to other factors), whereas external validity is concerned with the extent to which the observed effects can be generalized to other populations, contexts, times, or stimuli (Churchill and Iacobucci, 2005; Malhotra, 2015). While laboratory experiments have relatively high levels of internal validity, field experiments have relatively high levels of external validity (Brown et al., 2014).

Researchers tend to interpret findings from descriptive research designs (e.g., cross-sectional surveys) as implications of causal relationships; however, this is a fallacy and should be avoided. Descriptive studies fail to provide evidence of causality with respect to concomitant variation, time order, and elimination of alternative explanations (Churchill and Iacobucci, 2005). Relative to other research designs, experiments may be more time consuming and costly; moreover, administration of experiments tend to be more complicated than other designs (Malhotra, 2015). To sum, Table 1 presents an overview of market research designs.

Research Design	Main Purpose	Methods
Exploratory	<ul style="list-style-type: none"> - to provide insights into understanding a problem - to uncover novel ideas 	<ul style="list-style-type: none"> - Secondary data - Qualitative methods - Unstructured observations
Descriptive	<ul style="list-style-type: none"> - to describe characteristics of groups - to determine the proportion of people who behave in a certain way - to make specific predictions 	<ul style="list-style-type: none"> - Surveys - Longitudinal analysis - Observations
Causal	<ul style="list-style-type: none"> - to establish cause-and-effect relationships 	<ul style="list-style-type: none"> - Experiments

Table 1: An overview of research designs in market research.

3.3 Sampling and Data Collection

Necessary data for the research can be obtained from primary and secondary sources. In short, *primary data* refers to the novel data collected by the researcher, whereas *secondary data* refers to the already existing data. Although researchers have an inclination towards obtaining primary data, Churchill and Iacobucci (2005) suggest that researchers should not underestimate the amount and quality of the secondary data already available for research purposes. There are several advantages of secondary data over primary data, such as economies of time and cost; nonetheless secondary data may not fit the research problem at hand well and may have questionable accuracy (Churchill and Iacobucci, 2005). Although secondary data may not provide the complete solution to the research problem, it could be used for exploratory purposes, as a valuable supplement to the further investigations of the problem with primary data. Primary data is obtained via research designs that are tailored to a particular research problem, and is therefore more frequently used by market researchers.

After the problem is formulated and the research design is determined, researchers make decisions regarding the sample that will be used in the research. Sampling is a five-steps process (Malhotra, 2015). In the first step, researchers define the target population, which includes all individuals or objects that meet the criteria sought by the researcher. In the second step, researchers identify the sampling frame, which provides a list or guidelines for sampling from the target population. In the third step, researchers select a sampling technique, which consists of nonprobability sampling (based on researcher's judgment, e.g., convenience, judgment, snowball, or quota sampling) and probability sampling (based on chance, e.g., simple random, systematic, stratified, or cluster sampling). In the

fourth step, researchers determine the sample size (i.e., how many elements will be included in the study?). In the fifth and final step, researchers execute the sampling process, which requires a detailed description as to how the sampling decisions were made (Malhotra, 2015). Once the sampling process is completed, researchers proceed to data collection.

In the data collection stage, researchers should be aware of errors that can bias the research findings. There are five types of error associated with data collection (Brown et al., 2014):

1. *Sampling error* refers to the discrepancy between results from the sample and the population. Sampling error is less troublesome than the other types of errors; it can be reduced by increasing the sample size and can be examined through the margin of sampling error statistic.

2. *Noncoverage error* refers to the failure of excluding qualified elements of a defined population in the sampling frame. Given that noncoverage error is a sampling frame problem, it can be reduced by improving the quality of the sampling frame.

3. *Nonresponse error* refers to the failure to obtain information from some elements of the sample. Nonresponse error becomes a potential problem for a study when there is a systematic difference between respondents and nonrespondents. Nonresponse error can be diagnosed by identifying and contacting a sample of nonrespondents, by comparing respondent demographics with the population demographics, or by comparing the results of early responders with late responders.

4. *Response error* occurs when respondents provide inaccurate answers to questions. Response error may arise from researcher's faults in preparing the research instrument (e.g., problems with wording of items), or from respondent's inability or reluctance in providing answers.

5. *Office error* refers to the errors that arise when editing, coding, or analyzing data.

Some of the contemporary discussions in sampling and data collection pertain to *crowdsourcing*, which facilitates data collection over the Internet, *statistical power*, which guides researchers in sample size decisions, and *indirect measures*, which may reduce response errors in measuring consumer attitudes.

3.3.1 Crowdsourcing

The Internet provides easy access to diverse groups of the population and thus poses new sampling and data collection opportunities to market researchers. Recently, utilizing *crowdsourcing* has been a popular method for data collection. Crowdsourcing simply refers to outsourcing a job or a service from the participants of online platforms that facilitate the exchange between the job suppliers and the workers. On such online platforms, the job suppliers post a task (e.g., an online survey) with a compensation that generally varies based on task complexity, and then solicit inputs from workers that are eligible for the task. Currently the most popular crowdsourcing platform is Amazon's Mechanical Turk (MTurk), which

provide access to a participant pool available for conducting research that is diverse with respect to age, education, income, social class, and nationality (Buhrmester et al., 2011).

Web-based crowdsourcing has several advantages over traditional methods of sampling and data collection: (1) participants in crowdsourcing platforms are demographically diverse, thus researchers can conduct research beyond undergraduate student samples and even investigate specialized samples, (2) data collection is quick and inexpensive, (3) experimenter related biases are eliminated, (4) computer-based designs can be easily replicated by other researchers, and (5) reliability of the data is generally equivalent to the traditional methods (Buhrmester et al., 2011; Birnbaum, 2004).

Researchers should be aware that participation rate in crowdsourcing depends on compensation level and time commitment (Buhrmester et al., 2011), and web-based designs may be susceptible to multiple submissions and response biases (for remedies of these shortcomings, see Birnbaum, 2004). Nevertheless, the advantages of crowdsourcing clearly outweigh its weaknesses, and when coupled with rigorously designed studies, it becomes a valuable source of data for researchers.

3.3.2 Statistical Power

A crucial tenet of quantitative research designs (e.g., surveys and experiments) pertains to sample size. Prior to data collection, researchers must determine the sample size necessary to detect the hypothesized effects in their study. This sample size decision is linked to the concept of *statistical power*, which refers to the probability that a statistical test will correctly reject a false null hypothesis (Cohen, 1992). Or, in other words, if a study is under-powered, statistical tests may fail to produce meaningful results when there was actually an effect to be detected (i.e., the Type II error).

Statistical power is a function of three factors: sample size, effect size, and the significance criterion. Thus, when determining the necessary sample size, researchers should take desired power, effect size, and the significance criterion into consideration. First, researchers can set the desired power at the recommended 80% level (Cohen, 1992) or select a higher power level if necessary. Second, the effect size (i.e., the magnitude of the hypothesized effect) can be determined based on the researcher's expectations or the previous studies that tested similar hypotheses. Finally, researchers can use the conventional 5% significance criterion, or set another appropriate significance level based on their study. Larger sample sizes, larger effect sizes, and increased significance levels are associated with higher statistical power.

Statistical power analysis is not a contemporary issue; the importance of power analysis has been highlighted for decades. Nevertheless, researchers continue to neglect conducting power analysis in their studies. Power analyses are crucial, because it forces researchers to consider the effect sizes (i.e., the magnitude of dif-

ferences) they want to detect in the study. For example, consider a researcher who will conduct an experiment to examine the effect of a new product packaging on consumers' willingness-to-pay, anticipating that the respondents in the experimental (new packaging) condition will be willing to pay more for the product than the respondents in the control group. How big of a difference between the groups is meaningful for the research purposes? The researcher's effect size estimates will determine the necessary sample size in this example.

There are free computer programs dedicated to statistical power analysis (e.g., G*Power; Faul et al., 2007) which can be used for determining sample size based on different statistical tests. Power analyses, when conducted, should be reported in detail.

3.3.3 Indirect Measures of Attitudes

Investigating attitudes has always been challenging, for individuals tend to give socially desirable responses to self-report questions or sometimes they lack introspective access to their true attitudes. For instance, consumers may not reveal their attitudes toward drinking or smoking accurately when asked about it in a direct fashion that allows them to deliberate on their responses. This limitation may give rise to response errors in attitude research.

Social psychologists conceptualized that individuals hold two types of attitudes: *explicit attitudes*, which refer to the deliberately formed verbal judgments about objects, and *implicit attitudes*, which refer to the spontaneous and automatic responses to objects (Greenwald and Banaji, 1995). While explicit attitudes are measured directly via verbal self-report statements, implicit attitudes are measured indirectly via computer-aided tests that evaluate automatic associations in memory.

Currently, the most popular measure of implicit attitudes is the Implicit Association Test (IAT, Greenwald et al., 1998). The IAT is a computerized task in which the respondent is presented with target-concepts (e.g., young people – old people) and attribute dimensions (e.g., good – bad), and throughout the test the respondent categorizes pairs of target-concepts and attributes (e.g., young people – good, old people – bad; young people – bad, old people – good). The IAT then evaluates the automatic associations between target-concepts and attributes based on the response latencies, that is, how quickly the respondent categorizes the association under investigation (e.g., quicker responses to the old people – bad pair indicates stronger negative automatic attitudes toward old people).

The IAT can also be used to measure individuals' attitudes toward themselves (i.e., self-esteem). Self-esteem has long been a central construct in consumer research, given the individuals' tendencies to enhance their self-concepts with material possessions. Analogous to the distinction between explicit and implicit attitudes toward objects, individuals' self-evaluations also take two forms: *explicit self-esteem*, which represents deliberate and reflective self-evaluations, and *implicit self-esteem*, which represents automatic and uncontrolled self-evaluations

(Greenwald and Banaji, 1995). Consumer researchers have long relied on explicit self-esteem, which assessed self-evaluations directly through self-report measures with self-evaluative statements (e.g., “I am satisfied with myself”). Self-report measures of self-esteem are, however, susceptible to individuals’ socially desirable responses or other biases arising from self-presentational motives. Thus, both implicit and explicit self-esteem should be taken into consideration when self-esteem construct is investigated. IAT can assess implicit self-esteem by measuring the response latencies on the self-related words (e.g., I, me, myself) and positive attributes (e.g., good, warm) categorization. In addition to IAT, name-letter liking (positivity towards name initials) can also be used as a measure of implicit self-esteem (Greenwald and Banaji, 1995).

Implicit measures are consequential for market research, because, although the majority of research is based on the assumption that consumers make deliberate, thoughtful decisions, consumers also have internal, uncontrolled motivations and goals that could be activated automatically without the individual’s awareness of the initiation or operation of the process (Bargh, 2002). Thus, researchers should be aware that both controlled and automatic processes influence consumption behaviors. In other words, both explicit and implicit attitudes may be activated by environmental cues and in turn exert influence on behavior.

3.4 Data Analysis

Once the studies are designed based on the research problem and relevant qualitative or quantitative data are collected, the next step pertains to the analysis of the data. The data analysis stage is central to the market research process, for researchers have to extract meaning out of the cluttered raw data using the methodologies appropriate for the research question and the type of data at hand.

Regardless of the type of data collected (i.e., qualitative or quantitative), the data analysis stage begins with some pre-analysis procedures. The aim of these procedures is to ensure the quality of the raw data for the subsequent analyses and interpretation, because imperfections in the raw data may confound the results. For qualitative methods, data analysis generally begins with transcribing (if necessary) and coding. Coding is the process of transforming qualitative observations into quantitative measures (Churchill and Iacobucci, 2005). Coding allows researchers to capture summative, more general attributes from verbal or visual data. For example, imagine a group of researchers who conducted a focus group with customers to understand the important attributes of their cars. A relevant code for this research would be “safety”. Thus, researchers can examine the interview transcript and code the sentences that indicate safety (e.g., “number of airbags is important for me” would be coded as “safety”). Interpretations then can be made based on the patterns and frequencies of these codes. To improve the reliability of coding, researchers are recommended to train multiple coders and evaluate the amount of agreement between the coders (Churchill and Iacobucci, 2005).

Similarly, for quantitative methods, data analysis stage begins with screening the dataset for imperfections such as erroneous data patterns, data entry errors, outliers, and missing values. Such flaws in the dataset may pose threats to the validity of the conclusions drawn from statistical data analyses. When data is entered into a statistical data analysis software, a codebook that provides information on how each item was coded into the software should be prepared (Churchill and Iacobucci, 2005). Subsequently, the data can be presented in the form of various graphs, tables, and descriptive statistics. If necessary, the data can be analyzed further with the appropriate type of inferential statistics (e.g., between-group comparisons, regression analysis, conjoint analysis, etc.; Churchill and Iacobucci, 2005). Preparing a data analysis plan that outlines primary and secondary variables (or other data), and documents a detailed explanation of the procedures for conducting the statistical analysis can further assist researchers.

Contemporary issues in data analysis pertain to the analysis of data collected from different cultural contexts, statistical mediation and moderation analysis, and the use of confidence intervals and effect sizes.

3.4.1 Analysis of Cross-Cultural Data

As a result of globalization and rapid growth of world trade, market research is increasingly taking place across borders. For decision makers in multinational companies, market research serves the crucial function of providing information about consumers in foreign markets. For marketing academics, market research enables testing and developing theories in diverse cultural contexts. Consequently, marketing practitioners and academics frequently work with data collected in more than one country.

Analysis of cross-cultural data, however, poses a measurement invariance (or equivalence) challenge, especially when collected via survey methods. Measurement invariance refers to the assumption that a measurement instrument performs similarly (i.e., measures the same attribute) when making comparisons, for example between cultural groups, time points, or any other categories (Davidov et al., 2014). Thus, the validity of cross-cultural comparisons is dependent on an invariant measurement instrument that is understood and interpreted similarly by respondents in different groups. Lack of invariance may indicate that the observed results are products of statistical confounds rather than true differences, which poses a substantial threat to the conclusions of any comparative study.

Measurement invariance encompasses both theoretical and statistical elements. A statistically sound measurement instrument requires, first of all, theoretical constructs that are comparable between groups at the conceptual level. Accordingly, when conducting research across cultures (or other groups), researchers must ensure that the theoretical constructs under investigation do not have culture- or group-specific meanings. For example, prior market research suggested that the concept of service quality might have different meanings across cultures and the measures for this construct should therefore be adapted to the study context

(Carrillat et al., 2007). To avoid anomalies arising from incomparable theoretical constructs across groups, researchers should scrutinize the conceptual connotations of the constructs, preferably through expert opinions and focus groups, and also pay attention to the instrument translations to prevent potential item-level biases (Davidov et al., 2014).

In the current section, we are concerned with the statistical comparability of measurement instruments at the data analysis phase (e.g., comparison of mean scores or regression parameters across groups). Statistical considerations in measurement invariance mainly pertain to the between-groups comparability of empirical qualities of measurement models (theoretical constructs and their corresponding observed variables) when researchers collect data from at least two different groups using the same instrument. Multigroup Confirmatory Factor Analysis (MGCFA), which will be briefly introduced here, is currently the most widely adopted statistical method to test for measurement invariance (Davidov et al., 2014; Steenkamp and Baumgartner, 1998).

MGCFA is a sequential testing method, which begins by a comparison of the overall structure of the measurement models across groups (without imposing any restrictions on the models), and proceeds by adding constraints on the model (e.g., restricting factor loadings and mean scores of the constructs to equality across groups). Additional constraints to some degree worsen the model fit obtained in the unconstrained model; accordingly, MGCFA establishes measurement invariance by comparing the discrepancies in the fit of the constrained and unconstrained models (larger discrepancies indicate violation of invariance). The sequential steps of conducting measurement invariance analysis using MGCFA are explained comprehensively in Steenkamp and Baumgartner (1998). MGCFA can be implemented with dedicated statistical packages (e.g., Lisrel, AMOS, or Mplus). It should also be noted here that there are various statistical approaches available to scrutinize which specific items are biased in a measurement model (see, van de Vijver and Leung, 2011).

Measurement invariance is also sensitive to the method of data collection. As discussed earlier, survey methods, in which the same questionnaire is administered to the members of different groups, are most susceptible to measurement noninvariance. On the other hand, computer-aided methods (e.g., IAT and eye-tracking) are potentially less vulnerable to bias and can therefore yield more accurate between-group comparisons. Researchers should consider employing different data collection techniques when conducting cross-cultural market research.

3.4.2 Statistical Mediation and Moderation Analyses

Mediation and moderation models enable researchers to further explicate observed relationships between constructs. Consider the simple association between consumers' attitudes toward an advertisement and their purchase intentions for the brand. Through mediation models, researchers can identify other constructs that mediate this relationship, and thereby clarify how or why this relationship occurs

(Baron and Kenny, 1986). For example, attitudes toward the brand can be modelled as a mediating variable in the example above: consumers' attitudes toward the ad enhance their attitudes toward the brand, which in turn increase purchase intentions for the brand.

Moderation models, on the other hand, examine the *when* question, and therefore aim at uncovering the boundary conditions of observed relationships. Moderating variables elucidate under what circumstances, for which types of products, for which consumers, in which cultures, etc., the relationship occurs (or does not occur). In our advertisement – purchase intention example, we can postulate that the strength of this association is contingent on consumer's level of involvement with the product, such that the influence of attitudes toward the advertisement on purchase intentions will be stronger for consumers with high (vs. low) levels of product involvement. After developing conceptual models that explain how mediators or moderators are related to the problem at hand, researchers analyze statistical models based on collected data to determine those mediation or moderation effects.

In testing statistical mediation, a contemporary development has been the introduction of alternatives to the long dominant Baron and Kenny (1986) approach. The Baron and Kenny approach is based on hierarchical multiple regression analyses, and its central tenet is that a statistically significant association between two variables will be largely reduced in magnitude (and even become nonsignificant) when the mediator is entered into the model, suggesting that the mediator accounts for the given relationship. The reduction in the main effect and the significance of the indirect model (i.e., the effect that is transferred through the mediator) are then tested with a method known as the Sobel test, which is criticized to be a conservative test with low power and high reliance on normal distribution of the indirect effects (Hayes, 2013). These limitations impeded the use of the Sobel test and gave rise to alternative methods to test for indirect effects in mediation models.

Recently, bootstrapping approach to mediation (Hayes, 2013; Shrout and Bolger, 2002) has gained popularity among researchers. Bootstrapping is a resampling technique, in which the statistics of interest are computed based on large numbers (e.g., 5000 or 10000) of resamples that are generated from the original sample with replacement. For example, if we have an original sample of five observations (e.g., 7, 4, 6, 9, 2), some bootstrap samples (with replacement) would appear as: (6, 4, 2, 2, 9), (4, 7, 4, 9, 9), (2, 4, 7, 9, 2), etc.

When testing for mediation, an indirect effect for each bootstrap sample is computed, and then based on the total number of bootstrap samples (e.g., 5000 or 10000), a confidence interval (typically at the 95% level) for the indirect effect is generated. The mediation effect is established when the confidence interval for the indirect effect excludes zero. Bootstrapping approach is not bounded with the assumption of normal distribution of the indirect effect, and therefore yields more accurate estimates than the Sobel test (Hayes, 2013). Although initially bootstrapping was deemed appropriate in small samples (Shrout and Bolger, 2002), a recent simulation study (Koopman et al., 2015) reported that using bootstrapping in small

samples may lead to inflated Type I error rates (i.e., finding more than $\alpha\%$ false significant indirect effects).

Although rigorous statistical analyses are consequential in testing for mediation effects, researchers should be cautious in presenting statistically significant mediation effects as a proof of their conceptual (theoretical) mediation model. As explicated in Fiedler et al. (2011), a statistically supported model, especially in a cross-sectional design, may not reveal the true mediator, but instead may correspond to a spurious mediator (a variable that is highly correlated with the true mediator) or a correlate (an alternative) of the independent or the dependent variable. Examining alternative theoretical models and employing different designs (e.g., experimental or longitudinal) are therefore imperative in mediation-based designs. When reporting results of mediation analysis, researchers are also recommended to refrain from making cogent claims about “establishing causal mechanisms” or “revealing underlying processes” (Fiedler et al., 2011).

A contemporary issue in testing statistical moderation pertains to the treatment of moderator variables that are measured as a continuous scale. In such occasions, a common yet flawed procedure was to discretize the continuous variable into groups, for example based on the median score of the variable (hence called median-split), and then to conduct an Analysis of Variance (ANOVA) based on the categorical variables. There is now a consensus that the discretization of continuous variables may result in reduced statistical power, loss of information, and false significant findings, and thus should be avoided (e.g., Fitzsimons, 2008). Instead, researchers are recommended to use the continuous variables without transformation in statistical moderation analysis. A common approach to analyzing moderation with continuous variables is the pick-a-point (also called simple slopes) technique (Aiken and West, 1991), in which the conditional effect of an independent variable on a dependent variable is examined at high and low values of the moderator (e.g., $\pm 1SD$ from the mean). A major limitation of this approach is that such arbitrarily selected points do not correspond to theoretically meaningful values on the scale; moreover, depending on the sample distribution, those the selected values may be outside the range of the observed data, thereby making the analysis sample specific (Hayes, 2013).

Researchers can overcome the limitations of the pick-a-point approach by implementing the Johnson-Neyman method (Johnson and Neyman, 1936) in their moderation analyses. The Johnson-Neyman method tests the conditional effect of an independent variable on a dependent variable at all values of the continuous moderator, and returns a “region of significance” within which this conditional effect differs from zero at a specified significance level (e.g., $p < .05$). Because the method is not bounded by arbitrarily selected values, researchers can examine moderation at specific values selected with guidance from theory, or explore the entire range of values to accurately identify the points at which moderation occurs. For example, if we hypothesize age as a moderator (e.g., the relationship between brand heritage and brand attitudes will be stronger among older consumers), we can reveal at what specific age the relationship becomes significant (e.g., for re-

spondents above 44 years old brand heritage significantly influences brand attitudes).

The Johnson-Neyman analysis is not a new development, but it has only recently been integrated into the mainstream statistical analysis programs (e.g., PROCESS Macro for SPSS and SAS, Hayes, 2013), which propelled its use in moderation analyses.

3.4.3 Confidence Intervals and Effect Sizes

Null hypothesis significance testing (NHST) is still the most common method for making inferences from statistical tests. In NHST, significance levels (p -values) obtained from statistical analyses are used to make judgments about the level of support (or no support) for the study hypothesis (e.g., null hypothesis is rejected, or alternative hypothesis accepted, when $p < .05$). Cumming (2012, p. 27) explains the meaning of the p -value with a neat example. Consider the two following probabilities: (1) the probability of obtaining such results from our study, if our hypothesis is true, and (2) the probability that our hypothesis is true, if we've obtained such results from our study. Although researchers tend to interpret the p -value as in the latter statement, the first statement is the correct one. Thus, the p -value provides us the conditional probability of the data, not the hypothesis (Kline, 2004).

NHST suffers from various drawbacks that should be recognized by researchers. Some of these drawbacks, as outlined in Cummings (2012) and Kline (2004), include: (1) p -values are sensitive to sample size, thus, in sufficiently large samples any relationship may appear significant and in small samples existing effects may not emerge, (2) NHST gives rise to dichotomous interpretations of the results (i.e., hypothesis is supported or not), and (3) p -values do not inform researchers about the probability of replications. Despite such criticisms, NHST remains as a prevalent method for statistical inference. Researchers can, however, improve the rigor of their analysis by supplementing p -values with confidence intervals and effect sizes.

Confidence intervals can render statistical results more informative by providing interval estimates along with point estimates. While the mean score of a measure obtained from a sample (e.g., $M = 14$) is a point estimate of the population mean, a confidence interval (CI) provides the interval estimate (e.g., 95% CI for the M [10, 18]), which informs us about the precision or accuracy of the point estimate (Cumming, 2012). Thus, narrower interval estimates indicate more precise point estimates. Although it is possible to use other values, conventionally confidence intervals are evaluated at the 95% level. For example, a 95% confidence interval for a sample mean can be interpreted as follows: when the analysis is replicated with multiple samples from the same population, in the long run, 95% of the confidence intervals will include the true population mean and 5% will not (Cumming, 2012). However, note that interpreting a single confidence interval as "we are 95% confident that the true population mean is between value X and value

Y” is incorrect, because we might simply have obtained a confidence interval from the 5% group that does not capture the true population mean. We can therefore only talk about the long run probabilities of confidence intervals.

Confidence intervals, which provide a range for estimates, are more informative about precision and accuracy than single point estimates, and thus can allow researchers to steer away from the dichotomous thinking encouraged in NHST (Cumming, 2012). Furthermore, confidence intervals become beneficial when evaluating multiple studies with the same conditions, as they reveal a range of possible results based on multiple confidence intervals, and thereby encourage replication of results (Kline, 2004). Researchers are therefore recommended to report confidence intervals for primary results whenever possible.

An effect size refers to the magnitude of the phenomenon under investigation (Cohen, 1992). While a p -value only informs about the probability of the data and presents a “reject or no reject” decision to the researcher, effect size informs about how large the magnitude of the effect is. Intuitively, the larger the effects are, the more substantial are the findings for research and practice. In sufficiently large samples, trivial effects may emerge as significant. Researchers therefore should evaluate and report effect sizes together with p -values.

There are various effect size indexes for different statistical analysis, and those effect size indexes are generally interpreted as small, medium, or large (see, Cohen, 1992). For example, for the simple correlation coefficient (Pearson’s r) between two variables, 0.10, 0.30, and 0.50 correspond to small, medium, and large effect sizes, respectively. For between-group comparisons, Cohen’s d is a common index of effect size (0.20 for small, 0.50 for medium, and 0.80 for large effects). In addition to reporting effect sizes, researchers should also report the accompanying confidence interval for the effect size, because the confidence interval provides the range of possible effect sizes in the population (Kline, 2004). This information, for example, would be useful for other researchers when designing studies on a similar topic.

The usefulness of effect sizes and confidence intervals could best be understood through meta-analysis. With meta-analysis, researchers can combine results from different studies on similar questions and make general conclusions based on the combined evidence (Cumming, 2012). Meta-analysis is grounded upon effect sizes and confidence intervals, because p -values alone do not inform us about the range of estimates and magnitude of effects. Thus, reporting effect sizes and confidence intervals are vital for future meta-analyses that aim to synthesize the literature. Understanding effect sizes and confidence intervals encourages replication and meta-analytical thinking (Kline, 2004). In this way, researchers evaluate evidence based on magnitudes rather than the frequencies of rejected hypotheses.

3.4 Reporting Market Research

The final step of market research pertains to reporting the research findings. Marketing academics communicate their findings through scientific publication outlets such as journals and books; their audience is generally the other scholars and the reports are judged based on their scientific merit. Marketing practitioners, however, report their results to executives or managers who are usually more interested in the qualitative conclusions of the report than the technical details of research. Regardless of the type of audience, market research reports should be complete, accurate, and clearly written (Brown et al., 2014). Complete reports provide all necessary information to the reader while omitting irrelevant information; accurate reports present correct information with a logical line of reasoning; clearly written reports are well organized with precise expressions (Brown et al., 2014).

A vital aspect of market research reports is the *executive summary*. Most executives would like to obtain the essential information about the results, conclusions, and recommendations as quickly and as briefly as possible. The executive summary should therefore be prepared meticulously. The executive summary should state who authorized the research, outline the specific research questions or hypotheses that guided the research, explain how the data were collected, and present, often in a bullet format, the key findings, conclusions, and recommendations (Brown et al., 2014; Churchill and Iacobucci, 2005).

In addition to the written report, market research results are often presented with an oral report. When preparing the oral report, researchers should take into consideration the level of knowledge and involvement of the audience (Brown et al., 2014). In presenting the oral report, researchers can present the key results and conclusions at the end of the presentation or immediately after the introduction (purpose and main objectives). The former method allows researchers to build a logical case through sequential presenting of the supporting evidence; the latter method tends to engage the managers in the results early in the presentation and allows them to evaluate the supporting evidence in light of the key findings (Churchill and Iacobucci, 2005).

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