SMstudy® Guide

MARKETING RESEARCH

2017 Edition

A Comprehensive Guide to Marketing Research
PREFACE

The SMstudy® Guide (also referred to as a Guide to the Sales and Marketing Body of Knowledge, or SMBOK® Guide) is a comprehensive process-oriented framework for the planning and execution of activities associated with all facets of Sales and Marketing. It can be used as a reference source for experienced Sales and Marketing professionals or as a detailed guide for individuals or students with little prior Sales and Marketing knowledge or experience. The SMstudy® Guide can be applied in any organization or industry—from small companies with only a few employees to large, complex organizations with numerous business units, multiple product lines, and thousands of employees across many countries.

The SMstudy® Guide series consists of six books for all the aspects of Sales and Marketing: Marketing Strategy, Marketing Research, Digital Marketing, Corporate Sales, Branding and Advertising, and Retail Marketing. Each book addresses a key component of Marketing and can be used as a standalone resource or as part of a more comprehensive program that utilizes any number of the six books as required by the business. In this way the SMstudy® Guide series offers a flexible framework that can be tailored to address the specific needs of each organization.

This third book, Marketing Research, provides a framework for conducting Marketing Research for a company’s products, services, and brands. Marketing Research is the systematic process of collecting, processing, and analyzing data to provide required information to decision makers. Marketing Research is linked to all other Aspects of Marketing as it provides critical insights that inform key decisions in all other marketing planning and strategies. The processes associated with planning and executing a marketing research project include understanding the research problem; deciding a suitable research design; collecting, processing, and analyzing data required to solve the problem; interpreting data; and presenting the findings/recommendations of the research project to the key decision makers.

I would like to thank the 42 authors, subject matter experts, and reviewers who greatly contributed to the creation of this body of knowledge. Their combined efforts and collaborations have resulted in a comprehensive, highly effective, and unique approach to understanding, planning, and implementing Sales and Marketing initiatives.

Tridibesh Satpathy
CEO, SMstudy®
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1. INTRODUCTION

A Guide to the SMstudy® Sales and Marketing Body of Knowledge (SMBOK® Guide), also referred to as the “SMstudy® Guide,” is a series of books that provide guidelines for the Sales and Marketing of products and services. It offers a comprehensive framework that can be used to effectively manage Sales and Marketing efforts in any organization. The objective of the SMstudy® Guide is to provide a practical and process-oriented approach to Sales and Marketing that emphasizes how various elements of Sales and Marketing can be integrated to develop a comprehensive and effective organizational Sales and Marketing Plan.

The concepts in the SMstudy® Guide can be applied effectively to any company in any industry—from small companies with only a few employees to large, complex organizations with numerous business units, multiple product lines, and thousands of employees across many countries. The term “product” in the SMstudy® Guide may refer to either a product or a service of a company.

This introductory chapter includes definitions of key terms, the purpose and framework of the SMstudy® Guide, an overview of the Aspects of Sales and Marketing discussed throughout the SMstudy® Guide, the SMstudy® certification schema, a brief history of Marketing Research, and a general overview of the contents of this book on Marketing Research. This chapter also briefly discusses Corporate Strategy and its relationship to Sales and Marketing.

This chapter is divided into the following sections:

1.1 How to Use the SMstudy® Guide?
1.2 Why Use the SMstudy® Guide?
1.3 A Brief History of Marketing Research
1.4 Corporate Strategy Overview
1.5 Aspects of Sales and Marketing
1.6 The Levels of Sales and Marketing Strategy
1.7 Marketing Strategy Overview
1.8 Marketing Research Overview
1.1 How to Use the SMstudy® Guide?

The SMstudy® Guide can be used as a reference and knowledge guide by experienced Sales and Marketing practitioners, as well as by persons with little prior knowledge or experience in Sales or Marketing roles. Because the SMstudy® Guide offers a comprehensive Sales and Marketing framework, many will find value in using this resource to guide decision-making and planning across all facets of Sales and Marketing; however, the contents of the Guide are organized to enable quick and easy reference for individuals who may be interested in, or studying, only one or two specific facets of Sales or Marketing. Similarly, the SMstudy® Guide provides a valuable tool for individuals already in distinct Sales or Marketing roles (e.g., Digital Marketing Manager), as its design enables such individuals to focus on the specific Aspects that are most relevant to such roles.

1.1.1 Process-Oriented Approach with Defined Inputs, Tools, and Outputs

In order to facilitate the best application of the SMstudy® Guide framework, the SMstudy® Guide defines a process-oriented approach to Sales and Marketing, which provides specific guidance to Sales and Marketing professionals about how to most effectively and efficiently manage their marketing activities. The SMstudy® Guide defines Sales and Marketing in terms of processes that comprise a series of actions that lead to a particular result. Each process requires specific inputs and then uses various tools to create specific outputs. To cater to the needs of a diverse audience with varying levels of expertise in Sales and Marketing, the SMstudy® Guide has differentiated highly recommended inputs, tools, and outputs from recommended, but optional ones. Inputs, tools, and outputs denoted by asterisks (*) are highly recommended, while others with no asterisks are recommended, but optional. It is suggested that those individuals being introduced to Sales and Marketing focus primarily on the highly recommended inputs, tools, and outputs for each process, while more experienced practitioners should thoroughly understand all of the relevant inputs, tools, and outputs for each process.

1.1.2 Using SMstudy® Guide with SMstudy.com Website and VMEdu® Mobile App

The SMstudy.com website and the VMEdu® mobile app provide additional resources to help individuals better understand and apply the Sales and Marketing framework defined in the SMstudy® Guide. The website and app include the following:

- A certification schema, which helps students study marketing subjects in a structured manner, get tested on relevant concepts through proctored certification exams, and gain relevant certifications which demonstrate their knowledge and experience in different areas of Sales and Marketing (see section 1.1.3 for a description of the certification schema)
- High-quality videos with relevant and interesting examples that help individuals gain a thorough understanding of specific concepts
- Case studies that illustrate how the *SMstudy® Guide* framework can be used in real-life scenarios
- Additional resources for students to obtain expert training through physical classrooms, virtual instructor-led sessions, and high-quality online courses
- A glossary of terms, flashcards, study guides, and more

### 1.1.3 Certification Schema for SMstudy® Certifications

The certifications related to the *SMstudy® Guide* are managed by SMstudy.com. The certification schema is outlined in Figure 1-1.

<table>
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<th>Certification Schema</th>
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<td>Marketing Strategy (MS)</td>
<td>Expert Level Certification for each module (e.g., SMstudy® Certified Marketing Strategy Expert) requires passing a 4-hour proctored exam. Prerequisites: study of recommended and optional processes, 5 years of work experience, 40 mandatory educational hours, specialist level certification, and professional recommendations.</td>
</tr>
<tr>
<td>Marketing Research (MR)</td>
<td>Specialist Level Certification for each module (e.g., SMstudy® Certified Marketing Strategy Specialist) requires passing a 3-hour proctored exam. Prerequisites: study of recommended and optional processes, 3 years of work experience, and 20 mandatory educational hours.</td>
</tr>
<tr>
<td>Digital Marketing (DM)</td>
<td>Professional Level Certification for each module (e.g., SMstudy® Certified Marketing Strategy Professional) requires passing a 2-hour proctored exam. Prerequisites: study of recommended processes.</td>
</tr>
<tr>
<td>Corporate Sales (CS)</td>
<td>Associate Level Certification for each module (e.g., SMstudy® Certified Marketing Strategy Associate) requires passing a 1-hour unproctored exam. Prerequisites: study of introductory courses available free and online at SMstudy.com.</td>
</tr>
<tr>
<td>Branding and Advertising (BA)</td>
<td></td>
</tr>
<tr>
<td>Retail Marketing (RM)</td>
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![Figure 1-1: SMstudy® Certification Schema](image)

The following is a brief description of each level of certification:

- **Associate Level Certifications**—The introduction modules are available at no charge to interested individuals. All Aspects of Sales and Marketing have an applicable Associate-level certification (e.g., “SMstudy® Certified Marketing Strategy Associate”). The certification exams are free and not proctored; and candidates have one hour to complete each exam. The prerequisite is an understanding of the highly recommended inputs, tools, and outputs for each process relevant to the particular Aspect of Sales and Marketing. There is no work experience requirement and no mandatory educational hours in addition to the recommended study.
• **Professional Level Certifications**— All Aspects of Sales and Marketing have an applicable Professional-level certification (e.g., “SMstudy® Certified Marketing Strategy Professional”). The certification exams are proctored and candidates have two hours to complete each exam. The prerequisite is a study of the relevant SMstudy® Guide book with more emphasis on the highly recommended inputs, tools, and outputs for each process relevant to the particular Marketing Aspect. There is no work experience requirement and no mandatory educational hours in addition to the recommended study. Individuals who pass the certification exams for three or more Professional modules are awarded an additional certification called “SMstudy® Certified Sales and Marketing Professional.”

• **Specialist Level Certifications**—All Aspects of Sales and Marketing have an associated Specialist-level certification (e.g., “SMstudy® Certified Marketing Strategy Specialist”). The certification exams are proctored and candidates have three hours to complete each exam. The prerequisites are a study of all of the relevant inputs, tools, and outputs for each process, three years of related work experience, and twenty mandatory educational hours. Individuals who pass the certification exams for three or more Specialist modules are awarded an additional certification called “SMstudy® Certified Sales and Marketing Specialist.”

• **Expert Level Certifications**—All Aspects of Sales and Marketing have an associated Expert-level certification (e.g., “SMstudy® Certified Marketing Strategy Expert”). The certification exams are proctored and candidates have four hours to complete each exam. The prerequisites are attaining the Specialist level certification for that specific Aspect, a study of all of the relevant inputs, tools, and outputs for each process, five years of related work experience, forty mandatory educational hours, and recommendations from two peers and a manager. Individuals who pass the certification exams for three or more Expert modules are awarded an additional certification called “SMstudy® Certified Sales and Marketing Expert.”

Other than the certifications mentioned above, SMstudy® offers additional certifications in fields related to Sales and Marketing such as Affiliate Marketing, E-mail Marketing, Search Engine Optimization, Search Marketing, Social Media and Web Analytics. Information about these certifications is available in the SMstudy.com website.
1.2 Why Use the SMstudy® Guide?

Some of the key benefits of using the SMstudy® Guide are as follows:

1. **Consolidated Expertise**—The SMstudy® Guide is developed by VMEd, Inc., a global certification course provider that has educated over 400,000 students world-wide in more than 3,500 companies. It provides practical, industry-proven best practices, rather than purely theoretical advice.

2. **Process-Oriented Approach**—The SMstudy® Guide explains Sales and Marketing concepts through a practical, process-oriented approach. This helps Sales and Marketing professionals understand the specific processes they should follow to be effective in their Sales and Marketing roles. Each process has associated inputs, tools, and outputs that are recommended for use. Highly recommended inputs, tools, and outputs are noted with an asterisk (*) beside the concept in each process box and then again when each process is discussed throughout that section.

3. **Applicable to All Industries**—The many authors, advisers, and reviewers of the SMstudy® Guide have worked in numerous Sales and Marketing areas and geographic regions across a variety of industries. Thus, insights provided by them make this body of knowledge industry independent.

4. **Applicable to Companies of All Sizes**—The SMstudy® Guide has been written to meet the needs of all companies regardless of size. Small start-up companies with fewer than ten employees, or large organizations with several thousand employees and multiple product lines and business units, can equally benefit from the information in this guide. Additionally, the content provided in the SMstudy® Guide is highly relevant to for-profit and non-profit organizations alike.

5. **Comprehensiveness**—The SMstudy® Guide is organized into six Sales and Marketing Aspects: Marketing Strategy (MS), Marketing Research (MR), Digital Marketing (DM), Corporate Sales (CS), Branding and Advertising (BA), and Retail Marketing (RM). Each Aspect is detailed in a separate book. Taken together, the series provides a comprehensive and complete understanding of Sales and Marketing. The concepts covered in the SMstudy® Guide are further reinforced through videos and case studies available at SMstudy.com.

6. **Applicable to Beginners and Experts**—The SMstudy® Guide presents recommended concepts that beginners should know and also highlights advanced concepts for individuals who have more experience and who are on their way to becoming experts in the field. Readers can decide which of the six Sales and Marketing Aspects are most relevant to them and select from the available books accordingly.

7. **Alignment with Job Roles**—The Aspects included in the SMstudy® Guide are organized to align with the most common or typical job roles or career fields of Sales and Marketing.
8. **Continuous Improvement**—Concepts related to Sales and Marketing continue to evolve; therefore, the *SMstudy® Guide* will be continuously reviewed and updated to ensure that it remains relevant.
1.3 A Brief History of Marketing Research

Although Sales and Marketing evolved many centuries ago with the advent of the barter system, Marketing Research as a practice developed relatively recently. The use of Marketing Research in Sales and Marketing can be traced to the evolution of conventional mass media marketing. Unlike a seller’s marketplace where sellers had the advantage over customers, mass media marketing featured multiple manufacturers, thus shifting the balance of power in favor of consumers. Manufacturers created differentiated perceptions for their products by developing brands or names for their specific products or services with a specific message or positioning. They also began advertising their products or brands for a wider reach. With the introduction of brands and advertising, manufacturers felt the need to understand how their brands and advertisements performed among consumers. Early Marketing Research started in the form of surveys and interviews that gauged people’s recall of ads that appeared in print media. The scope of Marketing Research increased with the progress in conventional mass media marketing and later with the advent of advanced models of Sales and Marketing. The following section discusses the evolution of Sales and Marketing models over time and describes the role that Marketing Research played in each of them.

1.3.1 Early Models of Sales and Marketing

Sales and Marketing has evolved significantly over time, starting over one thousand years ago with the simple barter system and spanning several centuries, adapting to changes in consumer behavior, modes of communication, and advancements in technology, in order to become the multifaceted, multimedia discipline that it is today. It is important to take a look at the interesting history of Sales and Marketing in order to gain an understanding and appreciation for the systems and concepts that are used today to promote goods and services to consumers.

Figure 1-2 depicts the timeline for the Evolution of Sales and Marketing; a comprehensive description of the history of Sales and Marketing can be found in the SMstudy® Guide-Book 1, Marketing Strategy (section 1.3)

Marketing began several centuries ago with the barter system whereby various goods and services were exchanged for other goods and services. This concept of exchange is the foundation of Sales and Marketing
and, while the barter system is less common today, the dawn of the Internet in the 1990s made this simple form of transaction even more convenient by offering a means for non-local individuals to match their needs with the offerings of others, both locally and across the globe. While the barter system introduced consumers to the concept of exchange, the introduction of various forms of currency several centuries later, made the concept of exchange a simpler proposition. No longer was a match of ‘needs’ required—goods and services could be exchanged for money—and the “Traditional Marketplace” was born. Over the years, the concept of mass production as well as supply chain and distribution channels were introduced giving way to the “Seller’s Marketplace.” During this time, the transportation infrastructure and communication systems substantially improved, which allowed factories to mass produce and sell the products to a wide variety of customers, a concept often referred to as “mass marketing.” Although not directly applied in Sales and Marketing, various research techniques that would later be used for Marketing Research evolved during this period. The early predecessors of Marketing Research included surveys and studies conducted by governments and agencies for analyzing economic, social, and political factors that affected people. Censuses, poll surveys and studies for production thus were precursors to modern Marketing Research techniques.

1.3.2 Conventional Mass Media Marketing

The number of manufacturers or industries grew in the twentieth century giving consumers more options to buy from multiple manufacturers. Manufacturers started creating differentiated perceptions for their products which led to the concept of branding. Various channels such as print advertising (newspapers, magazines, inserts, or run of paper) mass mailers (flyers, postcards), television (network, cable, or syndication), radio (national, local, satellite, or podcast), and outdoor advertising emerged through which products were advertised and promoted. These developments shifted the balance of power in favor of consumers. The objective of conventional mass media marketing is for organizations to create strong brands and differentiated brand perceptions so that consumers will desire and purchase their products rather than those available from competitors. Thus, mass media marketing usually uses cumulative repetition over time to influence consumer attitudes and purchase actions. Mass media marketing also involves creating distribution channels and appropriate pricing and positioning strategies to ensure that desirable products are available to customers at specific price points.

Marketing Research evolved as an important aspect for mass media marketing. Manufacturers felt the need to identify customer preferences across regions and demographics and create or customize products that suited a particular target segment. Early Marketing Research relied primarily on surveys and interviews through which customer perceptions, preferences, attitudes, lifestyles etc. were gauged. The information gathered was used to make decisions regarding product attributes and branding. The advances in mass media allowed industries to increase the reach and popularity of their brands as well as increase the scope of conducting market research.
1.3.3 Fragmented New-Age Marketing

In recent times, the media has become increasingly fragmented with several hundred television and radio channels, as well as a large variety of print media, including newspapers, magazines, and trade publications. Moreover, since the late nineteen nineties, with the increasing popularity of the Internet and, more recently, smartphones, many options now exist for advertisers to reach a global audience using digital media marketing methods. With all of these options, many marketers find it beneficial to use an integrated approach to marketing by leveraging the strengths of various types of media. Companies must evaluate all media in terms of who the target audience is and what media resonates with them best. In many cases, assumptions will need to be made and incorporated into the media-testing framework (e.g., for each planning period a company might allocate a certain amount of its marketing budget to test new methods).

Some characteristics of fragmented new-age marketing are as follows:

- It is a fact that people now spend more time on the Internet using smartphones, tablets, or computers than they spend through conventional mass media, such as television, radio, or newspapers. This is especially true for the thirty-year-old and younger market segment. Since Sales and Marketing is most successful when it meets the demands of consumers, this change in consumer preferences is significantly altering the Sales and Marketing landscape for established companies. Businesses are discovering that conventional mass media marketing has limited effectiveness and some customer segments are not even reachable using these traditional media forms.

- Fragmented new-age marketing generally supports new, small brands with much smaller budgets targeted directly to customers in a global marketplace. This represents a significant distinction from conventional mass media marketing, where achieving a global reach for a small company may have been prohibitively expensive.

- While mass media marketing is less targeted and primarily focused on affecting emotional attitudes about the brand, new-age marketing is data-driven and more focused on driving specific calls to action. Also, while mass media marketing typically involves interruption (e.g., people watching a television program which is "interrupted" by an advertisement), new-age marketing is about engagement (e.g., offering relevant content that is of value to people).

- Unlike older media options where Sales and Marketing communications were primarily unidirectional (i.e., from producers to end-consumers), communications have increasingly become multi-directional (i.e., from producers to consumers, consumers to producers, and consumers to consumers). For example, there are multiple rating websites available where customers can provide independent ratings of a company’s products or services, and others, including the company itself, can respond or elaborate on these ratings. Although generally a benefit to both producers and consumers, this trend can make brand management challenging for companies if actual or potential
customers perceive that a product does not reflect the brand message intended by marketing efforts.

- Due to the nature of new-age marketing, consisting of multiple media forms and the ability to generate significant information, huge amounts of data (commonly referred to as “big data”) are now available to companies. The ability to process this data through proper marketing analytics, and assimilate such data to generate valuable insights, can become a significant differentiator for ensuring that companies engage in “smart marketing” (i.e., to generate greater revenues with relatively smaller marketing budgets).

Marketing Research evolved significantly during this period with the advances in computing power and statistical techniques, giving rise to tools that allowed large amounts of data to be analyzed and interpreted with relative ease. The use of computers reduced the effort required for collecting and analyzing data, at the same time increasing accuracy and reducing costs. During this period Marketing Research graduated from being just a supporting activity for decision makers. Market researchers were now expected to provide intelligent insights that were interpreted by analyzing data. Companies now relied on Marketing Research to decide on key strategies for all Aspects of Sales and Marketing. The advent of the Internet provided more options for companies to reach out to the target audience as well as for the public to interact, discuss, and provide feedback about the company’s products. The use of Internet-based multi-directional channels such as social media also made it possible for companies to collect feedback for marketing campaigns run across any channel.
1.3.4 Innovative Internet-Enabled Business Models

The growing popularity of the Internet, smartphones, and digital media provides opportunities for a company to not only use fragmented new-age marketing effectively to promote existing products, but also to come up with innovative business models where product demo, customer acquisition, and order fulfillment can also take place online.

Innovative business models may include the following:

- **Online Marketplaces**—Several e-commerce companies have created global online marketplaces for selling books, consumer goods, and other products. In such business models, customer acquisition is usually initiated through the company’s website. The company coordinates with its multiple suppliers to source products; samples, demos, and product reviews are provided on the website; customers make their purchases online; and items are shipped directly to customers.
Online Services—Online services have significantly impacted many traditional product and service industries by transforming existing business models and creating new ways to conduct business.

Examples of Online Services:

- Global Positioning Systems (GPS) and online maps have made physical maps redundant.
- The gaming industry has transformed predominantly to the online community with options for participants to play against opponents from various locations.

Online Networking—The Internet has made the world a smaller place. People can now have access to their networks at all times. These changes have significantly impacted the way in which people communicate with each other and, in turn, have created new possibilities for innovative business models.

Examples of Online Networking:

- Social media channels such as LinkedIn, Twitter, WhatsApp, Facebook, and Google+, have significantly changed the way in which people communicate with each other.
- Online search engines such as Google, Yahoo, and Bing make it easy to find information and locate businesses globally.

Business Models Using Smartphones—Smartphones are Internet-enabled mobile phones that also allow people to have an ongoing connection to the Internet. Since individuals usually carry their smartphones with them, mobile apps are becoming increasingly popular. Innovative business models based on the use of smartphones can disrupt several existing business models—more so in industries that rely on other forms of communications and networking.
Marketing Research today typically involves both online and offline efforts. Online research makes collection and analysis of data easy and cost effective. Pop-up windows, e-mails, etc. can be used for online surveys. Another source of online data is web analytics, which provides information about visitor profiles, visiting patterns, spending patterns, etc. Based on the data collected, companies try to customize their web pages for each visitor with suggestions such as recommended products, similar products, etc. Online surveys are only completed by consumers with access to the Internet so the results may not be representative of the entire population. If online surveys are conducted on the company’s webpage or app then the respondent base is further restricted to their own customers. Offline research is similar to earlier models but companies using disruptive models might have to establish their category before conducting offline research.

Examples of Marketing Research for Innovative Internet-Enabled Business Models:

- XYZ, an online travel portal, uses pop-up windows to collect data about customer satisfaction. A short questionnaire of four to five questions regarding user experience is provided to a customer if he or she agrees to be a part of the survey.
- ABC, an e-commerce company, uses e-mails to invite customers to take part in their quarterly survey. Customers can click on the given link if they want to participate in the survey.

1.3.5 Sales and Marketing as a Continuum

It is important for us to note that the fact that we are in the twenty-first century does not make all the earlier avenues of Sales and Marketing obsolete. Some companies marketing consumer goods continue to spend a significant proportion of their marketing budget on conventional mass media marketing. In some cases a seller’s marketplace continues to be the reality for certain commodities that have a limited number of producers, or where the production is highly regulated by the government or controlled by monopolies or duopolies. Similarly, in some regions or countries, traditional marketplaces continue to flourish.

Rather than viewing the changes as completely replacing the earlier practices, Sales and Marketing approaches should be viewed as a continuum where recent innovations can co-exist with earlier practices. It is the responsibility of a company’s Sales and Marketing teams to make the strategic decisions that will work best to achieve the desired outcomes, given the reality of the markets and particular consumer preferences.

Sales and Marketing students, who read material on the subject, often find it confusing because authors offer varied perspectives that may be difficult to assimilate and comprehend in the present day. Each
The author's perspective can also vary depending on when the material was written (i.e., where he or she was on the Sales and Marketing timeline), his or her individual or industry preferences and experiences, and other factors. Conversely, the concepts covered in this Sales and Marketing Body of Knowledge (SMstudy® Guide) are not limited to the perspective of any particular author or industry. The SMstudy® Guide was developed by VMEdu, Inc., a professional education provider which has educated over 400,000 students world-wide in more than 3,500 companies. The forty plus authors, advisors, and reviewers of this book have worked in multiple marketing environments and geographic regions across an eclectic variety of industries. Thus, the insights provided in this book provide comprehensive detail of the principles and concepts related to Sales and Marketing and specifically to Marketing Research. This book also articulates an action-oriented process approach that can be used by Sales and Marketing practitioners to gain a better understanding of the subject, and then conduct comprehensive and effective Marketing Research that supports both the marketing objectives as set out in the Marketing Strategy and the business goals as established in the Corporate Strategy.
1.4 Corporate Strategy Overview

Corporate Strategy is the overall direction of the company (as defined by senior management) that takes into consideration an assessment of the existing capabilities of the company and external opportunities and threats. Corporate Strategy usually coincides with the immediate future fiscal period or it could be developed with a longer-term view (e.g., a three-year plan). It is important to understand the overall Corporate Strategy and its relationship to all areas of the business in order to ensure that activities at all levels are aligned and aimed at achieving overall corporate goals. It is best to have a clear understanding of where the company plans to be in the near and far future, so that the Marketing Research projects can be planned and executed to contribute to the marketing objectives and the overall goals of the business.

Corporate Strategy is a combination of the following:

1. **Senior Management Direction and Insights**—This is provided by senior management based on their experience and insights related to the business.

2. **Corporate Product Strategy**—This defines the products or services the company offers, and the research and development (R&D) efforts required to create them.

3. **Corporate Marketing Strategy**—This defines how the company plans to target, position, market, and sell the planned products, and defines metrics, targets, and budgets for all marketing activities.

4. **Corporate Operations Strategy**—This defines how the company will manage operational activities, manufacture its products (or provide services), and provide the corresponding customer support and warranty.

5. **Corporate Finance Strategy**—This defines how the company will manage its finances, attain funding, and financially sustain its operations. The Finance Strategy should include forecasts and projections and summarize costs, income, and investments.

6. **Corporate Human Resource Strategy**—This maps the human resource capabilities within the company and considers talent management and acquisition needs to sustain growth.

Typically, companies have existing documentation regarding their Corporate Product Strategy, Corporate Marketing Strategy, Corporate Operations Strategy, Corporate Finance Strategy, and Corporate Human Resource Strategy; these must be considered in an integrated manner to define a coherent Corporate Strategy. The level and complexity of documentation for these strategies may vary depending on the size of the company and the breadth of its product portfolio and geographic reach. If formal documentation of these strategies is not available (e.g., as with a start-up company), the teams involved in strategic planning should consider the various strategies using the SMstudy® Guide framework and decide on an overall Corporate Strategy, which can then become a benchmark to execute future plans.

Corporate Strategy can be further divided into lower level strategies depending on the complexity of the organization. For example, the Corporate Strategy for an entire company can be divided into strategies for
each business unit or geographic region (e.g., country, state, or city), and then subdivided further into a Product or Brand Strategy for each product or brand in a business unit or geographic region. The Product or Brand Strategy is the lowest level in this hierarchy.

Figure 1-3 illustrates the relationship between Corporate Strategy, Business Unit/Geographic Strategy, and Product/Brand Strategy.

![Figure 1-3: Levels of Strategy](image)

While each of the various strategies established in an organization has its own goals and expectations, it is important to note that all activities must align in order to ensure that teams are focused on achieving targets that will contribute to the overall business goals. Alignment of goals across brands, functional areas, and business units, contributes to the attainment of overall marketing objectives and ultimately assists the business in the successful execution of the Corporate Strategy and, therefore, the achievement of business goals. Additional information about Corporate Strategy is described in detail in SMstudy® Guide-Book One, Marketing Strategy (Appendix A).
1.5 Aspects of Sales and Marketing

The SMstudy® Guide describes six Aspects of Sales and Marketing as follows:

1. Marketing Strategy (MS)
2. Marketing Research (MR)
3. Digital Marketing (DM)
4. Corporate Sales (CS)
5. Branding and Advertising (BA)
6. Retail Marketing (RM)

Since the SMstudy® Guide is geared towards Sales and Marketing professionals or those who desire to work in this field, the six Aspects are based on the six most common and often distinct career fields related to Sales and Marketing. Figure 1-4 illustrates the six Aspects of Sales and Marketing and how they interact with each other.

![Figure 1-4: Aspects of Sales and Marketing](image-url)
The two marketing Aspects that are shown in dotted lines at the top of Figure 1-5 (i.e., Marketing Strategy and Marketing Research) are referred to as “Essential Marketing Aspects.” Both of these Aspects are mandatory and should be used to define, measure, and provide direction for the overall marketing efforts of a company.

The four remaining Aspects (i.e., Digital Marketing, Corporate Sales, Branding and Advertising, and Retail Marketing) are referred to as “Optional Marketing Aspects” because one or more of them could be used by a company to reach its marketing goals and, in some instances, not all are applicable. For example, a small company creating phone apps or online games may decide to solely use Digital Marketing; another company manufacturing heavy equipment may use only Corporate Sales; and a large consumer goods company or global fashion chain may decide to use all four Optional Marketing Aspects to reach its marketing goals.

**Marketing Strategy (MS)**, describes how the Aspect of Marketing Strategy aligns with a company’s overall Corporate Strategy and acts as a unifying framework to define and analyze the other Aspects of Sales and Marketing. It also supports the alignment of all marketing resources among all Aspects. Marketing Strategy includes determining internal organizational strengths and weaknesses, as well as external opportunities and threats; identifying and segregating prospective buyers into market segments based on common needs; defining competitive positioning to satisfy specific customer needs; creating pricing and distribution strategies; and defining the metrics, objectives and corresponding budgets for implementation, evaluation, and improvement of all marketing activities.

**Marketing Research (MR)**, which is the focus of this book, explains the concepts of Marketing Research and provides a framework to conduct Marketing Research and to analyze Sales and Marketing data. It also demonstrates how marketing research findings can help the marketing team conceptualize and finalize product features and other components of a company’s Marketing Strategy. In addition, Marketing Research discusses assessment tools that can be used to measure factors that can help drive better corporate decision-making, and in turn more decisive marketing actions. Marketing Research can be conducted for any other Aspect of Sales and Marketing. It is commonly used to test multiple marketing hypotheses in order to better understand consumer behavior, finalize product features, define metrics for measuring marketing efforts, and track and improve marketing activities.

**Digital Marketing (DM)** includes all marketing activities that use electronic devices connected to the Internet to engage with customers (e.g., computers, tablets, smartphones). These include activities related to creating and managing effective websites and mobile apps as well as promoting a company’s products and brand through various online channels that help meet marketing objectives. Some of the tools pertaining to Digital Marketing include Search Engine Optimization, Search Engine Marketing, Mobile Device Marketing, Social Media Marketing, and E-mail Marketing. This Aspect also demonstrates how an effective Digital Marketing Strategy can be a force multiplier for the other Sales and Marketing Aspects.

**Corporate Sales (CS)** outlines the best practices and processes to be followed for effective business-to-business (B2B) sales. It provides guidance on activities related to building strong business relationships; successfully working with other businesses to help them see the value in the company’s products and services; understanding procurement management; conducting effective negotiations with other
organizations; and ensuring leads generation, qualification, follow-up, and other related activities. It also emphasizes how corporate sales should interface with the other Sales and Marketing Aspects.

**Branding and Advertising (BA)** includes concepts of product branding, consumer behavior, marketing communication, and public relations. Branding is the process of creating a distinct image of a product or range of products in the customer's mind. This image communicates the promise of value the customer will receive from the product or products. Branding should remain consistent across all channels of communications with the customer. Advertising is defined in the SMstudy® Guide as any paid form of non-personal communications to existing and potential customers that promote the company's products through all types of media—such as radio, television, and print. Internet advertising is discussed in the book on Digital Marketing.

**Retail Marketing (RM)** presents concepts of all marketing activities related to persuading the end customer to purchase a company's products at a physical retail outlet or store, and efficiently managing the supply chain and distribution channels to improve the reach and sales for a company's products. This Aspect also discusses how Retail Marketing interfaces with the other Sales and Marketing Aspects.
1.6 Levels of Sales and Marketing Strategy

The Corporate Marketing Strategy, which is a component of the overall Corporate Strategy, is further divided into various Business Unit or Geographic Strategies, which in turn is further divided into particular Product or Brand Strategies for each product or brand. Figure 1-5 illustrates the relationship between Corporate Marketing Strategy, Business Unit/Geographic Marketing Strategy, and Product/Brand Marketing Strategy.

![Diagram of Levels of Sales and Marketing Strategy]

The Corporate Marketing Strategy is defined at a corporate level. It defines the overall marketing goals for the company. These general marketing goals drive more specific marketing strategies for each of the company’s business units or geographies. Each business unit or geography in turn defines its own goals, which are relevant inputs for each area’s particular Product or Brand Marketing Strategies. Each Product or Brand Marketing Strategy (also referred to as ‘Marketing Strategy’ in the SMstudy® Guide) defines Sales and Marketing objectives for each product or brand, which drive specific tactics that align with and often rely on other Marketing Aspects. Marketing Research is one of six Aspects of Marketing defined in the SMstudy® Guide, and is the focus of this book. The marketing activities across all Aspects of Marketing are designed with the marketing objectives in mind. Within the strategy for each Aspect, various activities are designed to
meet specific targets that the team establishes will provide a measure of success and enable the team to contribute to the overall marketing objectives and, ultimately, to the business goals.

**Example of Levels of Marketing Strategy:**

**Land Development Company**

- **Corporate Level:** A land development company wants to grow to be among the top three land development companies in its state.

- **Business Unit/Geographic Level:** The land development company operates two business units: Residential and Retail. A goal of the Residential Business Unit is to grow that unit by 12% within one year; a goal of the Retail Business Unit is to grow that unit by 10% within the same time period.

- **Product/Brand Level:** Within the Residential Business Unit, the company sells three products: Condominiums, Townhomes, and Singles. The Singles Product Marketing Strategy identifies an objective to grow the sale of single units by 15%. To achieve this objective, the teams responsible for building strategy within the various Aspects of Marketing establish specific objectives that are designed to support the overall product objectives and to align with one another.

- **Marketing Aspect Level:** The company’s greatest strength is the fact that it is an award-winning leader in ‘green’ sustainable development. Therefore, the Branding and Advertising team builds specific tactics that incorporate an increase in reach of its messaging around sustainable development. One specific tactic is to leverage billboard and newspaper advertising with the objective of increasing reach of ‘green’ messaging by 30%. The Digital Marketing team incorporates tactics to support the objective of increasing the ‘green’ sustainable development messaging, stressing the importance of this trend, and positioning the company as a leader in the industry, through the use of various social media channels. One specific tactic is to leverage blogs and online public relations with the objective of increasing the company’s rankings in online searches related to keywords, such as ‘sustainable development.’ The tactics of each Marketing Aspect are aimed at achieving their own specific objectives; however, both support the overall Singles Product Strategy objective of achieving a 15% growth in sales for this product line.
Example of Levels of Marketing Strategy:

Global Automobile Company

- **Corporate Level:** A global automobile company specializing in manufacturing luxury automobiles has a corporate goal to grow the company by 8% in the upcoming year by launching new models of cars in its existing locations and entering new market segments.

- **Business Unit/Geographic Level:** The automobile company has been organized into multiple business units based on geographies where it conducts business. Each business unit has business unit goals that contribute to the company’s overall corporate goals. The business unit goals for next year are 5% growth in the United States, 10% growth in China, 4% growth in the United Kingdom, 12% growth in India, and 6% growth in Germany.

- **Product/Brand Level:** To meet the 10% growth target in China, the marketing team in China plans strategies for the three existing brands in the market (i.e., ‘Ceres,’ ‘Pallas,’ and ‘Vesta’) and also plans to launch a new brand, ‘Juno.’ Each brand targets a different customer segment. Ceres is an entry-level sedan, targeted at working professionals who aspire to have a luxury car; Pallas is a minivan, primarily targeted at families with children; Vesta is a four-wheel drive sport-utility vehicle for individuals who want both on- and off-road capability and to still be able to go on long drives; the new brand, Juno is a convertible that the Chinese business unit plans to target at young persons who want a stylish and fun car.

  Each brand team creates a Marketing Strategy for its brand. When creating the Marketing Strategy, the team considers the strengths, weaknesses, opportunities, and threats for the brand; defines the market and identifies the different market segments; identifies the brand’s competition; finalizes the target market segment for the brand; analyzes the target market to create a differentiated positioning for the brand; and then finalizes the pricing and distribution strategies. Each team then determines the appropriate metrics and objectives that will help reach the team’s growth target, and a budget is allocated to each Marketing Aspect. Juno’s key metric is sales and its main objective is to sell 25,000 cars in the Chinese market the year after the vehicle is released. The Marketing Strategy team for Juno decides to use Digital Marketing, Branding and Advertising, and Retail Marketing to reach out to its target market segment. Juno’s product strategy team sets a budget of $1 million for Digital Marketing to sell 3,000 cars, $10 million for Branding and Advertising to sell 10,000 cars, and $15 million for Retail Marketing to sell 12,000 cars.

- **Marketing Aspect Level:** The metrics, objectives, and budgets allocated to each of the Marketing Aspects become inputs for those Aspects. For example, the Digital Marketing team may decide to create a high-quality website with their budget of $1 million and an objective of selling 3,000 cars.
1.7 Marketing Strategy Overview

All successful products or brands need well-planned marketing strategies in place to ensure that they satisfy the goals set by the corresponding Business Unit or Geographic location, and in turn the overall Corporate Marketing Strategy. Marketing Strategy is therefore one of the most crucial Aspects of Sales and Marketing. It defines a product or brand’s unique value proposition, target markets, and the specific strategies to be used to connect with defined audiences. It also specifies the pricing and distribution strategies for a product or brand, and outlines the specific metrics, objectives, and budgets for all its marketing activities.

Among the outputs of Marketing Strategy are the specific Aspects that will be used to achieve the overall marketing objectives. Although Marketing Research is one element of a variety of Aspects of Marketing that businesses use to grow their business and achieve corporate goals, it is considered an “Essential Marketing Aspect,” as it is a significant contributor to all other Aspects of Marketing. The findings from all marketing research efforts inform key decisions relating to understanding and defining target markets, selecting channels, determining resources, and selecting and measuring marketing activities, among others. Effective Marketing Research will result in customer-focused Sales and Marketing planning across all Aspects of Marketing. For a comprehensive understanding of how to build and execute a Marketing Strategy that aligns all Aspects of Marketing toward achieving both the marketing objectives and the business goals, consult the SMstudy® Guide-Book One, Marketing Strategy.
1.8 Marketing Research Overview

Marketing Research is one of several Aspects of Marketing discussed in the SMStudy\textsuperscript{®} Guide series. Other Aspects discussed in this series include Digital Marketing (DM), Corporate Sales (CS), Branding and Advertising (BA), and Retail Marketing (RM). The strategies for each of the Aspects of Marketing are derived from the outputs of the Marketing Strategy (MS), which are described in the SMStudy\textsuperscript{®} Guide series on Marketing Strategy.

Marketing Research is the systematic process of collecting, processing, and analyzing data to provide required information to decision makers. Marketing Research is linked to all other Aspects of Marketing as it provides critical insights that inform key decisions in all other marketing planning and strategies. For example, it can provide information for pricing a new product or for designing a new Mobile App or for finalizing the new TV advertisement for a product.

The processes associated with planning and executing a marketing research project include understanding the research problem; deciding a suitable research design; collecting, processing, and analyzing data required to solve the problem; interpreting data; and presenting the findings/recommendations of the research project to the key decision makers.
1.8.1 Define Research Problem and Choose Research Design

Chapter two of this book focuses on defining the research problem and choosing a research design. A marketing research project starts with defining the research problem and ends with the solution to the problem. Since this step sets the course of the research project, defining the research problem is a critical step in the lifecycle of the research project. Once the research problem is properly defined, the next step is to choose a research design that can address the problem and objectives. Different research methods are used for different types of research projects based on the types of information needed. Further, every research project is unique in itself; therefore, there is no single research design best suited for a particular type of research. Many alternative research designs can satisfy the same research objectives, and the researcher needs to select a design that will be most suitable for the current project.

Figure 1-6 provides an overview of the processes discussed in Chapter 2, Define Research Problem and Choose Research Design.

![Figure 1-6: Define Research Problem and Choose Research Design Overview](image)

Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.
1.8.2 Data Collection

The third chapter of this book discusses data collection methods for two types of research data—primary data and secondary data. Many significant marketing decisions are made based on the analysis of the data collected from a research project. Hence, the quality and relevance of the data is very important for any marketing research project.

Other important factors to consider are the availability of data and the affordability of the process required to collect it. The researcher needs to decide whether to collect primary data or spend the research budget exclusively on secondary data. Researchers usually prefer to examine the utility of low-cost and readily available secondary data first to see whether they can partly or fully solve the research problem under investigation without collecting costly primary data. The source of the secondary data can be internal or external. The sources may include books or periodicals, published reports, data services, and computer data banks. When the needed data is non-existent, outdated, incorrect, or inadequate, the researcher needs to collect primary data. Most marketing research projects do include some primary data collection. Primary data may be obtained from consumers, subject matter experts, random samplings of a target segment, organizations, and other sources.

Figure 1-7 provides an overview of the processes discussed in Chapter 3, Data Collection.

Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.
1.8.3 Data Processing and Data Analysis

Chapter four of Marketing Research takes a close look at techniques and methods that convert data into useful information that can answer the marketing research question. Two processes are explored in this chapter—Data Processing and Data Analysis. Data Processing is used to organize, manipulate, and transform raw data into useful information that is ready for analysis. Data Analysis is used to transform processed data into intelligence which helps in decision-making.

It is important to have a structured framework for data processing and analysis. Hence, the researcher establishes, in the creation of the research design process, how much data will be collected and how the data will be processed and analyzed. Establishing a plan for processing and analyzing data before collection also helps ensure that only required information is collected, that the data is formatted in a standardized way for easy processing, and that the output of the analysis will satisfy the research objectives and solve the research problem.

Figure 1-8 provides an overview of the two processes associated with Data Processing and Data Analysis.

![Figure 1-8: Data Processing and Data Analysis Overview](image)

Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.
1.8.4 Data Interpretation and Reporting

Chapter five of this book focuses on interpreting and reporting analyzed data. This is an important step in transforming the analyzed data into meaningful and reliable information that can be used to solve the research problem and ultimately inform key marketing and business decisions. In Data Interpretation, all of the possible interpretations from the analyzed data are determined. Interpreting the data appropriately, accurately, and from the right perspective is important to ensure that sound marketing decisions are made based on the interpretations. Reporting is the final process of a Marketing Research project. In this process guidelines are provided to create the Marketing Research report based on the data interpretation and the research problem and objectives. Reports and presentations have to be created with the target audience in mind. As this is typically the only component of the study that management and key decision makers are exposed to, the overall evaluation of the research project rests almost completely on how well this information is communicated.

The two processes discussed in this chapter are shown in figure 1-9.

![Figure 1-9: Data Interpretation and Reporting Overview](image)

Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.
2. DEFINE RESEARCH PROBLEM AND CHOOSE RESEARCH DESIGN

When a marketing decision maker is faced with a management problem, he or she may decide to use marketing research in order to arrive at an objective, informed decision, or course of action. In marketing research, the first step is to define the research problem and objectives of the research. Once the research problem is properly defined, the next step is to choose a research design that can address the problem and objectives. Different research methods are used for different types of research projects based on the types of information needed. Further, every research project is unique in itself; therefore, there is no single research design best suited for a particular type of research. Many alternative research designs can satisfy the same research objectives, and the researcher needs to select a design that will be the most suitable for the current project.

Figure 2-1: Flowchart Depicting Initial Stage of Marketing Research

Figure 2-2 provides an overview of the two processes associated with this initial stage of a research project.

2.1 Define Research Problem—In this process, the researcher understands the situation at hand and defines the research problem, which in turn helps to determine the objectives of the research.

2.2 Choose Research Design—In this process, the researcher examines the background information, consults with relevant parties and experts, and finalizes a research design that will be most suitable to fulfill the research objectives within the given conditions.
2 – DEFINE RESEARCH PROBLEM AND CHOOSE RESEARCH DESIGN

### 2.1 Define Research Problem

**INPUTS**
1. Management Problem*
2. Existing Marketing Strategy
3. Corporate Strategy*
4. Senior Management Direction and Insights

**TOOLS**
1. Use Cases
2. Fishbone
3. 2x2 (Two-by-Two) Matrices
4. Meetings and Discussions*
5. Situation Analysis*
6. Symptomatic Situation Analysis

**OUTPUTS**
1. Research Problem and Objectives*

### 2.2 Choose Research Design

**INPUTS**
1. Research Problem and Objectives*
2. Senior Management Direction and Insights*
3. Expert Judgment
4. Background Information*
5. Available Information

**TOOLS**
1. Meetings and Discussions*
2. Available Information Evaluation
3. Exploratory Research Design*
4. Descriptive Research Design*
5. Causal Research Design*

**OUTPUTS**
1. Selected Research Design*

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*Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.*

**Figure 2-2: Define Research Problem and Choose Research Design Overview**
2.1 Define Research Problem

A marketing research project starts with defining the research problem and ends with the solution to the problem. Since this step sets the course of the research project, defining the research problem is the most important step in the lifecycle of the research project. The success of the research project is, in fact, highly dependent on whether the problem statement has been clearly and accurately identified at the outset. The research problem provides the context for the research design, and therefore should be focused, appropriate, and clear in order to effectively guide the efforts of the research team throughout the project lifecycle.

Defining the research problem involves analysis of the management problem along with insights into the company’s future direction and strategy. A comprehensive analysis of many factors helps the team define a proper research problem and set clear research objectives. There are numerous examples in which research problems are defined based on intuition, and this approach can lead to the failure of the marketing research project. Clear definition of the marketing research problem will help ensure that useful and meaningful information is gained from the research project and will help the team avoid additional costs and delays throughout the research project.

Identification of the research problem is also one of the most difficult phases in a project. Often the problem or the source of the problem is too broad or vague for the researcher to investigate. The problem faced by the decision makers needs to be analyzed in order to narrow the broad management problem area into a research problem. The research problem definition should be neither too broad nor too narrow. A research problem which is too broad does not provide enough focus for subsequent steps (e.g., “Improving the image of a brand” is too broad of a problem area to investigate). If the problem definition is too narrow, there is the possibility of overlooking or missing important components of the problem (e.g., if the investigation of low sales is limited only to analyzing customer reactions to a price increase, then the research team would likely miss other factors such as seasonality and point-of-sale promotions).

During this process, the researcher tries to understand the background of the management problem, gathers relevant information and context, has discussions with important stakeholders, and conducts an analysis.

Figure 2-3 shows the inputs, tools, and outputs for the Define Research Problem process.
2.1.1 Inputs

2.1.1.1 Management Problem*

Marketing research is undertaken to gather information that is partially or fully unavailable. The information may be an evaluation of product performance, the study of an industry trend, or the analysis of a market selected for the launch of a new product. The outcome of the research should help management, or the sponsor of the research assignment, make decisions concerning any kind of business requirement. The primary objective of marketing research is to provide management with enough data or evidence to make decisions on issues objectively and reduce the risk of a business failure.

The management decision problem or management problem states the business-related issues, whereas the marketing research problem states the information that is required to solve the problem. For example, a sales manager wanting to increase market share for product X is a management problem. One of the research problems for this management problem could be “how can we encourage the sales team to generate more sales?” The research project will provide information that will help the sales manager devise an attractive incentive structure to motivate the sales people, which in turn will solve the management problem of increasing market share.

The researcher needs to understand and analyze the management problem and translate it into a research problem that marketing research can address.
2.1.1.2 Existing Marketing Strategy

Execution of the existing marketing strategy requires information such as market size, demand, customer behavior, existing competition, and future forecasts. Marketing research can be performed frequently since every business runs in a dynamic environment.

Changes in technology over the years, consumer buying trends, economic conditions, and changes in business strategy are a few examples that may require marketing research for management when it is strategizing future business plans.

When marketing research is conducted for a research problem concerning an existing offering, the researcher needs to examine the existing marketing strategy for that offering when defining the research problem. Examining the existing marketing strategy will help the researcher understand the market-oriented strategies of the product and other important aspects of the offering.
Example of Existing Marketing Strategy:

- A leading fast food chain entering a new market/geography implements the existing marketing strategy of understanding popular local flavors and incorporating them into its menu to attract its target group in the new market. Marketing research goes hand-in-hand at every step of decision-making in this marketing strategy.

The research problem in this case is identifying local flavors that can be incorporated into the menu. The marketing research starts with understanding the eating habits and consumer behavior of the target group to develop the menu for each kind of meal. This is followed by testing—various fast-food items that incorporate local flavors as well as some standard menu items are introduced to a limited market. The final food items are selected and placed on the menu.

Here, marketing research helps the company enter a new geography with a marketing strategy based on a robust analysis of the market. The next steps in marketing are again supported by research for testing the advertising creatives, understanding the image of the brand in the market, designing the best media plan for the category, and understanding the impact of the marketing activities on consumers and, consequently, on the brand.

2.1.1.3 Corporate Strategy*

Understanding the Corporate Strategy is essential in identifying the problem the marketing research needs to address. Corporate Strategy, which is defined by the company’s senior management team, provides overall direction for the company and helps assess the existing capabilities of the company as well as external opportunities and threats. Existing documentation on Corporate Strategy—a combination of Product Strategy, Marketing Strategy, Operations Strategy, Finance Strategy, and Human Resource Strategy—needs to be considered because it applies to the context of the problem when determining what information is needed, and how that information will be used in decision-making. Figure 2-4 shows the various strategies that make up the company’s corporate strategy.

![Corporate Strategy Overview](image)

Figure 2-4: Corporate Strategy Overview
Marketing Research is often used to define Product Strategy for future markets by analyzing consumer behavior. The existing Product Strategy, along with an external view of competition and possible innovation opportunities, provides valuable insights while defining a market research problem related to entering a new market or launching new product variants. For example, the existing Product Strategy of a fast-food product will have information on multiple taste variants of the product. This information will be helpful in determining the marketing research problem for inclusion in a new market or introduction of a new variant.

The information on target segments, defined in the company’s Marketing Strategy, will help marketing researchers create customer personas for each segment. In the mobile phone industry, for example, users who prefer advanced features such as e-mail and Internet browsing have different personas than users who mainly care about signal strength and basic voice. (There may, of course, be overlaps—all types of customers want longer battery life.) Without a comprehensive review of target segments, a marketing researcher may be analyzing the problem among users who are not associated with the product.

Information from the existing Operations Strategy will provide inputs on defining problems related to operational processes that need to be identified through marketing research. For example, in a low-priced market segment, firms need efficient large volume operations to be more profitable and have a competitive advantage. Department stores and other high-margin firms often set the selling price of items at the manufacturer’s suggested selling price. The large volume operators that enjoy the economies of scale obtain a higher profit margin by receiving a lower wholesale price. Mega-discount stores such as Walmart are more likely to pass the savings from the lower costs on to customers in the form of lower prices, thus maintaining their competitive advantage.

**Example of Corporate Strategy:**

- A classifieds website focused on selling used goods changed its corporate strategy to start selling new products from well-known brands along with providing a meeting place for online buyers and sellers. Thus, the target groups of the marketing research for understanding consumer behavior have to be modified accordingly to include those who are interested in buying new products online as well as those who prefer to buy only used products online.

  In this way, the corporate strategy directs the marketing research and ensures that its results are useful for refining the corporate strategy and creating marketing tactics in line with the needs of the right set of consumers.

### 2.1.1.4 Senior Management Direction and Insights

Organizations require leadership across different business units and functions in order to implement best practices while striving to carry on business as usual. Most organizations have both strategy and leadership teams integrated in their senior management team. This senior management team comprises members with
vast experience in their respective fields who provide useful insights and strategic thinking to functional teams. They also help the organization position itself for its long-, medium-, and short-term goals.

Since the senior management team regularly receives information from the functional strategy teams, it acquires a comprehensive view of the company, and as a result can provide insights into problems and their causes, even before they are articulated through situation analysis and market opportunity analysis. These insights allow the senior management team to carefully define the problem, which individual functional teams may not be able to do. For example, in a retail shoe chain, the manager may decide that the product-positioning and inaccurate floor set-up are the causes for a drop in sales. However, inputs from senior management may prove that the actual cause is improper training for sales staff regarding quality customer service.

Given their industry knowledge and long-term view of the company’s goals, members of senior management may help identify problems related to entering new markets. Without the involvement of senior management and its leadership, insights, and vision, the marketing research team risks overlooking the strengths and weaknesses in other functional areas, defining a problem that does not complement the corporate strategy, and/or moving in a direction that is not aligned with corporate objectives.

**Example of Senior Management Direction and Insights:**

- An auto-parts manufacturer commissioned a marketing research study to understand need gaps in consumer categories. According to the research proposal, the study would be conducted within two segments—four-wheeler owners and heavy vehicle drivers. After this proposal was presented to senior management, the target groups of the study were modified. The first segment was changed to four-wheeler owners and four-wheeler mechanics, instead of only owners, and the second segment was changed to heavy vehicle fleet owners and managers, instead of drivers.

  Senior management had insights into the industry that marketing did not, and this knowledge affected the parameters of the study. The decision to select an auto-part is most often made jointly by four-wheeler owners and mechanics and for heavy vehicles is decided by the fleet owner or manager for all the vehicles in the fleet.

  Thus, senior management direction and insights are necessary to refine the research problem and the research scope before it is implemented.
2.1.2 Tools

2.1.2.1 Use Cases

A use case is a methodology or list of steps that defines the interactions between stakeholders and a system. A use case is an effective tool for identifying a research problem. Use cases can be used to describe how a customer’s needs are met (or not met) by the product or service offering. A use case enables marketers to examine the business problem that they are trying to solve and frame the choices that will be examined through marketing research. The steps for generating a use case are as follows:

1. Identify the customer (or actor).
2. Identify other stakeholders (other actors in the system).
3. Identify the interactions they will undertake in the system (the uses).
4. Describe the actions and interactions between the actors and the environment (system). Actions are captured as arrows between stages in the journey.

For example, a bank might look at how an individual consumer responds to the use of an ATM when they are looking to do a transaction (i.e., deposit, withdraw, make a payment, buy an investment). Looking at each of these transactions, the use case helps to visualize customer interactions in order to improve or change the customer experience. This information provides context for crafting the marketing research problem statement. By exploring the customer experience and where it may or may not meet certain customer needs (use cases) a research study can be framed more effectively. Figure 2-5 shows a use case for customer interaction with an ATM.
2.1.2.2 Fishbone

A Fishbone diagram, also called a cause and effect diagram, is a team tool for identifying possible causes to a problem and is often used in quality assurance measurement. The steps for creating a fishbone diagram are as follows:

1. Identify the hypothesis problem statement (draw a box around this sentence and then a horizontal line running from the box across the page or whiteboard).
2. Through a brainstorming exercise, identify major common categories that could be the cause of the “problem.”
3. If brainstorming is not producing agreed upon categories, use generic terms, such as methods, processes, measurements, people, machines, or environment.
4. Write each of the categories as branches off of the main arrow (the horizontal line running from the hypothesis problem statement).
5. Ask “Why does this happen?” for each of the causes and continue to dive deeper with each round of questions to generate a better understanding of where the problem originates.

For example, a bank might look at the following hypothesis: customers cannot easily buy investments. The research team could use a fishbone to breakdown the elements of the problem to explore how each of these factors creates an impact on the outcome. Identifying elements of the customer experience and how the people, the information, the environment (configuration), the furniture, the equipment, and the methods impact what the customer must do to purchase an investment can help the bank determine the root of the problem. By extension, the fishbone diagram can help identify where further data and research is required to create a more expedient and satisfactory purchase process for the customer. Figure 2-6 shows a fishbone for this problem.

![Fishbone Diagram Example](image)

**Figure 2-6: Fishbone Example**
2.1.2.3 2X2 (Two-by-Two) Matrices

The use of a 2X2 matrix for improving decision-making and problem identification crosses many fields of study and applications from game theory to consulting. A 2X2 matrix can expand options and force the team to think multi-dimensionally. Rather than seeking one answer to a problem the team looks at relationships, considering the impact that multiple adjustments can have on the potential solution. It creates focus around the problem statement to allow exploration of various types of opposition: direct, complementary, and reflexive. The choice of axes indicates the type of opposition being explored.

- Direct Opposition—In a 2X2 matrix that uses direct opposition, the team examines opposing options from which to choose—i.e., selecting one option from options that are distinct from one another. Stephen Covey’s Time Management Grid, used for prioritizing work on the basis of urgency and importance, is an example of a 2X2 Matrix based on direct opposition. Figure 2-7 shows a Time Management Grid.

![Time Management Grid](image)

**Figure 2-7: Time Management Grid**

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• Complementary Opposition—In a 2X2 matrix that uses complementary opposition, qualitatively different options that can be interdependent are explored. BCG matrix, given in Figure 2-8, explores complementary opposition. It analyzes product portfolio on the basis of market share and market growth rate. A thorough discussion of the BCG Matrix is provided in SMstudy® Guide-Book One, Marketing Strategy (section 2.1).

![Figure 2-8: BCG Matrix](image)

• Reflexive Opposition—In a 2X2 matrix that uses reflexive opposition, options in the same category are used on both axes (but they can be viewed from more than one perspective). Johari Window², which looks at knowledge from different perspectives- known to self and known to others, is an example of a 2X2 Matrix based on reflexive opposition. Figure 2-9 shows a Johari Window.

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The steps for creating a 2X2 matrix are as follows:

1. Identify the hypothetical problem statement, acknowledging the problem that is resisting a solution.
2. Envision the outcome you are trying to generate.
3. List the features and characteristics of the problem, identifying fears, hopes, values, and essential elements of the problem statement.
4. Organize the features into themes.
5. Prioritize the themes.
6. Draw the 2X2 matrix and test the prioritized themes against each other, closing in on a pair.
7. Name the four quadrants to provide guidance on the placement of the content.

Test for coverage to ensure that the themes and quadrants cover the core elements of the problem statement definition.
2.1.2.4 Meetings and Discussions*

Detailed knowledge of the management problem is extremely important and helps a researcher determine whether a marketing research project is actually needed and, if needed, what the research problem statement and goal(s) of the research should be. Clear communication between the researcher and the management problem owner in the problem definition stage is the most important factor for improving the usefulness of research. The researcher needs to be involved in detailed meetings and discussions with the management problem owner or the manager/decision maker. The researcher gathers all relevant information and data regarding the management problem and asks as many questions as possible during discussions with the managers. To understand the background of a marketing research problem, the researcher must understand the client’s firm and industry as well as the management problem itself. During discussions with managers and experts, the researcher should ask questions regarding, but not limited to the following:

- the history, current status, and future objectives (The researcher should try to understand the products, customers, marketing strategy, corporate strategy, company background, mission and vision of the company, etc.)
- the background of the management problem
- the nature, symptoms, and suspected causes of the problem
- the concerned stakeholders
- any assumptions about existing conditions
- possible solutions to the problem
- anticipated results of tentative solutions
- expectations from the marketing research
- any other relevant information

During the discussions, the researcher should try to find out whether the information in hand is adequate enough to specify the research problem and objectives. If not, he or she should pose more questions to the manager(s) or decision maker(s). The researcher may also approach relevant person(s) from the company to gather more information if needed. At times, interviews with industry experts (internal or external) also help in gathering critical information in understanding the management problem and defining the research problem.

Meetings and discussions can take on any of several forms, from creative and open-ended brainstorming sessions to structured workshops employing specific meeting strategies and models. Process workshops, for example, provide a forum for all members in a specific process to arrive at a process-related solution such as adding a new product to production, or implementing new protocol. War Room Sessions offer a creative space for generating ideas, diagraming, problem-solving, and testing of hypotheses. It is important when establishing meetings for the purposes of defining a research problem that all affected areas are represented in the meeting. A process workshop, for example, should bring together individuals representing all areas of the business that might be affected by the implementation of the new process, including senior management as well as the various departments and functional areas impacted.
2.1.2.5 Situation Analysis*

One of the important steps in identifying the research problem is to conduct a situation analysis. A situation analysis involves examining the external environmental factors and internal organizational capabilities that impact how a company operates. Since companies operate in dynamic environments, understanding the changing landscape and current trends that are impacting the business helps marketing researchers identify the existing and potential problems. 5C Analysis, SWOT Analysis, and Porter’s Five Forces Industry Analysis are some of the techniques used to conduct situation analyses. These analyses help marketing researchers understand their company, their customers, and the external environment in which they compete, which in turn allows them to focus on the most critical problems facing their organization.

5C Analysis

5C Analysis is one of the most popular and useful frameworks in understanding internal and external environments. It is an extension of the 3C Analysis that originally included Company, Customers, and Competitors. Collaborators and Climate were later added to the analysis to make it comprehensive. This integrated analysis covers the most important areas of marketing, and the insights generated can help identify the key problems and challenges facing the organization. However, it should be noted that not all five elements need to be considered when identifying the problem in a particular area of marketing.

Example of Meetings and Discussions:

- Process Workshops—Concrete Solutions designs and installs custom driveways. The company is focused on the private home market but wishes to expand into commercial contracting. As it is new to this market it decides to facilitate a process workshop to formalize its marketing methodology for this new customer base. The management problem it wishes to address is, “Can we profitably enter the commercial contracting market?” To define a related research problem it sets up a process workshop. The company brings marketing managers, production engineers, and a commercial construction consultant together to review its current data gathering procedures to determine if there are existing processes that can be modified to fit the new need. By diagramming its current processes and mapping them against the new desired criteria, the company can determine the most efficient way to expand its methods to include the new target market.

- War Room Sessions—Concrete Solutions may have a need to quickly determine the research problems associated with its management problem, “Can we profitably enter the commercial contracting market?” Because time is a critical factor, it decides to set up a war-room meeting with appropriate subject matter experts. This meeting is to take place at its head office, and will be held over the course of one day. By co-locating these experts and establishing a time limit on discussion and solution, the team is able to collectively agree that the primary research problems are, “What is the average price per square meter developers currently pay for paving?” and “What are the anticipated construction levels over the next two years?”.
Depending on the area of marketing under scrutiny, some areas need to be given more importance than others.

- **Company**—The company analysis studies an organization’s vision, strategies, capabilities, product line, technology, culture, and objectives. It is useful in understanding the existing and potential problems with the company’s business model and the challenges it faces from the external environment.

- **Competitors**—Competitor analysis is critical in understanding the external environment in which the firm operates. This analysis involves knowing the competitors’ strengths, weaknesses, positioning, market share, and upcoming initiatives.

- **Collaborators**—Collaborators are the external stakeholders who team up with the organization in a mutually beneficial partnership. Agencies, suppliers, distributors, and business partners are typical collaborators. It is important to understand their capabilities, performances, and issues to better identify business problems.

- **Climate**—Climate analysis is the evaluation of the macro-environmental factors affecting the business. PESTEL analysis can be used to analyze climate—political, economic, social/cultural, technological, environmental, and legal scenarios are included in PESTEL.

- **Customers**—Understanding customers is a key part of situation analysis. It involves knowing the target audience, their behavior, market size, market growth, buying patterns, average purchase size, frequency of purchase, and preferred retail channels.
SWOT Analysis

SWOT analysis is an important method of conducting situation analysis. The internal capabilities are studied by identifying strengths and weaknesses while the external environment is studied by identifying opportunities and threats.

The strengths and weaknesses of a company determine its internal capabilities to compete in a market and to fulfill customer expectations. A review of a company’s ability to leverage its strengths and counter its weaknesses can be a good source of problem identification. Those factors that can be exploited to help the company achieve its objectives are considered opportunities, while those that hinder the company’s efforts are considered threats. Marketing research is a useful tool for identifying or ratifying opportunities and for
negating or preempting potential threats. For a detailed discussion on SWOT analysis, refer to SMstudy® Guide-Book One, Marketing Strategy (sections 2.1 and 2.2).

Example of SWOT Analysis:

- A leading aircraft manufacturing company, despite being the current market leader, performed a SWOT analysis to identify new opportunities, to address key threats, and to overcome weaknesses to establish itself as a long-term market leader. A recent SWOT report indicated that the company's strengths include the capability to produce commercial planes, integrated defense systems, military and missile systems, and space and communication systems. However, two weaknesses—excessive spending on R&D and a decline in the performance of integrated defense systems—had reduced the company's net earnings.

  Addressing these two issues provided the company with an opportunity to increase the production in the defense and military sectors and fulfill the market demand. Changes in government policies and contracts continue to be a threat to the company as it has to reevaluate its production and quality requirements time and again. Thus, the SWOT analysis helped the company understand that the research problem should be aimed at creating alternatives for tackling government policy changes and not only be focused on understanding new opportunities.

Porter’s Five Forces Industry Analysis

Porter’s Five Forces model is used to analyze the long-term attractiveness of an industry. It also helps a company decide whether or not to enter an industry. The five forces include the following:

1. Threat of new entrants
2. Threat of substitutes
3. Bargaining power of customers
4. Bargaining power of suppliers
5. Competitive rivalry

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This model uses industrial organization economics to derive the five forces that affect the overall profitability of an industry. The output of the analysis can result in an early indication of the potential problems posed by the external environment. Marketing research can then be used effectively to explore and preempt these potential problems. A detailed description of Porter’s Five Forces Model is provided in SMstudy® Guide-Book One, Marketing Strategy (section 2.2).
Example of Porter’s Five Forces Industry Analysis:

- Porter’s Five Forces model is one way to answer the first basic question in strategic management: “Why are some industries more attractive than others?” This model helps identify the key areas of the industry—the threat of new entrants, the threat of substitutes, the bargaining power of customers, the bargaining power of suppliers, and competitive rivalry. Using Porter’s Five forces Model to analyze the airline industry in the United States would provide an airline with a comprehensive understanding of the attractiveness of this industry.

Threat of new entrants
The threat of a new entrant is a key component of the five forces. For the airline industry, the threat of new entrants is very low, as this industry requires an enormous amount of capital. Without a strong customer base, the new entrant may not be able to sustain itself as there might be little or no profit in the initial years. Most consumers prefer to stick with an established provider that has a proven track record in safety and quality service. Several other factors facing new entrants, such as licensing, flying experience, aircraft mechanics, and frequent changes in regulations by governmental and aviation bodies, make it difficult for new entrants. The time and money necessary to start an airline company alone prevent most people from entering the industry.

Threat of substitutes
There are substitutes to the airline industry—that is, alternate forms of transportation—including rail, road, and boat. Many people in the United States use private vehicles for long journeys. However, flying is the quickest choice for consumers, and substitutes in terms of the train and bus are minimal in their impact when expedited travel is required.

Bargaining power of customers
The customers in this industry can be classified into two groups—the individual buyer and the institutional intermediaries (i.e., travel agencies and online portals). An individual can buy a flight ticket either directly from a specific airline or indirectly through the second group of buyers. Travel agencies work with multiple airline providers to offer their customers attractive deals. The entry of low cost carriers and the resultant price wars have greatly benefited the consumer. Although there are several options available to a buyer, the purchase decisions are based on individual requirements and preferences; where some are inclined towards cost, others prefer the amenities. Overall, the bargaining power of buyers is a moderate to high threat in this industry.
Symptomatic Situation Analysis

Symptomatic situation analysis can be used as a step in identifying a research problem. The three symptomatic situations are overt difficulties, latent difficulties, and unnoticed opportunities.

- **Overt difficulties**—These are the challenges faced by the organization that are evident and need to be addressed immediately. For example, the reduced number of downloads for an e-commerce company’s app is an overt difficulty. Such difficulties present the most urgent cases for marketing research.
- **Latent difficulties**—These are the not-so-obvious challenges faced by the organization. These become evident in due time if not detected and addressed promptly. Such difficulties can be identified and resolved by marketing research, especially exploratory research.

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- **Unnoticed opportunities**—Many opportunities are not very evident and some effort is required to identify them. Marketing research is invaluable in identifying and leveraging such opportunities.

**Example of Symptomatic Situation Analysis:**

- A global pizza restaurant chain provides free home delivery to customers. The traditional business model dictated that customers make a phone call to place orders. With increasing numbers of calls and other operational issues, the company developed a self-serve website and a smartphone app to make the ordering process easy and to enhance the customer buying experience.

**Overt difficulties**

Downtime in the mobile app or website will affect the direct sales and also result in a bad experience for the customers. These are evident challenges, and it is essential for the company to make sure the website and the app have a nearly 100 percent uptime to enhance consumer satisfaction and sales.

**Latent difficulties**

When customers ordered by telephone, there was an opportunity for the pizza chain to repeat the order back to the customer and confirm that it was correct. As the more automated system was implemented, the restaurant chain noticed an increase in incorrect orders. Even though they were typically due to customer error using the app, this still resulted in complaints and dissatisfaction. The pizza chain will need to research the underlying causes of these incorrect orders to seek solutions.

**Unnoticed opportunities**

After customers started using the app, the pizza chain noticed an increase in repeat business per customer. The convenience of ordering with a few quick clicks, appeared to minimize the chain’s vulnerability to competitor’s special offers and discounts. The pizza chain may have the opportunity to increase the price of their pizzas, without losing repeat business. Market research will help to determine the levels of price sensitivity, and the impact of special offers on their sales volumes.

Thus, a symptomatic situation analysis helped the researcher identify the research problems within the company that could be addressed for business stability, consumer satisfaction, and growth.

### 2.1.3 Outputs

#### 2.1.3.1 Research Problem and Objectives*

Defining the marketing research problem along with its objectives accurately and completely is critical for the marketing research team to initiate the marketing research process. Improper problem definition will lead to incorrect research design selection, inappropriate data collection, and inaccurate data analysis. A detailed statement of the marketing research problem and objectives needs to be documented so that it can be used
as an input for other processes within marketing research. The document can also contain information about the possible causes of the problem.

It is important to document the marketing research problem and the objectives because the research will be completely driven towards answering the research problem. The objectives must be focused and specific. The research objectives should answer the main questions such as “What is the purpose of the research?” and “What information is being sought?” and “How will the information be used?” These questions will eventually translate the management problem to the research problem statement. For example, the management problem may be whether to launch a new product. The research problem will analyze if there is any scope for the new product in a particular market. Therefore, most researchers outline the research problem, objectives, and possible research results before the research commences.

**Example of Research Problem and Objectives:**

- A high-end patio furniture design company is adding two new grades of furniture to its line. It may decide the primary research problem is “What are the demographics for the new low- and medium-grades of furniture to be offered?” Its objective will be to qualify and quantify these two new consumer groups in order to set appropriate price points and marketing strategies.

- An air conditioning company has had a website for many years. Its purpose is to describe the features and benefits of their product line. It sells indirectly through retail distributors and has no plans to change this, but they are interested in determining if a social media presence will increase the reputation of their brand. The company’s research problem is designed to answer three key questions: “Which social media channels are currently being used by our distributors?” “Does our target market use these channels?” “And, how much traffic do they generate?” If the research determines that there is a large enough audience seeking information on these channels, it will allocate a portion of their marketing budget to this area.

- A well-established luggage designer wants to re-investigate its value proposition. It may state the primary research problem as follows: “How is our product line differentiated from the competition on customer service, price, warranty, and quality?” Its objective will be to compare customer evaluations of the business using these criteria with evaluations of its three closest competitors using the same criteria.
2.2 Choose Research Design

Once the marketing research objectives are defined by the researcher and marketing decision maker, an approach to the problem is established and an appropriate research design is developed. The components of the research design consist of an objective/theoretical framework, analytical models, research questions, and hypotheses.

After the researcher has formulated the research problem, he or she must develop or choose a proper research design and establish the research approach. The chosen research design is a set of guidelines or a blueprint that specifies the methods and procedures for obtaining and analyzing the required information. The research design will provide a framework or plan of action for the research project. This can be called the “Master Plan” or “Project Plan” for the entire research project.

The research problem and objectives determined in the previous process need to be included as part of the design to ensure that the information obtained is appropriate for solving the problem under review. The research design will also include the sources of information, assumptions, design tools and techniques, the sampling methodology, the analytical methods with which the inputs will be treated or calculated, the budget, and the schedule of the research.

There are many alternative research designs that can satisfy research objectives. The key is to create a design that enhances the value of the information obtained, while reducing the cost and time of obtaining it. Choosing the correct research design is one of the most important steps in the research process. An incorrect research design may lead to wastage of time and money, and it may also lead to incorrect conclusions, which can have more severe implications. Figure 2-11 shows the inputs, tools, and outputs for the Choose Research Design process.

![Figure 2-11: Choose Research Design—Inputs, Tools, and Outputs](image)

Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.
2.2.1 Inputs

2.2.1.1 Research Problem and Objectives*

While it is difficult to point to any particular process as the most important in a research project, a strong case can be made for the first step, defining the research problem and objectives. If this step is approached incorrectly, the entire research design can be misguided and unfocused.

Different types of objectives lead to different types of research designs. Selecting appropriate research design depends, to a large extent, on the research problem and objectives and how much information is already known about the problem.

The research problem may be very clear in the sense that there are strong established theories of what should be measured and how to conduct the measurements. Conversely, the research problem may lack a theoretical foundation, with the researcher trying to cope with a broad set of issues that have not been sufficiently researched beforehand and the inability to rely on existing theories. Poorly defined problems may cause confusion and hinder the ability of the researcher to develop a good research design.

Exploratory research may be appropriate when very little is known about the problem or if the objectives are not well defined. If basic information about the problem is available and the scope of the problem is limited, descriptive research is preferred. Causal research is used when the exact nature of the problem is well defined and when a relationship needs to be established between variables of interest. The research methods and tools associated with these designs will be discussed in detail in later sections.

2.2.1.2 Senior Management Direction and Insights*

When developing the research design, the researcher should take into account the views and perspectives of marketing decision makers. Senior management should have confidence that the research design will accomplish what is desired. The client's assessment of the initial research design may warrant revision to meet the information needs of the marketing decision makers.

From their education and industry experience, senior management members may have more confidence in certain techniques, believing them to be the most effective. The researcher may need to take the perspective of the intended respondents to evaluate whether the proposed technique actually is the best means to measure or understand the issue under investigation. Thus, research design involves the researcher developing an understanding of both the type of data decision makers and senior management have confidence in and how respondents may react to certain research approaches or designs.

Every research design has some assumptions and limitations. When creating the research design, the researcher should discuss the key limitations with senior management and the marketing decision makers to
convey and understand the points of view of all parties involved in establishing the research design. This information is required to avoid selecting an inappropriate course of action.

The researcher needs to understand the time and budget that management has allocated to the research project. With knowledge of time and cost constraints, the researcher can develop a research design that can be implemented within the given time and budget. At times, he or she may need to convince senior management to allocate more budget and time to implement the best possible research design. The researcher needs to ensure that constraints do not diminish the value of the research to the decision makers, or compromise the integrity of the research process. In instances where the resources are too limited to facilitate a project of sufficient quality, the firm should be advised not to undertake formal marketing research. Thus, it becomes necessary to identify resources and constraints, a task that can be better understood when discussed with the decision makers.

The researcher should understand the various legal aspects associated with the research project. While formulating the design, the researcher should confer with senior management to understand relevant legal issues associated with data collection, supplier-customer contractual relationships, privacy rights, data protection, and any possible violation of other binding obligations. For example, a particular research design may call for interviewing customers, but the organization may have a binding obligation promising not to share customer data with third parties, such as the researcher. In such a case, the researcher may need to look at altering the research design. The researcher should never put the organization in legal jeopardy while conducting its research. Senior management or the legal department of an organization should review the procedures to make sure no legal problems are created by implementing the proposed design.

Also, an organization may not want the researcher to reveal its identity while the research is being conducted. The identity of the survey sponsor and/or the ultimate client for whom a survey is being conducted is typically held in confidence at all times, unless this identity is to be revealed as part of the research design. The researcher should also understand from senior management the confidentiality of the research information collected during the research project.

The researcher should discuss senior management’s expectations regarding delivery of interim reports, who in the organization may be helpful for supplying further information, and which source materials and individuals are needed to successfully complete the research. While choosing the research design, the researcher should seek the inputs of the sponsoring party as and when required.
2.2.1.3 Expert Judgment

It is a well-established fact that there is no single best research design for any particular research project. The researcher often has several alternative research designs that can accomplish the stated research objectives. For example, a consumer durables company wants to predict its market share for the next few years by conducting a research project. In this case, the researcher has several options to consider: surveying dealers and distributors, collecting industry-wide sales figures from the last few years and analyzing the collected data, surveying a large sample size of future potential customers, analyzing driving factors of the market, monitoring industry trends, and others. Any one of these options may yield a reliable forecast.

The ability to select the most appropriate research design develops with experience. Inexperienced researchers often choose a particular method over others because of their comfort with the method. Researchers should seek opinions from industry experts and research experts who can provide valuable inputs in choosing the best research design within the project's given constraints.

2.2.1.4 Background Information*

Background information is an integral part of the research design. Background information puts the research objectives into context, helping the researcher understand why certain research objectives are being pursued. The background information also gives a framework for the researcher to investigate other
potential events and contributing factors or causes in addition to the defined research objectives. The background information provides hints to the researcher regarding what information he or she should be looking for and where to look for it. Detailed background information regarding the problem under study also helps the researcher to adopt a particular research design over others.

**Example of Background Information:**

- A company markets a labor-intensive product distributed in multiple global markets that is very price sensitive. It has been noticed that sales are steadily declining in one of the market regions and the company’s objective is to identify the problem and take countermeasures to revive the market in this region. The strength of the sales and marketing has not changed over the past year; there have been no changes in government regulations; and the cost of raw materials, labor, fuel, and other incidental costs have not changed significantly in this region. Some two-year-old data are available regarding consumer demographics and preferences; this data was used during the marketing strategy formulation the previous year.

Based on this background information, the researcher realized that the correct research design will depend on multiple parameters, such as changes in industry trends, changes in customer preferences, changes in competitive pricing, and the entry of new competition, and a good starting point for this project may be studying secondary research to gather more data on these parameters.

### 2.2.1.5 Available Information

In the selection of design, researchers must take into account the availability of internal and external resources. There may be data available in the form of published material, online databases, or information provided by syndicated services. The collection and analysis of secondary data helps define the problem of market research and develop a strategy. Examination of available secondary data is a prerequisite to the collection of primary data. The researcher should consider collecting primary data only when the secondary data sources have been exhausted or yield partial information. Therefore, secondary data are key components of successful research design. Secondary data can help in sample design and in finalizing the details of primary research methods. Given the explosion of available secondary data sources, it is possible for a researcher to access enough data to solve a specific market research problem.

The researcher should also look for reports based on previous similar research projects (in-house or external). In any research project, lessons learned from previous similar projects play an important role in deciding appropriate research methods.
2.2.2 Tools

2.2.2.1 Meetings and Discussions*

It is essential for a researcher to discuss the research project with stakeholders to ensure the findings are helpful. These meetings can be conducted within the organization or by seeking insights from experts externally. These discussions are conducted at the early stages of the research project and at frequent intervals to evaluate the research process.

The researcher brings a small group of stakeholders and experts to discuss the key research problem and to gain information relevant to it. The outcome of these meetings can help the researcher define the research process and priorities. The researcher gathers key information from these discussions, which enables the research team to choose a suitable research design—exploratory, descriptive, or causal. These initial meetings and discussions help the researcher clearly define the research problem. The key factor of these meetings is to ensure that the goals are met using the appropriate research design.

Example of Meetings and Discussions:

- As described in section 2.2.1.4, if a company selling a labor-intensive product experiences declining sales in a certain geography, the researcher may start by setting up discussions with the sales and marketing teams across the geographies. The collective inputs from the internal sales and marketing teams will provide significant information on comparative sales scenarios with other markets, historical data analysis of fluctuating buyer behavior in this industry, and potential causes for the decline in sales. The researcher can also plan meetings with industry experts to understand what has changed in the recent past that can bring about changes in the buying behavior of customers. This may validate the learning from the sales and marketing teams. The information collected from these meetings can be enough to provide the researcher with a good understanding of the basic problem and its causes. He or she can then focus on an exploratory research design to examine the causes of the declining sales.
2.2.2.2 Available Information Evaluation

Every research problem is unique in its own way, but almost all research problems and objectives can be matched to one of three types of research designs—exploratory, descriptive, or causal. Available information evaluation is one of the important tools for choosing the research design. Available information such as the nature of the problem, scope of the problem, objectives, and known information, informs the decision maker regarding which type of research design to adopt. Table 2-1 shows the three types of research design and how their selection depends on the available information.

<table>
<thead>
<tr>
<th>Available Information</th>
<th>Research Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploratory research design is selected when the exact nature of the problem is not</td>
<td>Exploratory</td>
</tr>
<tr>
<td>known and limited information is available about the problem. Its goal is to gather</td>
<td></td>
</tr>
<tr>
<td>information, to gain clarity, to discover ideas, and to suggest possible solutions.</td>
<td></td>
</tr>
<tr>
<td>Descriptive research design is used when the basic information about the problem is</td>
<td>Descriptive</td>
</tr>
<tr>
<td>available and the scope of the research is limited to a few aspects that need to be</td>
<td></td>
</tr>
<tr>
<td>examined.</td>
<td></td>
</tr>
<tr>
<td>Causal research design is used when the exact nature of the problem is known and a</td>
<td>Causal</td>
</tr>
<tr>
<td>relationship needs to be established between the variables of interest. It is usually</td>
<td></td>
</tr>
<tr>
<td>associated with limited scope and high information availability.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-1: Types of Research Design

2.2.2.3 Exploratory Research Design*

As previously discussed, research design is classified into three major categories—exploratory, descriptive, and causal. The researcher’s choice of design depends on the objectives of the research or the research problem. Exploratory research design is chosen to gain background information and to define the terms of the research problem. This is used to clarify research problems and hypotheses and to establish research priorities. A hypothesis is a statement based on limited evidence which can be proved or disproved and leads to further investigation. It helps organizations to formulate their problems clearly.

Exploratory research design is conducted for a research problem when the researcher has no past data or only a few studies for reference. Sometimes this research is informal and unstructured. It serves as a tool for initial research that provides a hypothetical or theoretical idea of the research problem. It will not offer concrete solutions for the research problem. This research is conducted in order to determine the nature of the problem and helps the researcher to develop a better understanding of the problem. Exploratory research is flexible and provides the initial groundwork for future research. Exploratory research requires the
researcher to investigate different sources such as published secondary data, data from other surveys, observation of research items, and opinions about a company, product, or service.

Example of Exploratory Research Design:

- IdeaFire is a one-year-old e-commerce startup company in the education domain. The company sells customized self-learning courses to corporations and universities. Since its inception, the company has been exceeding expectations by achieving a high sales growth rate. However, after the first ten months, sales suddenly started dropping. Due to the lack of any past data or history, the sales director was puzzled about the reasons for this decline in sales. Rather than making assumptions, he appointed a marketing research agency to conduct an exploratory research study in order to discern the possible reasons. The objective of this research was not to figure out a solution to the declining sales problem, but rather to identify the possible reasons, such as seasonality, competition, or ineffective marketing, and to better understand the factors affecting sales. Once these potential causes are identified, the strength of each reason can be tested using causal research.

Uses of Exploratory Research Design

Some uses of exploratory research design are as follows:

- **To gain background information on the research problem**—Background information is essential when the researcher is left with little or no information about the research problem. In such instances, the researcher will look for Management Information Systems (MIS) data or past data that can provide useful insights. The background of the company, brand perception, quality, and sales figures provide information that the researcher may find useful in formulating the research process.

- **To define terms**—Exploratory research design helps to define terms and concepts of the research problem. For example, the brand image of a service or a product needs to be defined by several components such as price, product range, quality perception, customer feedback, and after-sales service. The researcher can use the exploratory research design to categorize these components and address the branding issue of the product or service.

- **To clarify research problem and hypothesis**—It is essential for a researcher to identify or define the research problem accurately, and this enables him or her to arrive at a hypothesis for future study.

- **To establish research priorities**—A research project can involve several research studies such as case studies, in-depth interviews, focus groups, and customer feedback. The researcher can prioritize the importance of these studies using exploratory research design.
Methods of Exploratory Research Design

The common methods of exploratory research design are as follows:

- **Secondary Research Techniques**
  - **Secondary Data Analysis**—The researcher may find some existing information relevant to the research problem from sources such as journals, books, MIS, and the Internet. The process of searching and interpreting the existing information is known as secondary data analysis. An analysis of the secondary data is often referred as the core of exploratory research.

  **Example of Secondary Data Analysis:**
  - A leading telecom service provider needs to decide the next pack of value-added services to offer to its subscribers. Therefore, the company decides to conduct an exploratory secondary research study to understand the main services currently used by consumers and the need gaps in the market. The consumer needs that are not currently being addressed by other players, such as pay-per-use models and integrated service offerings, would be the provider’s main focus area when developing new value-added services combinations.

  - **Case Studies**—Case studies are an effective source of information to aid a researcher in addressing a research problem. The researcher can refer to available information in a past case study that is relevant to the present research problem.

  **Examples of Case Studies:**
  - Manufacturing companies often require exploratory research to improve their operations processes. These types of research projects are mostly secondary, where they examine case studies of similar companies that have optimized their operations process in similar situations.
  - Medical practitioners also refer to case studies when they face some difficulty that they have not faced before. Past case studies can show them a path taken to treat a patient successfully, which can be repeated with a patient showing similar symptoms.
  - Technological advancements often provide new opportunities. By reviewing case studies of how a new technology has succeeded in a parallel industry, a company can gather pertinent information to design a research strategy for its own application. If a company wishes to launch a pay-per-view service for instructional videos, it may review successful and failed attempts of similar companies in the entertainment industry. By understanding the user’s acceptance criteria of this model in a related field, the instructional video provider can focus on the relevant research criteria.
• **Observation Techniques**
  
  o **Structured**—Structured observation, also referred to as systematic observation, is an observational data collection technique in which the researcher collects the information directly without the mediation of respondents, interviewees, and so on. In this structured technique, the data is collected according to predefined rules.

  **Examples of Structured Observation:**
  
  - A grocery chain may wish to understand the factors influencing impulse purchases. It can set up a structured observation experiment to record sales levels of purchases based on product placement in the stores. For the first month, the company may place a display of snack foods at the store’s entrance, and then record the total volume of purchases. The second month, the company may place the same snack foods, in the same display, next to the cash registers. By comparing purchase volumes, it can observe the impact of product placement on impulse buying.
  - A kitchen appliances company wants to understand the need gaps in the cookware category among its target consumers. To achieve this objective, a research study was designed where consumers were asked to prepare food items using the cookware under study. The issues faced and the challenges experienced, sometimes unnoticed by the participants, were observed by the research team, and a product extension concept was formulated based on this research.

  o **Unstructured**—In unstructured observation, the researcher enters the field with some general ideas of what might be salient, but not of what specifically will be observed. Therefore, observation is holistic, unstructured, and unfocused, with the investigator attempting to document as much as possible about the setting and its participants in order to discover themes of interest.

  **Example of Unstructured Observations:**
  
  - Often, consumer durables companies seeking to discover new features that can be implemented and launched in the market undertake exploratory research studies to understand areas of discomfort or challenges faced by consumers with currently available products. This research can be a qualitative research study where researchers talk to consumers directly and ask about features required or about improvements that can be made to certain products. Companies often conduct unstructured observations of consumers using their products to see the difficulties that they face or areas of effort that can be avoided or can be managed more efficiently.

  o **Ethnographic**—In ethnographic research, a researcher observes or interacts with a particular geography or ethnicity to determine consumer behavior. Understanding consumer rituals is essential in determining the marketing plans for a particular geography. Ethnographic research can help companies gain popularity and increase sales by understanding consumer rituals and preferences.
Examples of Ethnographies:

- Multi-national food chains like McDonalds, KFC, and Subway have varied menus to cater to different geographies or ethnic groups. By observing and interacting with consumers and testing various flavors and options, such chains are able to identify products that appeal to consumers in certain geographic regions and tap into unique and specific consumer preferences in order to gain popularity in these markets.
- Regional holidays and celebrations are commonly used to increase sales of specific types of fast moving goods. A chocolate bar manufacturer will be aware that candies packaged with an Easter theme will have a high acceptance rate in geographies that celebrate that holiday, yet will have limited impact in regions that do not. By reviewing census reports and other demographic data, the manufacturer can focus on areas with high concentrations of its target audience.

Qualitative Techniques

- **Focus groups**—Groups recruited to discuss the current research problem can produce insightful information and possible suggestions to support the marketing research process.

Example of Focus Group Discussion:

- A credit card company wants to understand the expectations of consumers in the market. It organizes focus group discussions among its consumers, and those of its competitors, to understand what the competitor is offering and what can be offered by the company to make its customers happy and to attract new customers. Its offers, benefits, and reward points system need to be tailored to the most used and wanted services among the target consumers; these can be anything from benefits given on payments of utility bills to offers on dining, movie tickets, and more.

- **In-depth Interviews**—These interviews are often unstructured and conducted by the researcher to gain expert insights or to gain consumer opinions through door-to-door interviewing. Although these interviews are unstructured, the questions and probing are focused on the research problem. The main focus of in-depth interviews is to seek answers and possible solutions for the research problem.

Example of In-depth Interviews:

- A new fashion retail portal for women wants to understand the aspirations of its potential customers—women who currently buy from other fashion portals. The potential customers’ needs and aspirations are best disclosed in one-on-one discussions with company representatives who are responsible for deciding the product range for the portal. The knowledge gained from the interviews can also help the marketing team plan communications that will appeal to the women in their target group and connect with them on an emotional level. In-depth interviews prove to be a powerful tool in this type of scenario.
**Projective Techniques**—Projective techniques may be classified as a structured, indirect way of investigating the “whys” of a situation. Projective techniques are not used to measure, but to understand the attitudes, beliefs, and motivations of the consumer. Projective techniques help the researcher to understand customer perception of a product or a service.

**Example of Projective Techniques:**
- Projective techniques can be used to understand the desired personal values consumers seek in the products they are evaluating. A focus group might be asked questions such as, “What type of person would drive this car?” Framing questions in this fashion gives the observer information related to the qualities that a consumer projects upon a product or an environment.

**Quantitative Techniques**

**Exploratory Multivariate Analysis**—This involves analyzing more than two variables or factors. The most favorable scenario in this case is one dependent variable and multiple independent variables; that is, one particular factor is influenced by many other factors. Another scenario could be two or more variables that are dependent on other independent variables.

**Examples of Exploratory Multivariate Analysis:**
- A multivariate analysis can be conducted to determine the impact of volume discounting on purchasing decisions. A test group can be given pricing options for the same related products. The group will be informed of the specific price for each item. They will then be given the option of purchasing based on a volume discount per item, or a discounted, bundled price for all items. This will help to quantify the impact of each pricing strategy and clarify the customer’s perception of the individual and bundled value of the items.
- Most fast moving consumer goods companies want to understand the impact of season, temperature, holidays, promotions, and the like on the sales of their products. To understand these relationships between the dependent variable “sales” and all other independent variables, they carry out a secondary research study followed by data analysis in which data from all in-store promotions and the sales generated are used. These data are regressed along with other time series data to understand the impact of all the variables on the dependent variable, sales.

**Surveys**—Surveys can provide quality information relevant to the research problem. The surveys can be conducted, usually within a target group of past customers or people who have enough knowledge about the product or service. In addition to standard surveys, there are two specific surveys that have unique target groups. These are as follows:

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• **Pilot survey**: In a pilot survey, data are collected from a smaller sample group relative to the planned sample group. A pilot survey is a good option to test a survey before expense and time is invested in a larger more comprehensive survey.

*Example of Pilot Survey:*
- A multi-national photocopier manufacturer is developing a low cost 3-D printer. The marketing department is researching potential industrial applications for this technology. The technology is new to the market and the potential consumer group is broad and undefined. It decides to use a pilot survey targeting appliance repair companies. By limiting the initial survey, it can measure the response, minimize the quantity of variables, and gain an understanding of how to effectively proceed with future surveys and data collection.

• **Expert survey**: This survey involves collecting data from a group having experience with the particular research problem.

*Example of Expert Survey:*
- A professional association has been holding annual conferences to increase membership and build relationships within the association. It plans to hold events in multiple locations in the future. As the conferences have been well attended in their current location, the association may distribute a survey to the previous attendees to help determine the factors that have contributed to the popularity of past conferences so that these specific criteria can be met in the new locations.

### 2.2.2.4 Descriptive Research Design*

Descriptive Research Design is used to determine specific characteristics of a group, people, or organization associated with the marketing research problem. Descriptive research is most suitable if the researcher wants to know who the customers are, where they are from, and what they want. It provides answers to the questions who, what, when, where, and how. In this research design, basic information about the problem is available and the scope of the problem is limited to a few areas that need to be examined. If the sample is representative of a larger group, the research findings can be used to make predictions. For example, predicting sales for a geographic region, brand, and product typically involves monitoring behavior at a specific place and time. It does not necessarily answer questions related to how and why something is happening.
Descriptive research design involves observing and monitoring the behavior of a sample group from the target population. Depending on the research objectives, the marketing researcher can choose the type of sampling strategy. Sampling design is discussed in detail in section 3.2.1.5. There are two categories of descriptive research design: cross-sectional and longitudinal designs. Figure 2-12 shows the two types of designs and the subtypes of each.

**Example of Descriptive Research Design:**

- An online education publisher wants to launch a new range of self-learning courses for the healthcare industry. In order to prepare the marketing strategy, the marketing manager needs to clearly understand the target segment and its characteristics. The manager launches a descriptive marketing research study to understand different characteristics and preferences of the target market. Based on the inputs of the marketing research, the marketing manager will be in a better position to define the positioning for the product.

1. **Cross-sectional Design**—In cross-sectional design, the collection of information from the sample group happens at one point in time. Research to understand the customer preference for a particular brand while purchasing garments during a festive season would fall under cross-sectional design.
   - **Single Cross-sectional Design**—This approach refers to a research design in which only one sample group from a larger target group is used for collecting information. In order for the researcher to obtain accurate results, the sample group selected should be representative of the target group and share similar characteristics, such as social and educational status.
2. **Longitudinal Design**—In longitudinal design, the same sample group is examined and the information is collected over an extended period of research. This is helpful for researchers who want to track changes in the sample group over a period of time. Tracking changes in the same group, unlike cross-sectional design, reduces the impact of many external factors on the information collected. This makes tracking changes more accurate. Since the same sample group, referred to as a “panel,” participates in the research, availability of all group members throughout the process is important for accurate analysis of the research. Because this type of research is extended over a long period of time, it takes a lot of effort and can be very expensive. Due to the high costs, small sample groups are usually used for this research. The smaller sample size can make it difficult to apply the results to a larger target group, as the sample group may not always be representative of the total population. Longitudinal design is classified based on the type of panel—continuous or discontinuous⁶—used in the study:

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• **Continuous Panels**—In a study that uses a continuous panel, the questions asked of the panel members remain the same over the research period. This is helpful in problems where the researcher wants to understand the changes in customer behavior over a period of time.

**Example of Continuous Panels:**
- A researcher can track purchase information of a grocery store customer by asking the same questions over a period of time. The results for this research can provide insights into why the panel members changed product brands over time.

• **Discontinuous Panels**—In a study that uses a discontinuous panel, panel members respond to different questions at different points in time over the research process. Since the panel members are available for the extended duration of the research, discontinuous panels act as a ready source of information for the researchers to address a wide variety of problems. In discontinuous panels, the demographics and characteristics of the panel members are representative of the target population. This ensures the accuracy of the results when applied to the larger group.

**Example of Discontinuous Panels:**
- Online communities managed by e-commerce players act as discontinuous panels where the e-commerce player can ask any set of questions at any time to obtain responses from its customers and make decisions about their offerings accordingly.

These communities are often used to test new concepts where an outside opinion is required to refine a new line of products or new marketing strategy.

There are both advantages and disadvantages to using cross-sectional and longitudinal design approaches. Some of these are provided in Table 2-2.

<table>
<thead>
<tr>
<th></th>
<th>Cross-sectional Design</th>
<th>Longitudinal Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>• Representative sample group</td>
<td>• Higher accuracy of data collected</td>
</tr>
<tr>
<td></td>
<td>• Unbiased response of participants</td>
<td>• Ability to track changes over time</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>• Limited data: data are collected at only one point in time from one target group</td>
<td>• High attrition rate of participants</td>
</tr>
<tr>
<td></td>
<td>• External factors and variables can impact data collected</td>
<td>• More effort and time required and can be expensive</td>
</tr>
</tbody>
</table>

Table 2-2: Advantages and Disadvantages of Cross-sectional and Longitudinal Designs
2.2.2.5 Causal Research Design*

The third type of research design is causal research design. Causal research design is used when a cause-and-effect relationship has to be established between two variables related to the research problem. Put simply, when one independent variable (X) affects the state of another dependent variable (Y), there is a causal relationship. For example, if sales of an online retailer increase during discount periods, then the increase in sales can be attributed to the discounts. Thus, discounts and increase in sales have a causal relationship. In popular view, discounts and increase in sales are thought to imply a deterministic relationship. However, in scientific interpretation, it implies a probabilistic relationship. Any increase in sales cannot be solely attributed to the discounts. There can be a number of variables that might affect the increase in sales. Even though the effect of such variables can be negated or controlled for in an experimental setting, it can never be entirely ruled out.

To establish a causal relationship, three conditions need to be fulfilled—concomitant variation, time order of occurrence, and elimination of extraneous variables. It should be noted here that these three conditions are necessary for causality, but are not sufficient.

- **Concomitant Variation**—One of the important conditions for causality is concomitant variation. It is the extent to which the two variables in a cause-effect relationship vary together in a predictable manner. Suppose an online retailer offers discounts on some product categories and not on others. At the end of the year, it is found that higher sales have occurred for categories with discounts while low sales were observed for categories with no discount. It can be said that discounts and sales have a concomitant variation.

- **Time Order of Occurrence**—Time order of occurrence of the cause and effect is of critical importance for causality. The cause X should precede or occur simultaneously with the effect Y. An increase in sales should happen after the discounts are applied, if the discounts and sales are in a causal relationship. A past history of increases in sales (an effect of historical discounts) during the discount period can motivate (cause) a company to offer future discounts. Thus, a variable can be both cause and effect in certain cases.

- **Elimination of Extraneous Factors**—To study the effect of an independent variable on the dependent variable, it is imperative that the extraneous variables are controlled. A causal relationship can only be established if all the other variables except the ones under study are kept the same. In order to establish the causality between discounts and sales, for example, it is required that the other variables such as standard pricing, product, branding, and seasonal variations are kept constant.

---

Experimental design is one of the primary methods of causal research. In experimental design, independent variables can be manipulated in a controlled environment. This ensures that the effect of other variables on the dependent variable is minimized as much as possible. The experimental design process specifies the following requirements:

- an independent variable to be manipulated in the experiment
- test units to be exposed to the treatment
- a dependent variable to be measured
- method of controlling the extraneous variables

The various components are defined as follows:

- **Dependent variable**—The dependent variable is the outcome of the experiment that is measured by the researchers. Sales, awareness, and profit are typical dependent variables.

- **Independent variable**—An independent variable is the trigger that leads to the effect. Also called treatments, these variables are manipulated as part of the experiment, and the effect on the dependent variable is measured. Advertising expenses, discounts, and price levels are typical independent variables.

- **Test units**—Test units are individuals, groups, or entities that are exposed to the experiment to measure their response on the dependent variable. Customers are the test units of the online retailer in the example used previously.

- **Extraneous variables**—Any variable other than the intended independent variable that can affect the behavior of the dependent variable is called an extraneous variable. Extraneous variables need to be controlled in an experiment to study the effect of the independent variable on the dependent variable.

- **Pretest**—The measurement that is taken before the exposure of test units to the independent variable is referred to as the pretest.

- **Posttest**—The measurement that is taken after the exposure of test units to the independent variable is considered the posttest.

- **Experiment**—The alteration or manipulation of an independent variable to measure the impact on a dependent variable in a controlled setting constitutes an experiment.
Experimental Design Notation

Experimental design is described and best understood with the use of standard symbols and structure to represent the various components, activities, and composition of the experiment. These symbols and standard syntax are as follows:

- **X**—represents the exposure of test units to the independent variable.
- **O**—represents the process of observation of the dependent variable.
- **R**—represents the random assignment of the test units to separate treatments.
- Movement from left to right indicates movement through time.
- Symbols in a single row pertain to a specific treatment group.

Symbols in a particular column refer to the events that occur simultaneously.

Types of Experimental Design

Experimental design is often classified as either true experimental design or quasi-experimental design. These are defined as follows:

- **True Experimental Design**—An experimental design that eliminates the effects of the extraneous variables is called a true experimental design. Control groups are used to achieve this effect.

- **Quasi-Experimental Design**—An experimental design that does not control the effects of the extraneous variables is called a quasi-experimental design.

Example of Variables in Experiments:

- A leading retail chain in the UK tries to understand the impact of an in-store promotion on the sales of its private label snacks brand. It decides to conduct a series of experiments, in which it would run a promotion for a period of one week and assess the impact on sales of the product at three different periods in the year. It observed that although the incremental sales due to the in-store promotion varied in all three periods, the promotion had some positive impact on sales. The company then realized that the variation in incremental sales was due to the season and not due to the high or low impact of the promotion. The promotion would have the same impact on sales if the seasonality were removed.

  In this experiment, the product sales data set was the dependent variable, the promotion was the independent variable, seasonality was the extraneous variable, and the private label product was the test unit.
In addition to the classification of true experimental and quasi-experimental designs, several subtypes of experimental designs are distinguished from one another based on several of the factors previously defined. Among these are After-only Design, Before-After Design, and Before-After with Control Group Design.

1. **After-only Design**—This is the simplest of all the experimental designs. The independent variable is exposed to the alteration and the result is observed after a period of time. It is represented as below:

   \[ X \quad O \]

   Where,
   
   \( X \) indicates the manipulation of the independent variable
   
   \( O \) represents the observation or measurement—a posttest—of the dependent variable

   The gap between the two symbols is representative of the time span between the cause and the effect. This is a quasi-experimental design as the effect of the extraneous variable is not controlled. In the example of the online retailer, \( X \) is the discount applied on a particular category of products and \( O \) is the increased sales. The drawback of this particular design is that it does not measure the impact of the change in independent variable but only measures the final state of the dependent variable.

   **Example of After-only Design:**

   - A car dealership wants to increase sales, but first needs to build awareness in its local area. To do this, the dealership manager decides to advertise in a local newspaper.
     - \( X \) indicates the published advertisement that would increase awareness of the enterprise.
     - \( O \) represents the observation or measurement—a posttest of the dependent variable awareness—achieved by conducting a door-to-door household survey.

   After-only design: \( X \quad O \)

   The advertisement is paid for and published. The day after the ad is published, the survey is conducted to measure awareness levels.

2. **Before-After Design**—In this design, first the dependent variable is measured, then the independent variable is altered and finally the dependent variable is measured again to understand the impact of the treatment on the test units. This design differs from the after-only design in that it has both a pretest as well as a posttest. It is represented as below:

   \[ O_1 \quad X \quad O_2 \]

   Where,
   
   \( X \) indicates the manipulation of the independent variable
O₁ represents the measurement of the dependent variable before the manipulation of the independent variable, a pretest.

O₂ represents the measurement of the dependent variable after the manipulation of the independent variable, a posttest.

The advantage of this design is that it measures the effectiveness of the experiment by measuring the change in the dependent variable. O₂ – O₁ is the change in the dependent variable and represents the outcome of the event. In the example of the online retailer, O₂ – O₁ is the increase in sales due to the discounts applied. This is also a quasi-experimental design as there can be multiple extraneous variables that can impact the change in the dependent variable.

**Example of Before-After Design:**

- A car dealership wants to increase sales and wants to first build awareness in the local area. To do this, the dealership manager decides to advertise in a local newspaper.

  - X indicates the published advertisement that would increase awareness of the enterprise.
  - O represents the observation or measurement—a posttest of the dependent variable—achieved by conducting a door-to-door household survey.

Before-After Design: O₁ X O₂

In the days prior to the ad being published, a survey is conducted measuring the awareness pre-advertisement (O₁). The advertisement is paid for and published. The day after publication, the survey is conducted again to measure awareness levels following the advertisement.

The awareness levels following the advertisement and how effective the advertising expenditure was can be inferred from the pre-ad and post-ad awareness levels.

3. **Before-After with Control Group**—Extraneous variables are controlled by using another test group called the “control group.” The control group is not exposed to the manipulation of the independent variable. By comparing the results of the control group and experimental group, the effects of extraneous variables can be controlled.

As part of the before-after design with the control group, the test group is divided into two homogenous groups—a control group and an experimental group. A pretest measurement of the dependent variable is taken for both the groups. The experimental group is then exposed to the change in the independent variable. A posttest measurement is then taken for both the groups. It is represented below:

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>O₁</th>
<th>X</th>
<th>O₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>O₃</td>
<td>O₄</td>
<td></td>
</tr>
</tbody>
</table>
Where,

$X$ indicates the manipulation of the independent variable

$O_1$ represents the measurement of the dependent variable in the experimental group before the manipulation of the independent variable in the experimental group, a pretest

$O_2$ represents the measurement of the dependent variable in the experimental group after the manipulation of the independent variable in the experimental group, a posttest

$O_3$ represents the measurement of the dependent variable in the control group before the manipulation of the independent variable in the experimental group, a pretest

$O_4$ represents the measurement of the dependent variable in the control group after the manipulation of the independent variable in the experimental group, a posttest

The treatment effect is measured as $(O_2 - O_1) - (O_4 - O_3)$.

The extraneous variables are controlled as follows:

$(O_2 - O_1) = TE + a + b + c + d + e + IT$

$(O_4 - O_3) = a + b + c + d + e$

$(O_2 - O_1) - (O_4 - O_3) = TE + IT$

Where,

$a, b, c, d, e$ are the extraneous variables.

$TE$ – Testing effect

$IT$ – Interactive testing effect

Extraneous variables are cancelled out when the outcomes of the control group and experimental group are compared. A pretest measurement affects the response of the test group to the experiment. This is called the interactive testing effect and it cannot be controlled. This design is an improvement over the before-after design and is an effective way of controlling the extraneous variables. Taking the earlier example, suppose the online retailer divides the incoming website traffic into two comparable groups as part of the A/B testing and provides a discount only to one group. The group that received the discount is the experimental group and the other group is the control group. Thus, the testing effect is the increase in sales of the group that received the discount minus the increase in sales of the control group.
Validity of Experiments

A critical component of experiments is ensuring validity. The validity of an experiment is the extent to which the experiment measures what it is supposed to measure. Experiments can be deemed valid if the following two conditions are satisfied:

- if it is established that the change in dependent variable has indeed occurred due to the independent variable and not due to other extraneous variables
- if the results of the experiment apply to the larger population of interest or to other populations of interest

The first condition is termed as internal validity and the second is referred to as external validity. These are defined as follows:

Example of Before-After with Control Group:

A car dealership wants to increase sales and wants to first build awareness in the local area. To do this, the dealership manager decides to advertise in a local newspaper.

- X indicates the published advertisement that would increase awareness of the enterprise.
- O represents the observation or measurement—a posttest, of the dependent variable awareness—achieved by conducting a door-to-door household survey.

**Before-After with Control Group**

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>O1</th>
<th>X</th>
<th>O2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>O3</td>
<td>O4</td>
<td></td>
</tr>
</tbody>
</table>

The same survey measuring awareness pre- and post-ad placement is undertaken in one area of the city.
In another area where there is no circulation of the local newspaper, the same surveys are conducted at the same time as the pre- and post-surveys with the experimental group.

Any differences between the experimental and control group in the pretest must be understood as being due to factors other than the ad.

A typical example of Before–After with Control group is “test marketing” done only in one region before rolling out on a larger scale.

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Internal Validity—Internal validity refers to the extent to which the manipulation of the dependent variable can be attributed to the independent variable. As discussed earlier, extraneous variables can distort the results of an experiment by affecting the dependent variables themselves. It is important that the effect of such variables is controlled in order to study causality.

**Example of Internal Validity:**
- In the car dealership example used in the before-after with control group design, the control group and the experimental group of survey respondents were assumed similar. But in reality, they might have different demographic, geographic, psychographic, and behavioral traits. Thus, one or more extraneous variables are introduced in the design and distort the results of the experiment. Extraneous variables need to be controlled in order for experiments to have internal validity.

External Validity—External validity refers to the extent to which the results of the experiment apply to the real world. This depends mainly on how well the test unit represents the actual population. Proper care needs to be taken while selecting the sample units. Otherwise the results will not be valid for the actual population under study. Another threat to external validity is the artificial setup of the experiments. Since experiments are designed to eliminate the effects of extraneous variables, the setup does not match the real world and, therefore, the results might not be valid in the real world. Thus, there is a tradeoff between designing the setup to ensure internal validity and designing it to ensure external validity.

**Example of External Validity:**
- In the car dealership example used in the before-after with control group design, the survey was conducted within a small, regional geographic area. If the survey results measuring the effectiveness of newspaper advertising on awareness of the dealership can be replicated in other regions or a larger geographic area, the study has external validity.
2.2.3 Outputs

2.2.3.1 Selected Research Design*

It is important to select a research design that will be used to undertake the marketing research based on the research problem, the objectives, the information available, and the information required. Researchers will need to assess whether it is feasible to collect the data and whether the study can be constructed with validity and reliability. Other considerations include whether it is ethical to conduct the study and whether the study can be conducted within the defined budget.

Clearly understanding the research problem is an essential step. Then, the team can evaluate available research design approaches, and select the research design that is most appropriate. A detailed document should be produced explaining the selected research design and the specific research methods; this document can then be used as an input for subsequent marketing research processes. The document can also contain information about the data required in the selected research design. Figure 2-12 provides sample research problems and some possible approaches to address each problem.

<table>
<thead>
<tr>
<th>Research Problem</th>
<th>Research Design</th>
<th>Types of Research Design</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>“Why has traffic to the in-store retail channel declined over the past six months?”</td>
<td>Exploratory</td>
<td>For example, use secondary research techniques to understand whether the problem is due to a downturn in the local economy or increased competition.</td>
<td></td>
</tr>
<tr>
<td>“Traffic to the in-store retail channel has declined over the past six months due to increased competitor presence in the area. On what criteria can the store best compete with the new competition (e.g., pricing, product selection, or customer service)?”</td>
<td>Descriptive</td>
<td>For example, a single cross-sectional design can involve surveying current customers to understand recent changes to their shopping behavior.</td>
<td></td>
</tr>
<tr>
<td>“If deeper discounts are offered on accessory items, will the store see an increase in foot traffic and associated sales?”</td>
<td>Causal</td>
<td>For example, a before-after with control group study can be performed to understand the effect of advertised sales of accessory items on in-store traffic patterns.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-3: Sample Research Problems and Possible Associated Research Designs
Example of Selected Research Design:

- Sunkissed Tanning Salon is launching a spray tanning service. It is seeking to solve the business problem of negative public perception regarding traditional tanning beds. Its research problems are, “What percentage of existing customers will switch to the spray tanning service?” and “What is the target market for new customers?”

Sunkissed will send out a survey to its existing customers to quantify the percentage likely to try the new spray tanning service.

It will also conduct a series of cross-sectional focus groups to help understand and qualify the characteristics of the potential new target market.
3. DATA COLLECTION

Data collection is an important part of marketing research. Many significant marketing decisions are made based on the analysis of the data collected from a research project. One critical component of data collection is ensuring the quality of the data collected. Specifically, the data should be both high-quality and relevant. Data quality is the degree to which data represents the true situation. High-quality data is accurate, valid, and reliable, and it represents reality faithfully. In some instances, researchers try to obtain the same data from multiple data sources to ensure the reliability and validity of the data collected.

The following characteristics are assessed to determine the quality of data:

- **Reliability**—The data should be reliable such that repeating the same methods produces the same results.

- **Validity**—The data should measure or represent what it is supposed to measure.

Along with the quality of data, other important factors to consider in a research project are the availability of data and the affordability of the process required to collect it. Often the marketing organization already possesses enough information to make sound decisions without additional marketing research. When adequate information is not available to make a decision, additional data needs to be collected from an appropriate source. If a potential source of data exists, the researcher or the decision-maker must consider the cost of obtaining it. The data should be obtained as quickly as is required to keep the research project on schedule and at an affordable cost. If the data cannot be obtained, or if it cannot be obtained in a timely fashion, the marketing research project should not be conducted.

Researchers have the option of collecting secondary data, primary data, or both. **Secondary data** is that which has already been collected for purposes other than the problem at hand. **Primary data** is newly obtained data for a specific purpose or a specific research project.

The marketing researcher needs to decide whether to collect primary data or spend the research budget exclusively on secondary data. Researchers usually prefer to examine the utility of low-cost and readily available secondary data first to see whether they can partly or fully solve the research problem under investigation without collecting costly primary data. The source of the secondary data can be internal or external. The sources may include books or periodicals, published reports, data services, and computer data banks.

When the needed data is non-existent, outdated, incorrect or inadequate, the researcher needs to collect primary data. Most marketing research projects do include some aspects of primary data collection. Primary data may be obtained from individual consumers, subject matter experts, random samplings of a target segment, organizations, and other sources.
Depending on the source of the data required, two processes are associated with data collection. Figure 3-1 provides an overview of these processes. They are as follows:

**3.1 Collect Secondary Data**—This process discusses various sources of secondary data. It also discusses why and how secondary data are collected in a research project.

**3.2 Collect Primary Data**—This process covers various types and sources of primary data and describes how primary data are collected using various tools.

**Figure 3-1: Data Collection Overview**
3.1 Collect Secondary Data

Data collection in a research project usually starts with examining secondary data sources. No marketing research project should be conducted without a previous search of secondary sources, as there are several inherent benefits to using secondary data throughout a research project.

During the initial steps:

- Secondary data can help in understanding and defining research problems.
- Secondary sources can help define the target group.
- Secondary data can be beneficial in structuring the sample that needs to be taken.

As the research continues:

- Secondary data often provides sufficient information to answer a researcher’s questions.
- Secondary data can be more accurate than primary data because of the population size under study. For example, research done by a large, multi-national company may provide more accurate and more broadly applicable data than surveys using smaller sample sizes.

When the research enters the analysis phase:

- Secondary data can help interpret primary data with more insights and validate qualitative research findings.

Two of the most significant benefits of secondary data collection is that it generally requires less time than primary data collection, and it usually generates more information for the same research budget. Sometimes researchers use secondary data because collecting primary data is prohibitively expensive or impossible.

Some of the points to be considered before collecting secondary data are as follows:

- There are many sources of secondary data available to a marketing researcher. However, the researcher should note that only a small portion of the existing secondary data may be useful.
- Secondary data may be inaccurate, outdated or unreliable. The researcher needs to evaluate the quality of data by examining its accuracy and relevance with respect to the current problem.

Figure 3-2 provides an overview of the inputs, tools, and output of the Collect Secondary Data process:
3.1 Inputs

3.1.1 Senior Management Direction and Insights

Senior management can provide useful suggestions regarding the source of secondary data and the validity of the data collected from various sources. Senior management knows if the required secondary data is available inside the organization and can authorize its collection. The senior management team should be comfortable with the validity of the secondary data and should have confidence in decisions that are made based on secondary data analysis. The decision-maker should work with senior management to determine specifics regarding the collection of secondary data such as the format of the data required.

3.1.2 Research Problem and Objectives*

The research problem and objectives are an output of the Define Research Problem process, described in section 2.1. The research problem and objectives provide a focused and definite direction for the secondary data collection process. The research problem indicates the nature of the marketing decisions to be made, which in turn dictates or specifies the kind of information that is required. The format of the required information must also be specified. Failure to provide this information will result in an unfocused and indefinite search for secondary information. While collecting secondary data, the researcher must examine and evaluate the relevance and usefulness of the secondary data to the research problem. The research problem and objectives may also indicate the possible sources of secondary data. For example, if the research problem requires investigation and analysis of nationwide data, one possible source may be a
previous study conducted at the national level by a government agency. The starting point in reviewing secondary data is to make sure the research topic has been correctly identified. Identifying possible data sources involves listing all possible categories or headings under which the topic might be discussed by other researchers or authors. It is a good idea to make the topics fairly wide-ranging, so that important elements are not overlooked. Once these headings have been established, attention can then be turned to aids that will provide direction to the researcher.

Having a well-defined purpose—a clear understanding of the objectives of data collection and the kind of data that needs to be collected and analyzed—will help the researcher maintain focus and avoid becoming overwhelmed with the volume of data.

Example of Research Problem and Objectives:

- A taxi company wants to increase its sales by 100 percent in the next year. The company is evaluating various options that can help in achieving its target.

  Research Problem: Will expanding operations to Central America help increase sales?
  Research Objectives: To understand the new market and the potential to increase sales by determining the market size and competitors.

  Once the research objective is defined, the researcher will be able to finalize how to collect the data. In this case, the researcher may find secondary data such as government reports, industry reports from the transportation department, and population statistics to understand the market. The researcher may also conduct some primary research to gain a more thorough understanding of the market.

3.1.1.3 **Selected Research Design**

The selected research design is an output of the *Choose Research Design* process described in section 2.2. The research design is a step-by-step plan that guides the data collection and analysis effort. In the case of secondary data collection, it might be an outline of what the final report should include, the types of data that need to be collected, and a preliminary list of data sources. It also defines the format of the information required.

Because the research design is based on the research problem, the research design is typically different for each problem. Research problems vary due to the nature of the business, the stage in the product life cycle of the product or service, the geographical location of the business, and other factors. Since the data collection methods to be used depend on the research design, it is recommended that the researcher first select the research design, then identify data collection needs, and then begin the data collection effort in order to ensure the data collection and analysis effort is focused and the results are useful.
3.1.2 Tools

3.1.2.1 Meetings and Discussions*

While analyzing and finalizing the detailed research design with decision-makers and experts, concerned parties meet and discuss the different sources available for collecting the data required for the research project. It is important to take inputs from the decision-makers in regard to parameters such as the extent to which secondary data will be used in the current project based on budget and time allocations, their confidence in decisions made based on secondary data analysis, and the format of the data required. During these discussions, the researcher should also try to find out if any source of secondary information exists internally.

Example of Meetings and Discussions:

- In the example of the university research project described in section 3.1.1.3, Selected Research Design, the researcher engages the panel of decision makers and experts to understand the source of the secondary data such as the age, gender, and education of the population of the city and the number of students enrolled with other universities in the city. The panel can also provide inputs on what it feels can be additional sources of secondary data already available.

3.1.2.2 Internal Reports*

Different functions or departments within an organization have valuable sources of past data. These data or reports are generally identified in the Management Information System (MIS). Examples of internal secondary data are financial reports, sales reports, past research studies, inventory, and miscellaneous reports. Internal secondary data is not limited to the above examples and can vary depending on the industry or the research problem.
### 3.1.2.3 Annual Reports

A lot of information is readily available within the annual report of an organization. These reports provide either internal or external secondary data and can be used as a good starting point. Annual reports may have information such as sales records, marketing activity, cost information, distribution channels, and customer feedback. This data is collected by the company and is organized in accordance with the business the company conducts. Annual reports or sales data available from previous months may help the researcher estimate future projections.

#### Example of Internal Reports:
- A leading food chain collects feedback from its customers regarding customer satisfaction and restaurant ratings with respect to service and meal preparation. The company wants to know the reason behind the declining sales in the last quarter. The researcher may use internal reports such as the customer service report to evaluate if the decline in sales is connected to customer satisfaction and restaurant ratings.

#### Examples of Annual Reports:
- A hotel wanted to establish sales projections for the January to March quarter. The researcher analyzed the historical data in annual reports and checked the sales that took place in the same quarter of the previous years and how they correlated with the figures of the entire year's sales revenue. The historical data helped the researcher estimate future projections using statistical models.
- Annual reports can be very helpful in collecting data and targeting certain areas of a market. A review of annual reports in the investment banking industry will help to gather contacts and other data on corporate directors and other high-level professionals.

### 3.1.2.4 Government Publications

Researchers may find and access huge amounts of secondary data in multiple government publications. Many governments produce reports frequently, and most of these reports can be counted on for quality and accuracy. For example, behavioral data from government sources can be more powerful and reliable than surveys and data from internal meetings or primary research. Examples of such government sources are the U.S. Census Bureau and the European Union’s European Commission. Government publications or reports may include statistics on production, agriculture, import, export, population census, and expenditure surveys.
Federal, state, and local government publications or agencies can also be useful sources of information. A researcher may find a state or a local government publication that is helpful in understanding the market in depth in a particular locality. Fortunately, most governmental reports and publications can now be accessed through their websites.

**Examples of Government Publications:**

- A spice exporter from Cleveland seeks to estimate the export market size of its products in Brazil. The researcher studies the spice import market reports by the Brazilian government, other commercial sources, and world trade bodies such as the International Trade Centre (a subsidiary organization of UNCTAD and WTO) to gather secondary data.
- Governments will often make large amounts of industry data available to promote growth within an industry. The United Kingdom’s Department of Energy and Climate Change, for example, publishes directories and interactive maps showing active areas of North Sea drilling, and identifying who operates in these areas.

### 3.1.2.5 Commercial Sources

Commercial sources are valuable, but usually involve a subscription to syndicate reports or membership for access. Research and trade associations remain great commercial sources for obtaining information. The information collected by trade associations is generally limited to a particular industry and is accessible to paid subscribers only. However, the information from these organizations is generally thorough and accurate. The commercial sources for secondary data will continue to be a valuable source of information.

There are many organizations that are commercial sources of external secondary data for a wide range of fields and industries. These commercial organizations allocate funding for such data collection and specialize in selling and publishing information. Market research reports and other useful publications are available from numerous organizations that charge for the information.

**Example of Commercial Sources:**

- Professional associations are often good sources of research data. The Canadian Society of Petroleum Geologists, for example, regularly publishes industry reports. These can be good sources of information on current industry trends, corporate direction, and future trends.
- Market research companies such as A.C. Nielsen—famous for its television ratings—provide extensive data that are ongoing and range across categories such as brand share, promotion, pricing, sales volume, audience size, and consumer behavior.
3.1.2.6 General Media*

General media such as the Internet, online databases, journals, broadcasts, and print media are major sources of external secondary data. The Internet proves to be the easiest and the quickest source of secondary data. A researcher can access a variety of websites, journals, and online versions of traditional print media to obtain required data. Archives of newspapers can be accessed online, making them useful resources for the researcher. Online databases are valuable sources of information because they usually contain the most up-to-date data, provide fast search capabilities, and are low-cost and convenient.

Examples of General Media:

- The Financial Times, The Economist and The Wall Street Journal are trusted valuable sources of information on market trends and the economy.
- General media serves to be a major source of information for organizations in their marketing decisions about topics such as advertisements and promotions. For example, sources such as the United States' Federal Communications Commission, the UK's Ofcom, newspapers, and magazines provide information regarding the most watched television programs. Organizations use this information to broadcast their advertisements during particular programs that are likely to help each organization achieve maximum benefit from its marketing efforts within the target segment it shares with a program.
- In sports, major tournaments can attract a huge number of viewers across the globe. Previous research, trends, and broadcast information help researchers by providing key information, such as the number of viewers, their demographics, and their psychographic characteristics. A leading sportswear brand might use this information to make decisions regarding tournament and apparel sponsorship and to determine the value of broadcast advertisements during live matches as a brand-building activity. These channels can provide a captive audience for the sports apparel brand given the audience's interest in sport.

3.1.2.7 Bibliographic Database

Bibliographic databases are generally composed of citations of journal articles, print media such as newspapers and magazines, and marketing research reports. The data obtained from these sources often provide summaries or abstracts. Journals and periodicals are some of the most important sources for reliable data. They provide information that is up-to-date and on a specific topic or issue, which books cannot provide.
3.1.3 Outputs

3.1.3.1 Collected Secondary Data*

The collected secondary data contains information collected from both internal and external sources. The overall direction, accuracy, and success of the marketing research project depend on the data collected. Data collected inaccurately or incompletely may lead to incorrect research results, poorly planned marketing activities, and an organization’s eventual failure to achieve its objectives. In some situations, the collected secondary data may be outdated or may be less relevant than primary data. The collected secondary data can be used as an input for other processes in Marketing Research including Data Processing and Analysis.

**Examples of Collected Secondary Data:**

- GeoPro is conducting a research on offshore drilling. The company reviewed all available governmental data to determine active players in the target area. It then captured management information from the appropriate annual reports and associated corporate websites.
- A telephony hardware company selling primarily to call center companies wants to expand its sales focus to the banking and financial service industry. To better understand the telephony and integration needs of this target market, the company purchases research reports from a well-known analyst firm.
3.2 Collect Primary Data

When a researcher collects new data for a specific research project, the data is considered primary data. The research requirements will vary from project to project, with many research projects requiring both primary and secondary data to solve the research problem. Some research projects can be solved with the sole use of existing secondary data, while in other cases no secondary data exists and the research project can only be solved with the use of primary data. The research needs, along with existing resources and scheduling requirements, dictate the costs of the project.

As a rule, a researcher should always try to collect and analyze secondary data before moving to the collection and analysis of comparatively costly and time-consuming primary data. In some cases secondary data may be inadequate or unusable. When the needed data do not exist or are outdated, inaccurate, incomplete, or unreliable, the researcher needs to collect primary data.

Primary Data Sources

There are various sources of primary data. Primary data may be obtained from individual consumers, subject matter experts, random samplings of a target segment, and various organizations, among others. Some of the major sources of primary data are as follows:

- **Internal Organization**—The organization is not only a good source of internal secondary information, but also it can be a good source of primary data. Interviewing and surveying relevant employees in the organization can be a good starting point for primary data collection. For example, the internal sales force is a good source of primary data in a research project that involves forecasting future sales.

  **Example of Primary Data Collection from the Internal Organization:**

  - Most companies are interested in keeping employees happy because studies show that engaged employees are more productive and are better contributors to their employer’s goals and objectives. Employee satisfaction surveys are done to evaluate the satisfaction of employees on key parameters such as satisfaction with senior management, immediate managers, and company policies.

    Employees are also approached if improvements are required for a particular process, or if a new process needs to be developed to address any existing issues.

- **External Environment**—The external environment includes all types of users, customers, potential customers, and any external entities, such as competitors, that can influence or be influenced by the outcome of the research project. Users or customers are important first-hand sources of information related to customer demands, views, beliefs, and intentions.
Another important source of primary data is the distribution channel. Vital information can be collected from wholesalers, retailers, manufacturers, and suppliers. In fact, the role of wholesalers and retailers has increased tremendously in recent years in many product categories where customer decision-making is greatly influenced by the channel partners.

Types of Primary Data

There are various forms of primary data. Some common types are as follows:

- **Demographic Data**—Demographic data are related to characteristics such as the gender, age, income, education, occupation, marital status, ethnicity, and social status of the target group. Demographic data are important because it helps marketers profile a target group. Demographic primary data help group the respondents into consumer segments. For example, a soft drink brand may find that the preferences of people in the 25–35 age group are different from the preferences of people in the 35–45 age group. Data can also be categorized by life stage including early childhood, youth, young adult, newly married, married with young children, married with teens, empty nesters, elderly, and retired.

- **Psychographics and Lifestyle Data**—This kind of data is related to personality traits, interests, lifestyle, values, and opinions of the target respondents. Marketers often combine psychographics and
lifestyle information with demographic information to obtain an important perspective of the target market.

- **Intentions**—Intentions refer to the anticipated future behaviors of an individual. This is a subject of interest to marketers who want to solve a research problem related to future consumption rate or demand. Although there will always be some differences between consumers’ intentions and actual practices, sellers believe that expected future behavior is a useful indicator to evaluate several possible alternative offerings.

- **Attitudes**—Attitudes refer to a person’s feelings, convictions, or beliefs toward an object, idea, or an individual. Since attitude impacts behavior, it is of great importance to marketers. It is difficult to measure or observe behavior in all conditions, and measuring attitudes of the respondents can provide a good indication of possible behaviors.

- **Awareness/Knowledge**—This data refers to what subjects do or do not know about an object of investigation. Information influences behavior and marketers often want to know how the behavior of customers changes with their level of awareness regarding a particular product, brand, object, or industry. This information helps marketers determine the image, experience, and feelings of consumers who are familiar with a product and make distinctions between consumers who are familiar with a particular product or industry and those who are not.

- **Motivations**—A person’s actions are the reflection of his or her inner state. Marketers often want to know the motives that direct specific consumer behavior. When a respondent is asked about the factors that are likely to influence his or her decision, a researcher is trying to identify the motives that influence behavior. Motivations can include users’ category, brand-purchasing motives, value systems, and perceptions among others.

- **Behaviors**—Behaviors are the actions taken by respondents. Data related to consumer behavior is of great importance to marketers. Questions regarding respondents’ behaviors toward a particular situation can be asked to them directly and can be included in a survey. However, the responses may not represent the actual behavior of the respondents. Observation techniques are more often used to understand the actual behavior of respondents. To further explore respondent behavior, marketers can categorize consumers according to product usage and user status. For example, transactional or research data can be used to divide a user base into cohorts by units consumed or dollars spent (e.g., light, medium, or heavy). Purchase behavior is also an important factor; when considering purchase behavior, marketers might categorize consumers as non-users, potential users, first-time users, regular users, or former users.
Primary Data Collection Methods

Primary data can be collected by a process of observation, qualitative research, or quantitative research, and these approaches can be used separately or in combination.

- **Observation Research** involves the collection of information with regard to the behavior of individuals, objects, and organizations without any questions being asked of the participants.

- **Qualitative Research** uses both structured and unstructured approaches to obtain unquantifiable insights into behavior, motivations, and attitude from a small number of selected individuals.

- **Quantitative Research** uses structured approaches to obtain measureable insights into the behavior, motivations, and attitudes of target respondents by involving a sample of the target population.

Depending on the type of research being conducted, this process is also likely to involve the development of data collection forms, the determination of the sample of respondents to take part in the research, and the actual collection of data.

Figure 3.3 provides an overview of the inputs, tools, and outputs of the *Collect Primary Data* process.

![Figure 3.3: Collect Primary Data—Inputs, Tools, and Outputs](image_url)

1. Research Problem and Objectives*
2. Selected Research Design*
3. Senior Management Direction and Insights
4. Secondary Data*
5. Sampling Design*

1. Observation Techniques*
2. Experiments*
3. Qualitative Techniques*
4. Quantitative Techniques*

1. Collected Primary Data *

*Note: An asterisk (*) denotes a highly recommended input, tool, or output for the corresponding process.*
3.2.1 Inputs

3.2.1.1 Research Problem and Objectives

The decision to collect primary data for a research project is a very important one. The research problem and objectives not only influence the decision to use primary research but also provide insights to the researcher regarding the application of collected data and the type of primary data that needs to be collected. Once the decision is made, it is important not to lose sight of how a researcher arrived at the point of acknowledging the need for primary data. The primary data collected should be in the form needed to answer the question related to the problem, test a hypothesis, or in some way contribute to improved decision-making. For example, from the research problem and objectives, the researchers will know that they need to measure consumer preferences if consumer preference is one of the key criteria identified by the decision-makers. A particular type of primary data collection should be included in the research project only if there is a reason for its inclusion, ultimately linking the type of data to the solution of the research problem.

While designing the primary data collection process it is important to decide the type of methods to be used, the data to be collected, and the ideal sample size, all of which are derived from a good understanding of the research problem and objectives.

Example of Research Problem and Objectives:

- A university wants to improve its ranking at the international level and wants to double student enrollment in several select programs in the following term. The university wants to improve its current programs in order to attract good-quality students from around the world.

  According to the requirement of the university, the researcher defines the research problem as “Evaluate the current teaching methods and the performance of the faculty.” The objective of the research is to identify competent faculty and to compare the current methods of teaching against the most effective pedagogical practices. This will enable the university to reward the competent faculty and to create high-quality programs.

  In this project, the researcher can gather secondary data about course enrollment and faculty details from the university’s internal records. Data on the best pedagogical models can be collected from various books, journals, past surveys, articles, and other online or offline resources. However, to evaluate the current teaching methods of the faculty and their popularity as defined in the research problem and objective, the researcher needs to collect primary data. The researcher may opt to create a survey questionnaire that asks students to rate faculty on various parameters and provide their views on the teaching methods (although results collected from non-experts will have very little value, and, if useful at all, will require expert interpretation). The researcher can also conduct an expert panel discussion to identify best practices in teaching.
3.2.1.2 Selected Research Design*

The selected research design is the master plan for conducting the research project. It provides the overall guidelines on how the researcher can obtain answers to the research questions and test hypotheses. The research design also includes the specific methodology that should be used to collect the data. The research design includes information regarding the use of communication and/or observation approaches to obtain the data, the degree of structure and approach of the research, and the process of administering the research. The research design will also facilitate the consideration of ethical and legal issues while designing primary data collection processes so that no legal issue arises while collecting the data.

3.2.1.3 Senior Management Direction and Insights

While analyzing and finalizing the detailed research design with the senior management, decision-makers and experts, concerned parties meet and discuss the different sources of data collection required for the research project. If the researcher feels the need to collect primary data, he or she should inform the decision-maker and discuss the techniques that can be used to collect this data. It is important to listen to feedback from the decision-makers while finalizing the scope of collection of primary data under given budget and time constraints. The senior management and decision-makers should also be consulted on the type of primary data to be collected, the intention behind collecting particular types of data, the suggested method and tool to collect the required data, the preferred format of collected data that will help in addressing the problem at hand, and so on. During the discussions, the researcher should also try to find out possible internal secondary data sources.

Experts can provide valuable input regarding the preferred method of data collection, types of data, format of data collection forms, sample size, and more.

*Example of Senior Management Direction and Insights:

- A real estate company wanted to understand the requirements of its target buyers for a villa township located in the outskirts of the city along with the price consumers would be willing to pay for each additional amenity that they list as their requirements. The researcher designed a research project where in-depth interviews would be conducted with high net-worth individuals who would be able to afford such a place and could give honest feedback on the price that they would be willing to pay for each amenity.

  During the meeting to discuss the research design, senior management suggested interviewing couples instead of only individuals because usually decisions related to real estate are made jointly by both husband and wife. As a result, the research design was modified to incorporate couple interviews rather than individual in-depth interviews.
3.2.1.4 Secondary Data*

The researcher should always start by examining secondary sources of information. In order to avoid wasting resources and time, the researcher should avoid collecting primary data if someone else has already collected the required data.

Before collecting primary data in a project, the researcher needs to determine the amount and type of information that still needs to be collected through primary research. If the researcher already has access to high-quality secondary data that partially addresses the problem at hand, he or she may consider collecting only the additionally required information through primary data collection in order to solve the problem. Comprehensive analysis of the secondary data forms a vital foundation and helps the researcher to decide on a more focused approach for primary data collection. The decision-maker and researcher can use the ideas generated from secondary data as a strong foundation for designing the primary data collection effort.

Secondary data can also be helpful in the interpretation of primary data by enabling researchers to see the broader picture of what the data means in the context of other current or historical developments in the market. It can provide a source of comparative data for the data gathered from primary research.

**Example of Secondary Data:**

- A financial institution wants to launch a new product in the market. The company does not have any information on the current status of various financial products that are available in the market, provided by the competition. It wants to launch a product that is differentiated and has an immediate demand among buyers.

  Thus, the company first decides to do secondary research to discover the various financial products present in the market so that it can plan the options of its future product accordingly. This data would be used to plan the product concepts to be tested in the market using descriptive research techniques.

3.2.1.5 Sampling Design*

While sampling design is a part of research design, the topic warrants further discussion in the context of defining primary research requirements, as sampling design has specific application requirements that should be considered before choosing an approach.

A population is the entire group of objects having characteristics of interest under study. The subset of a population that is chosen for the study is known as a “sample.” Choosing the portion or subset of a population is known as “sampling.” The chosen sample must represent all or most of the features of the population from which it is chosen. To ensure that the chosen sample appropriately represents the population, a strategy is required. This strategy is known as a “sampling strategy.” The sampling strategy is
a plan or strategy created to make sure that the sample of the population on which data will be collected is accurately representative of the group identified for study.

The task of sampling is undertaken when information regarding a process or product is not readily available, and analysis of the entire population on which the critical information is required is not feasible or possible (i.e., such an undertaking would be too time-consuming and too costly). Because sampling reduces costs and employs fewer human resources (among other benefits), it is commonly employed in most industries that require critical information regarding a process or product.

Sampling is also used when the data collection is a destructive process. For example, CDF Inc. is a mineral water manufacturer that produces bottled mineral water. The quality assurance team tests the quality standard of the mineral water by randomly selecting a sample of bottles taken from each production batch. In the testing process, they open the bottles and introduce chemicals into the contents, thus destroying the sample. These bottles will no longer be hygienic enough for sale and the water will be contaminated; testing the entire population of bottles would result in no revenue for the company, and therefore a sample is tested.

**Types of Sampling Strategies**

Researchers can choose from a number of different types of sampling strategies. The type of strategy chosen should appropriately suit the research objectives. The selected sampling strategy impacts the amount of data that can be collected and the margin of error that exists when it comes to the generalization of research results. The margin of error is typically a small amount that is allowed for in the event of miscalculation.

Sampling strategies are classified as either probability sampling or non-probability sampling.

1. **Probability Sampling Strategies**—Probability sampling strategies are the most reliable sampling strategies because the margin of error is minimal due to the statistical procedures used. In these strategies, every component in the population has an equal and independent opportunity to be chosen.

   The four main methods of probability sampling are simple random sampling, systematic sampling, stratified sampling, and cluster sampling.

   - **Simple Random Sampling:** This is the most basic type of probability sampling in which each individual is chosen randomly, so that each individual has an equal and unsystematic chance of being selected at any stage.

     Simple random sampling can be conducted in the following ways:

     - **Random numbers:** The best way to conduct random sampling is by using random numbers generated by computer or using a table of random numbers. For example, from a population of
1000 employees in a company, 50 employees are to be selected randomly for conducting a marketing campaign.

**Example of Random Sampling:**

- Random Sampling can be done using a function \( \text{=RANDBETWEEN(bottom, top)} \) in an Excel worksheet. Assign each employee a number between 000 and 999 (both inclusive). In the worksheet, write the formula as \( \text{=RANDBETWEEN(0, 999)} \). Copy this formula and paste it in another 50 cells. This will generate a random sample of size 50.

- **Lottery method**: This is a very popular method of selecting a random sample from a small population. In this method, each element of the population is assigned a name or number. Each name/number is written on a paper slip and folded to look identical to the other slips. All the slips are then deposited into a box and mixed thoroughly. The required number of slips is drawn randomly from the box. One drawback of this method is that it is not feasible when the population size is large. Another drawback could be that if the slips are not mixed properly there may be some pattern in the chosen sample.

- **Systematic Sampling**: In systematic sampling samples are selected according to some specified systematic rule, such as the selection of elements from the population from a random starting point and at uniform intervals.

For example, a sample of 10 questions is to be selected out of a set of 100 questions by using the systematic sampling technique. Assuming the questions are numbered 1 to 100, a starting point is selected randomly from the first 10 questions (i.e., questions numbered 1 to 10). Thereafter, every 10th question is chosen. If the random starting point is question number 7, then the selected question numbers are 7, 17, 27, 37, 47, 57, 67, 77, 87, and 97.

The interval length is the nearest integer value of the ratio of population size to sample size.

In this example,

\[
\text{Interval Length} = \frac{\text{Population Size}}{\text{Sample Size}} = \frac{100}{10} = 10
\]

The major drawback of systematic sampling is that the systematic rule may match some hidden trait of the population and introduce bias in the sample. Systematic sampling is applicable only if the population under study is homogeneous. Also, it must have a degree of randomness so that the sampling interval chosen does not hide any pattern.
A significant difference exists between simple random sampling and systematic sampling. Each unit of the population has an equal probability of selection in both cases but each sample does not have an equal probability of being chosen in systematic sampling unlike simple random sampling.

- **Stratified Sampling**: In this sampling technique, the entire population is divided into relatively homogeneous groups. These groups are known as strata. A random sample is chosen from each stratum. The size of the sample corresponds to the proportion of that stratum in the population as a whole. Alternatively, equal numbers of elements are drawn from each stratum and a weight is given to the results according to the stratum’s proportion of the entire population.

- **Cluster Sampling**: In this sampling technique, the total population is divided into groups or clusters. These individual clusters are essentially similar to each other. A random sample of these clusters is selected.

Both stratified and cluster sampling requires the entire population to be divided into some well-defined groups. However, there are some significant differences between these two types of sampling. With stratified sampling, statistical analysis is conducted on elements within strata, and a random sample is chosen from each of the strata. Conversely, with cluster sampling, since each cluster is treated as a sampling unit, analysis is completed on a population of clusters, and only randomly selected clusters are studied.

Stratified sampling is used when each group has a small variation within itself but there is a wide variation between the groups. Cluster sampling is used when there is considerable variation within each group, but the groups are similar in nature.

2. **Non-probability Sampling Strategies**—Non-probability sampling strategies are not as reliable as probability sampling strategies. The selection procedures in these strategies involve non-random methods. As a result, the subjects in the population do not have an equal chance of being selected as part of a sample. These types of sampling strategies are less likely to produce representative samples than probability sampling strategies. Regardless of this factor, many researchers have successfully used and continue to use these strategies. The three main strategies of non-probability sampling are Convenience, Quota, and Purposive.

- **Convenience sampling**: Convenience sampling is widely used in student research projects. In convenience sampling, elements that are easy to get are chosen from the population for the study. Thus, this strategy may lead to biased data.
Quota sampling: Quota sampling is a non-probability sampling technique where the assembled sample has the same proportion of individuals as the entire population with respect to known characteristics, traits, or focused phenomenon. In quota sampling, a population is first segmented into mutually exclusive subgroups and then judgment is used to select the elements from a subgroup based on a specified proportion. For example, an interviewer surveying the first fifty women wearing black dresses that he or she meets on a particular day is using quota sampling.

Quota sampling should be used only as a last resort because it is prone to the selection of a sample that does not precisely reflect the characteristics of the population, and thus introduces bias into the study.

Example of Quota Sampling:

- In order to determine competitor pricing of a similar product, an online search may be conducted. The first five similar products may be used as a benchmark. This would be a quota sample and may not be accurate, though it will still provide a base level of data from which to proceed.

Purposive sampling: A purposive sample is one that is selected based on the knowledge of a population and the purpose of the study. The main goal of purposive sampling is to focus on particular characteristics of a population. The subjects are selected because of the characteristic under consideration. Purposive sampling is applied only in situations where there are no other alternatives due to difficulties in locating and recruiting the desired population sample for the study.
3.2.2 Tools

3.2.2.1 Observation Techniques*

Observation techniques are considered valuable because they can provide insights on the consumer’s actual behavior. Observation techniques are used by researchers to record consumer behavior either with or without their knowledge. Types of observation techniques include structured observation, unstructured observation, obtrusive observation, unobtrusive observation, and ethnographic research.

1. Structured Observation—Structured observation, also referred to as systematic observation, is a technique for data collection in which the researcher collects the information directly without the mediation of respondents, interviewees, and so on. In this structured technique, the data is collected according to a set of predefined rules.

Example of Structured Observation:

- A retail chain can use paid observers to conduct reviews of the shopping experience at a given store. These observers, often referred to as mystery shoppers, will behave as though they are regular customers. Their goal will be to evaluate the shopping experience based on predefined criteria. This gives the retail chain data on the quality levels of the staff, presentation quality of the store, and overall shopping experience. This data can then be used to improve the customer experience and help to improve brand image and reputation.

2. Unstructured Observation—In unstructured observation, the researcher has some general ideas of what might be relevant, but not of what specifically needs to be observed. Therefore, observation is unstructured, holistic, and unfocused, as the researcher attempts to record as much as possible about the participants and the setting in order to determine themes of interest.
3. **Obtrusive Observation**—These are commonly used within a sample group to understand consumer reaction to a product, commonly referred to as obtrusive technique. In this scenario, the consumer or the sample is aware of the observation.

**Examples of Obtrusive Observation:**
- A statistical research company conducting research on behalf of a radio station may send out logbooks to selected households. The members of the household will be asked to complete daily records of their radio listening habits. This is time consuming for the population being observed, but the results give an extremely accurate picture of listener behavior.
- A car manufacturer may bring test drivers to drive a model in various conditions. Researchers will examine the performance of each test driver and record their comments.

4. **Unobtrusive Observation**—When the consumer is not aware of the observation, the technique is referred to as unobtrusive observation.

**Example of Unobtrusive Observation:**
- A call center for a cable company might test market a new corporate slogan by introducing the slogan at the start of each phone call. Customer reactions to this slogan can be recorded and reviewed to test the marketing. The customers may be aware that their phone calls are being monitored for quality purposes, but they are not aware that their reactions to the new slogan are being measured.

5. **Ethnographic Research**—This type of research is conducted by closely examining a customer’s behavior towards a certain product over a period of time. This type of observation is exploratory and can...
be valuable for understanding the perceptions toward a product or service over time. It is normally considered honest.

**Example of Ethnographic Research:**

- A leading beer manufacturer interested in understanding the drinking behavior of customers observed several pubs, restaurants, and parties over a period of time to understand changing trends and attitudes toward particular types of beer. The manufacturer even accompanied the owners while ordering or purchasing new stocks.

All observation techniques can help researchers discover important insights about a wide variety of consumer behaviors and attitudes toward certain objects, brands, trends, and industries.

### 3.2.2 Experiments*

Experimentation is often the method used by researchers to gather primary data. The causal research method is normally conducted using experiments. Here, the researcher alters one or more variables while observing the changes or effects on another variable. For example, in a retail store a researcher may choose to alter price, design, shelf space, positioning, and advertisement while observing the effect on the sales of the product.

While conducting an experiment, the researcher identifies the key variable that can possibly affect other variables. This method of collecting primary data can be impacted by other variables unless most of the factors are considered as constants, which is highly impractical. For example, an increase in the advertising budget can increase sales, but there are certain external factors, which can also affect sales, such as economics, weather, and competitors’ actions. The external factors always play a major role and are addressed (i.e., controlled for) by conscientious researchers in order to increase data reliability and validity.

Experimental design and the validity of experiments are detailed in section 2.2.2.5.

**Example of Experiments:**

- A leading soft drink manufacturer lost the majority of its market share to competitors. Management wondered if an increase in the volume of the drink per unit for the same price would increase sales. The soft drink company designed an experiment where the marketing mix stayed the same, but the size of the drink changed from small to large. Due to the change in packaging and SKU (Stock Keeping Unit) size, the company was able to increase sales. Providing the soft drink in a larger volume resulted in increased costs for the manufacturer; however, the additional costs were more than compensated for by the additional revenue.
3.2.2.3  Qualitative Techniques*

Qualitative techniques are also sometimes referred to as the “soft side” of marketing research. A variety of factors related to the research problem cannot be studied through quantitative research and require an understanding of softer aspects such as thoughts, feelings, emotions, behaviors, and so on. Many researchers practice a pluralistic approach, which involves combining qualitative and quantitative research techniques, thus taking advantage of the benefits of both types. Among the various qualitative techniques used by researchers are in-depth interviews, projective techniques, and focus group discussions.

1. In-depth Interviews—These interviews are normally open-ended, one-on-one interactions conducted either telephonically or face-to-face, and designed to collect individualistic behavior dynamics. Although these interviews are unstructured, the questions and probing are structured around the research problem.

The researcher should be able to gather the data, analyze it, and write a report at the end of the interview. In-depth interviews are not suitable for all types of research problems; they are typically suited for the following research scenarios:

- when there is a deeper need to understand individualistic behavior
- when the research involves sharing personal or confidential information or discussing embarrassing topics
- when the research involves interviewing professionals or experts (as it is often more convenient and feasible to interact with them in a one-to-one manner)

Example of In-depth Interviews:

- A consumer packaged goods company wants to understand more about the purchase behavior of its target consumers. The company conducts in-depth interviews with a sample of fifty people. The following questions are asked:
  - How do people become aware of their need for the product?
  - How do consumers find the product?
  - How do consumers make their final selection?
  - How do consumers order, purchase, and pay for the product?
  - What happens after they buy the product?
  - How is the product used and prepared?
  - What are consumers really using the product for?
  - What do consumers need help with when using the product?
  - How do consumers get help?
  - Do customers review the products? How? What do they say? Where do they say it?
  - How is the product refunded or replaced?
  - What happens after consumers finish using the product?
2. **Projective Techniques**—The projective technique is a questioning technique used to obtain indirect responses underlying motivations, beliefs, attitudes, or feelings regarding issues of concern. The main objective of the projective technique is to discover and interpret consumers’ perceptions of a product or service that they might not express directly.

There are different types of projective techniques:

- **Association**—Subjects are provided with a hint or stimulus and asked to respond with the first thing that comes to mind. Word association is a common example of the association technique.

- **Completion**—Subjects are provided with an incomplete stimulus situation and asked to complete it in any way they wish with the constraint that the completions meet certain standards of rationality or form. For example, a story completion may require a chronologic order.

- **Construction**—Respondents are required to go beyond simple association and to construct or create a more elaborate product, which is usually a complete art form, such as a story, description, dialogue, or picture. In a construction technique, the initial structure provided to the respondents is less than is the case with a completion technique. For example, the researcher might ask respondents to create a collage of what they feel when they experience a product, service, or concept under study.

- **Choice or Ordering Techniques**—Choice or ordering techniques require the respondent to select from a set of alternative arrangements that fit some specific criteria, such as relevance, attractiveness or meaningfulness (e.g., a picture arrangement test).

- **Expressive**—In expressive techniques, respondents are given a visual or verbal situation and asked to relate the attitudes and feelings of other individuals to the situation (e.g., a role play).

The projective technique has some limitations. Using this approach can be time-consuming and expensive. It requires a smaller sample size, has a high non-responsive rate, and can be misinterpreted. Interpretation of the data collected from a study that uses the projective technique can also be time-consuming and complex.

### Example of Projective Techniques

- A deodorant brand plans to determine its brand image, which can be associated with the perceptions of the consumer. Brand image is the total brand personality perceived by the customer. Using the construction projective technique, the brand asked respondents to create a collage of what they feel when they experience the deodorant under study. Based on feedback, the brand was able to characterize its image as a young, successful man who is handsome, pleasant, and enjoys the outdoors.
3. **Focus Group Discussions**—A focus group is used to collect qualitative data from five to ten respondents by conducting a small meeting in the presence of a moderator. Instead of collecting responses to specific questions, this meeting aims to create a forum for informal discussion about specific products or certain topics. The main objective of the focus group is to acquire insights into customer preferences and behavior. The informal and relaxed atmosphere often helps uncover unexpected insights about the product. Focus groups are usually conducted for exploratory research where there is a need to understand a complete picture of market dynamics.

Focus group participants are carefully selected on the basis of common traits such as similar buying behaviors, demographics, and socio-economic factors. Homogeneity among the participants prevents conflicts on issues that are not relevant to the discussion. One of the key criteria for selection can also be familiarity of the participants with the products or topics being discussed. For example, the participants of a focus group formed to evaluate the use of a new mobile application for smartphones should have adequate experience in using smartphones. Focus group size is usually kept small enough for the participants to have enough time to share their opinions and yet large enough to gather diverse views about the topic. Having too small of a group can limit the information that can be gathered, and too large of a group can result in a lack of opportunity for all participants to share their insights. Questions or topics for the focus group need to be developed based on the marketing research problem and objectives. When based on the research problem and objectives, the role of each focus group will also be clearly defined. The type of questions used to initiate discussion should be open-ended. For example, questions such as “What do you like about the product?” and “What would your suggestions for this service be?” would be appropriate for a focus group discussion. Questions that invite a “yes-or-no” response are generally not used in focus groups.

The moderator of a focus group plays a vital role in initiating and leading the discussion. The moderator should have characteristics similar to the participants and should have experience in handling groups. She will guide the discussion through the topics and ensure that the discussion aligns with the objectives. Even experienced moderators can sometimes find it difficult to manage participants who have a dominating personality and tend to disrupt the discussion. A skilled moderator will be flexible enough to alter the flow of discussion amid such disruptions. During lengthy discussions, the moderator should ensure that adequate arrangements are made to provide participants with a comfortable environment to relax and provide insights to discussion topics.

In most focus groups, audio and video of the discussions are recorded for analysis and reporting purposes. Notes and comments can be gathered by the moderator, which will help in creating the summary of the discussion. The report of the focus group discussion should be descriptive in nature. Instead of just summarizing the data, reporting should also provide a detailed interpretation of the data.

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3.2.2.4 Quantitative Techniques*

Quantitative data collection techniques depend heavily on the sampling methodology and the data collection instrument used. These techniques are concerned with testing hypotheses derived from theory or estimating the size of a phenomenon of interest.

One research or data collection instrument used in these techniques is the questionnaire, which is a set of pre-determined questions that can elicit both subjective and objective responses. There are a number of factors to consider in designing a questionnaire, including the characteristics that will be measured in the questionnaire, the scale on which the characteristics will be rated, the types of questions to ask, and the set of responses that will elicit meaningful data.

Designing an appropriate questionnaire that will elicit high-quality, analyzable data requires careful consideration of all of these factors. One of the first steps in designing a questionnaire is to determine the

Examples of Focus Group Discussions:

- Focus group research is used extensively by pharmaceutical companies to test concepts related to new drugs and marketing of over-the-counter (OTC) and prescription products. Using focus group discussion, pharmaceutical companies explore consumers' and physicians' opinions about various marketing mix elements such as product concepts and packaging, advertising, and promotional ideas. Focus group research will help the pharmaceutical company gain physicians' insights on various important matters and opinions, such as the types of users that will find a drug most appropriate, how important the drug is perceived to be in the treatment of patients, and when and how the physicians will prescribe the drug to patients. Focus group discussions will also help to gather input from physicians and end-users on the preferred positioning for the product or service. Focus groups can help in identifying the information needed to target customers for the new product. If advertising and merchandising materials have already been created, a focus group will provide information if the target customers (physician and/or retail consumer in this case) relate well to the advertising or merchandising materials aimed at them. Because many of drugs are not supported by mass media advertising, focus group discussions will also enable the company to gather useful information about packaging, which is helpful especially with OTC drugs. Focus groups also help pharmaceutical companies understand the opinions of physicians and end users regarding the service they expect to receive from the company thereby helping the company in creating customer service and loyalty programs.

- A dental clinic conducted a focus group discussion to improve the process for patients arriving at the out-patient office. The focus group was composed of patients who had experienced the clinic’s facilities, and the collated feedback was provided to the clinic management. Based on the recommendations of the focus group, the waiting area layout was improved and clear, easy-to-follow instructions were provided to first-time patients to avoid any inconveniences. A second focus group was conducted a few months later to evaluate the success of the implemented changes.
characteristic that needs to be measured and then determining an appropriate scale for rating the characteristic.

Measurement is the act of assessing the level of presence of certain characteristics in the variable under consideration. The characteristics measured are attributes or qualities of the variable. Characteristics that a researcher might measure include certain demographic characteristics, consumer perception of quality or user friendliness, or the reasons for a decrease in sales. Each characteristic is measured using a scale that will enable respondents to rate the attribute of the variable. For example, a restaurant may ask patrons to rate their dining experience (the attribute measured) on a scale of poor, fair, good, or excellent.

**Types of Scales**

Scales can be classified into “Categorical” and “Metric” scales.

- **Categorical Scales** measure variables with a few distinct levels of measurement for values. For example, the taste of a newly launched beverage can be measured as sweet, bitter, or bland. Two types of categorical scales are Nominal and Ordinal scales.

- **Metric Scales** measure variables using numbers on a continuous scale. Rating a new book on a scale of 1 to 10 is an example of a metric scale. Two types of metric scales are Interval and Ratio scales.

The level of measurement or type of scale chosen is a critical concept to consider in the design of a questionnaire for two reasons. First, the chosen scale will determine the amount of information to be derived from the scale. The amount of information derived is lowest when the nominal scale is used and highest when the ratio scale is used. Second, the chosen scale also determines the statistical analysis possible for a particular scale. Figure 3-4 shows the types of scales available to researchers.
1. **Nominal Scale**—A nominal scale is used for labeling variables. It is the simplest form of scale and can only be used to carry out the simplest of operations, such as categorizing variables into subsets. Consider the following example of customer preferences of 1,000 respondents from California who were asked to choose between two brands of soft drinks.

<table>
<thead>
<tr>
<th></th>
<th>Brand A</th>
<th>Brand B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teenagers</td>
<td>400</td>
<td>200</td>
<td>600</td>
</tr>
<tr>
<td>Adults</td>
<td>200</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>400</td>
<td>1,000</td>
</tr>
</tbody>
</table>

In this example, the respondents have been grouped into two categories: those who prefer brand A and those who prefer brand B. The respondents are further grouped based on their ages to identify the preferences of adults and teenagers for the two brands. The two subsets are mutually exclusive and exhaustive. The nominal scale in this case can be effectively used to understand the customer preferences of the respondents in two different age brackets for the two brands. However, this scale cannot be used to do advanced analysis of the responses, such as an analysis to understand how strongly the members of the two groups liked the two brands.

2. **Ordinal Scale**—An ordinal scale is used for ranking the test units or their responses to the variable under consideration. It is used for ordering only and not for comparing. For the example previously mentioned, consider four instead of two brands of soft drinks. Suppose the respondents are asked to rate each brand as one of the following: “extremely bad,” “bad,” “neutral,” “good,” or “extremely
good.” The response of each respondent for all four brands will indicate his or her level of preference.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Response of a respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>Bad</td>
</tr>
<tr>
<td>C</td>
<td>Extremely Good</td>
</tr>
<tr>
<td>D</td>
<td>Extremely Bad</td>
</tr>
</tbody>
</table>

The ordinal scale has been used in this example to compare the four brands of soft drinks by ranking them based on the preferences of the respondents. This scale has limitations, as it cannot be used to determine the distance between the values of customer preference for different brands. So, it is not possible to find out how preferable brand C is when compared to brand A.

3. **Interval Scale**—An interval scale not only contains the characteristics of both the nominal and ordinal scale but also can be used to determine the distance between the items. The degree of difference can be expressed using this scale, but not the ratio. Temperature scales and dates are examples of interval scales.

For the previous response, it can be inferred that the customer prefers brand C the most and brand D the least. Also, the difference between the preference for brand C and brand A can be assumed equal to the difference between the preference for brand B and brand D. Such a scale is called “assumed interval” as the difference between the different descriptors is assumed constant.

4. **Ratio Scale**—Unlike other scales, this scale deals with quantifiable data, and therefore has the concept of absolute zero. Not only does it contain the capabilities of the nominal, ordinal, and interval scales, but it also has the power of comparing the results using ratios. Actual measurements such as speed of a vehicle, age of a consumer, and number of children are all examples of ratio scales. Irrespective of the unit used to measure a particular quantity on a ratio scale, the ratio is always constant. For example, a vehicle traveling at 80 miles/hour is twice as fast as another vehicle traveling at 40 miles/hour. Even if the speed is converted to kilometers, the ratio remains constant.
Questionnaires

A questionnaire is a data collection tool that consists of a set of questions designed to obtain specific information from respondents. Correctly designing the questionnaire is a critical task because a properly designed questionnaire will enable the researcher to collect information that provides a decisive outcome. Questionnaires can be used to test hypotheses, gauge audience preferences, understand market demand for current product concepts, and decide on potential product features that may be attractive to the audience. There are a number of advantages to using a questionnaire, including the following:

- Questionnaires provide an economical and fast way of collecting data from a large audience.
- The results of a well-designed questionnaire can be easily quantified to draw actionable inferences.
- Results can be used to baseline information on various elements that can be compared over time.
- Questionnaires can be used to prove/dispel an existing hypothesis and/or create a new hypothesis.

Even though questionnaires present a quick and economical method of data collection, they are restricted in usage and have the following disadvantages:

- Questionnaires are insufficient when understanding complex issues that require in-depth research (e.g., reasons for a change in consumer perception).
- There is always a risk of interviewees not being truthful in their responses, especially for questions that are of a personal nature or ones that may be deemed embarrassing (e.g., income, how often a person goes to the restroom, etc.).
- Interviewees can misunderstand an open-ended question that is not clearly presented and this may skew the results.
- Questionnaires run the risk of being influenced by the bias of either the person framing the questions or of the person asking them.

Some of the disadvantages of a questionnaire are due to the fact that the questionnaires are open to bias introduced by the interviewer or interviewee. Some of these errors can be removed or reduced by designing the questionnaire effectively.

When designing a questionnaire, several steps are involved including identifying the objectives and hypotheses, framing the questions, selecting question formats and scales, and determining the sequence of questions.

1. **Identify objectives and hypotheses**—The key to designing the right questionnaire is to have clarity about the objectives of the survey. The target audience is identified before deciding the objectives of the questionnaire. Typically, there are two main objectives when using questionnaires to collect data:

   - to obtain relevant and accurate information from the target segment
• to test a current hypothesis or form a new hypothesis for developing a product/service

2. **Frame questions**—The most critical aspect of designing a questionnaire is to ensure that the questions are appropriately framed. For a question to be deemed appropriate for the questionnaire, it needs to fulfill the following criteria:

- The question must be easy to understand and must not be easily misinterpreted by the respondent.
- The answer to each question in the questionnaire should add some value to the overall survey.

3. **Decide on question formats**—Once the type of information to collect and the objectives of the research have been identified, questions that will extract relevant responses from the target segment should be crafted. Questions are typically of two types:

- Closed-ended questions: In such questions, the respondent must choose from among the response options provided for each question.
  
  Example: What is your favorite season?  
  a) Summer  
  b) Autumn  
  c) Spring  
  d) Winter

- Open-ended questions: These questions do not place restrictions on the answers respondents can provide. Thus, open-ended questions provide more varied responses than closed-ended ones. However, the information obtained from such questions takes greater time to analyze.
  
  Example: What is the most thrilling activity you have done in your life?

In addition to crafting appropriate questions, a scale for the responses should be chosen that elicits the type of information desired by the researcher and provides valuable data.

4. **Sequence the questions**—Some general rules for sequencing questions include the following:

- Start with a few generic questions and then move to ones asking for specific information.
- Order questions logically from one step to another.
- Avoid including personal and sensitive questions that would be difficult for the respondent to answer.

A few question formats should be avoided when creating a questionnaire. These include the following:

- Leading questions that are inclined to encourage the respondents to select a particular option
- Ambiguous questions that may be open to interpretation or that can be misunderstood by the respondents
- Sensitive questions that respondents may be reluctant to answer truthfully
- Double-negative questions that may be open to misinterpretation by the respondents
Example of Questionnaires:

A leading consumer electronics and home appliances company, XYZ, is conducting a survey to understand consumer buying behavior. The following are some of the questions included in its survey. In practice, when researchers design questionnaires, they try to balance the number of questions (information sought) with time taken to complete the survey. Also, depending on the quality of the information being sought, they can construct different types of questions.

Instructions: Please read each question below. Check the box next to the response that best matches your answer. Whenever a question says, “Please check all that apply,” please check each answer that applies to you. Your responses are completely anonymous.

1. Have you purchased a new washing machine, refrigerator, air conditioner, TV, or any other consumer electronics or home appliances within the last year?
   - Yes
   - No  → If No, please skip to Question 17.

2. What did you purchase? If you have purchased more than one of the products/appliances listed below during the last year, check the one that you purchased most recently.
   a. Washing Machine
   b. Refrigerator
   c. Air Conditioner
   d. TV
   e. Washer Dryer
   f. Vacuum Cleaner
   g. Water Purifier
   h. Other appliances: _______________

   Please answer the following questions for this particular appliance.

3. Why did you purchase this new appliance? Please check only one.
   - Old one broke
   - Moved into new house
   - Remodeled
   - Needed bigger/better model
   - Didn’t own one
   - Other: ____________________
4. Which company’s appliance(s) did you purchase? Is it
   - Brand 1
   - Brand 2
   - Brand 3
   - Brand 4
   - Brand XYZ
   - Brand 6
   - Brand 7
   - Brand 8
   - Brand 9
   - Brand 10
   - Other: ___________________________________

5. What sources did you use to help decide which make and model to buy? Please check all that apply.
   - Friends/word of mouth
   - In-store materials (brochures, etc.)
   - Salesperson
   - Consumer reports/reviews
   - Technical reviews
   - Information from Internet
   - Reputation of brand/manufacturer
   - Other sources: ___________________________________

6. Are you happy with your purchase?
   - Yes
   - No  ➔ If No, Why? _________________________________________________________

7. What was important to you when deciding on the make and model? Below is a list of factors that might have influenced your decision to buy the particular model you chose. Please rate the importance of each factor by circling a number from 1 to 4, where 1 is extremely important and 4 is not important at all.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Extremely Important</th>
<th>Important</th>
<th>Less Important</th>
<th>Not Important At All</th>
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<tr>
<td>Price</td>
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<td>Size</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Premium features</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Warranty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
8. Did a salesperson explain the long-term costs of owning an appliance due to its energy use?
   - Yes
   - No
   - Not applicable

9. Did you buy an energy-efficient model?
   - Yes
   - No
   - Not applicable

10. How did you know whether or not you were buying an energy efficient model?
    - Don’t know
    - Energy Guide label
    - Consumer reports
    - Sales person recommendation
    - Other: _________________________________

11. Where did you purchase the appliance?
    - Locally-owned business
    - Company dealer
    - Company showroom
    - Big-box retailer
    - Online purchase
    - Other: _________________________________

12. Did you receive a Rebate/Discount on the purchase of this appliance?
    - Yes
    - No

If YES:

13. Was the rebate important in your decision to buy this particular make and model?
    - Yes
    - No

14. What was the amount of the rebate? If you don’t remember, please make your best guess. $
    ________

15. Did you purchase the appliance in EMI?
    - Yes
    - No
16. Are you satisfied with the after sales service provided by the company?

- Yes
- No
- The product is performing satisfactorily and no after sales service has been required.

17. If you were to choose a gift from the following what would you choose? (check three)

- Cell phone (Brand: __________________________ )
- TV (Brand: __________________________ )
- Refrigerator (Brand: __________________________ )
- Washing machine (Brand: __________________________ )
- Stereo system (Brand: __________________________ )
- Air conditioner (Brand: __________________________ )
- Vacuum cleaner (Brand: __________________________ )
- Water purifier (Brand: __________________________ )
- Washer (Brand: __________________________ )
- Dryer (Brand: __________________________ )

18. In your opinion, which is the most effective mode of advertising?

a) TV  b) National newspaper  c) Billboard  d) Magazine  e) Banners and posters  f) Promotional campaigns

19. In your house, who makes the majority of household decisions?

________________________________________

20. How will you rate the following companies on a scale of 1 to 7 according to their visibility (frequency of advertisement seen on TV, newspaper, billboards, etc.)?

(7 means very frequently seen and 1 means rarely or never seen)

<table>
<thead>
<tr>
<th>Brand</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
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<td>6</td>
<td>7</td>
</tr>
<tr>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Brand XYZ</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Brand 7</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Please answer the following questions about yourself. Your answers to these questions, as well as to all the other questions on this survey, are completely anonymous.
Types of Quantitative Techniques

Quantitative techniques are the methods used to collect data from a larger target audience using a structured set of questions. The type of quantitative research depends on which medium can be used to reach the respondents in an optimum manner. The factors that need to be considered are the time and cost.
of the medium used and whether the medium obtains quality data without creating bias. The following types of quantitative techniques are available for data collection:

- **Paper and Pencil Interview (PAPI)**—The Paper and Pencil Interview (PAPI) is a quantitative technique that involves a direct interview of each respondent using a paper-based questionnaire. The use of PAPI has reduced greatly since the introduction of computers. However, it can still be convenient for non-complex questionnaires administered to small sets of people. For example, door-to-door researchers may carry copies with them, or copies may be given out to attendees at a conference or trade show.

- **Computer-assisted Personal Interview (CAPI)**—The Computer-assisted Personal Interview (CAPI) is a quantitative technique in which respondents provide their answers on a computer in the presence of an interviewer. It is considered a personal interviewing technique because the interviewer accompanies the respondent during the process. CAPI has several advantages over other forms of quantitative techniques when the sample size is large. However, this method has its own limitations as it attracts only computer-savvy respondents. This technique is mostly used when a stimulus has to be shown to the respondents and the questions are based on their understanding of the stimulus. It is often more convenient to show the stimulus on a computer screen.

- **Computer-assisted Telephonic Interview (CATI)**—The Computer-assisted Telephonic Interview (CATI) is a quantitative technique that uses computer software and a telephone system to conduct the questionnaire and record the responses. The computerized questionnaire is administered by the interviewer to the respondents over the phone. The interviewer records the responses directly into the software. This technique enables data analysis without the need for transferring responses to the computer and makes it possible for researchers to generate interim reports.

- **Computer-assisted Web Interview (CAWI)**—The Computer-assisted Web Interview (CAWI) is one of the most commonly used quantitative techniques in recent times. The questionnaires are created in software specifically built for web interviews. This interface allows for the insertion of audio-video and links to different web pages. The program changes the flow of questions depending on the respondent’s answers and the available information about the respondent. It is more economical than other quantitative techniques because it does not require the interviewer to be present during the interview.

- **Central Location Test (CLT)**—The Central Location Test (CLT) is a quantitative technique in which face-to-face interviews are conducted at a centralized location such as a room or booth in a shopping mall. It is considered an effective method for testing concepts, products, packaging, and advertising effectiveness, as well as conducting sensory research. The interviewers are well trained to ensure effective data collection.
3.2.3 Outputs

3.2.3.1 Collected Primary Data*

Choosing a particular data collection method depends completely on the research problem and is influenced by the researcher’s knowledge. It is essential for every researcher to identify the major factors that may influence the data collection method—cost, duration, quantity, reliability, and variety of data. The output of this process is the primary data, which can be collected through either quantitative or qualitative research, to solve a research problem. Once the data is collected, the researcher can analyze the nature of the qualitative or quantitative research and determine how that data can be applied to a given research problem’s context.

The researcher should also be able to identify the limitations associated with the data and take necessary actions to ensure that the qualitative or quantitative research is as scientifically valid and reliable as possible. The primary data collected should address all major aspects of the research area—such as demographics; consumer behavior and motives; and social, economic, psychological, and personal characteristics. Choosing an inappropriate research method can impact the validity of the research problem. Therefore, it is always recommended that the research problem and objectives be understood before choosing the appropriate data collection method.

Primary Data collected could be in the following forms:

- Qualitative: transcripts, diaries, projective technique material, audio and video recordings
- Quantitative: completed questionnaires, responses from electronic surveys

Examples of Primary Data:

- GeoPro conducted a series of focus group workshops in order to strengthen the understanding of which aspects of their proposed study will be valuable to the decision-makers. The potential clients, determined through secondary research, were invited to take part in lunch-and-learn sessions hosted by GeoPro. By attending these sessions, the involved clients were given the opportunity to make suggestions and requests surrounding the type of study that GeoPro was to provide. GeoPro now had direct and valuable qualitative input about the requirements and expectations of the potential client group.
- A telecom company collects quantitative primary data from its mobile app users by prompting them to complete a customer satisfaction survey.
The SMstudy® Guide series is developed by VMEdu, Inc., a global education and certification course provider that has educated over 400,000 students world-wide in more than 3,500 companies. It is the result of a collaborative effort from a large number of Sales and Marketing experts with extensive experience, knowledge, and insights from a variety of industries and disciplines.

This second book in the SMstudy® Guide series focuses on Marketing Research, providing a unique process-oriented framework that, when effectively used, ensures a thoughtful and methodical approach to planning and executing Marketing Research projects. These projects, if implemented successfully, provide critical insights for taking key marketing decisions.

Marketing Research is one book in a series of six. Others in the SMstudy® Guide series that can be used to complement the initiatives and tools detailed in this book are Marketing Strategy (MS), Digital Marketing (DM), Corporate Sales (CS), Branding and Advertising (BA), and Retail Marketing (RM).