# Principles of Market Research

#### FROM THE UNIVERSITY OF GEORGIA

Fulfilling the core market research educational needs of individuals and companies worldwide.



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# Marketing Research Core Body Knowledge (MRCBOK™) Learning Objectives

The Market Research Core Body of Knowledge (MRCBOK™) developed by William Neal of SDR Consulting, Inc. and Dr. Malcolm McNiven of the University of Georgia in 1994 directly led to the formation of the MRII.



Ever since, a unique mix of practitioners and academics have periodically reviewed and updated the MRCBOK<sup>TM</sup>, so that it can serve as a firm, contemporary foundation for market researchers. It represents an international consensus of business practitioners on the required fundamentals for research education.

Today, mastery of the MRCBOK™ by taking the *Principles of Market Research* course can lead to industry certification by the Insights Association (IA), Certified Analytics and Insights Professionals of Canada, Intellus Worldwide, and/or The Research Society (formerly AMSRS).

## **Learning Objectives**

#### Introduction to Market Research and the Research Process

After completing this topic you should be able to:

- 1. Describe the market research role and function relative to the role and function of marketing organizations as a whole.
- 2. Name the different types of business decisions in which market research is used by companies to develop strategy and tactics.
- 3. Describe the relationship between strategic decision makers and market research.
- 4. List the six steps in the market research process.
- 5. Discuss the basic marketing information needs and research methods used to address these needs, including ways to collect and analyze relevant information related to a broad spectrum of markets, such as consumer, business, government, healthcare, and institutional.
- 6. Acquire an appreciation of the international dimension and the complexity involved in international market research, including the ways in which research methods and interpretation can differ in global versus local market settings.
- 7. Illustrate how market research can identify the context for communicating (positioning) to the market and leverage the salient points (drivers) for which consumers and other audiences will be most receptive.
- 8. Review the basic issues in product (and services) management, planning and development as related to the product life cycle, brand strategy, product research, and decision making.
- 9. Identify the different types of companies that comprise the market research industry by the services they offer.
- 10. Describe the recent evolution of market research given the advent of emerging data sources (e.g., online data collection and large datasets) and analysis methods (e.g., text analysis, data mining, and modeling).
- 11. Describe the ethical considerations that guide market research activity, including data collection and reporting-, to clients, participants, and the public.

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#### Market Research Design and Data Identification

After completing this topic you should be able to:

- Lead a discussion with clients to define major business problems they are facing, and probe to discover obstacles, challenges, opportunities, and threats.
- 2. Determine what the clients already know and what they must know in order to take the most informed actions.
- 3. Identify appropriate secondary research and apply data analysis in defining the business problems and research objectives.
- 4. Translate essential business problems into cogent research objectives that are tied to specific business actions and success criteria.
- 5. Determine the appropriate level and depth of information required for decision-making, differentiating "nice-to-know" information from "need-to-know" information. Determine what is practical within the time and budgetary constraints.
- 6. Understand what business problems are "researchable" and which are not.
- 7. Describe the processes and approaches to research design and methodology and how these may differ by region in global projects.
- 8. Describe the role of primary and secondary data, the differences between them, and how they can be applied in a synergistic manner to address the business issues.
- 9. Explain the differences between qualitative and quantitative methods, the types of business problems addressed with each, and how the boundaries between the types of methods are blurring.
- 10. Identify and distinguish between the three basic research designs: exploratory, descriptive and causal.
- 11. Create proposals that clearly articulate the business need/context for the research, research design and methodology, analytical processes, project milestones, costs, and timelines. Explain the relationship between cost and time variables and the research process.
- 12. Discuss the ethical issues researchers face when developing a research proposal.

#### Sampling in Market Research

After completing this topic you should be able to:

- 1. Explain how sampling works.
- 2. Discuss the sampling design process: definition of the target population, best modes to reach that population, determination of the sampling frame, selection of sampling technique(s), determination of sample size, and execution of the sampling process.
- 3. Explain the differences between probability and non-probability samples, the benefits, drawbacks, and when each might be used.
- 4. Discuss the major types of probability sampling (simple random, systematic, stratified, and cluster), their benefits, drawbacks, and when each might be used.
- 5. Discuss the major types of non-probability sampling (convenience, quota, and snowball), their benefits, drawbacks, and when each might be used.
- 6. Explain the differences between landline and mobile phone sampling.
- 7. Describe sampling techniques and sources specific to Internet data collection, including mobile research.
- 8. Discuss the survey assignment process and understand the potential bias implications of routing, targeting, prescreening, and prior survey exposure.
- 9. Describe the concept of consistent sampling both in terms of a consistent sample frame and how sample is drawn, and quotas are set against that frame.
- 10. Discuss how a single sample frame is not necessarily connected to a single mode and that having multiple points of contact for the same person can increase response rates.
- 11. Describe how the screener section of the survey, as well as dropouts, data quality, and technical issues, will ultimately impact the "sample" that completes the survey.
- 12. Describe the challenges in obtaining representative samples and how representative samples can be improved at the selection stage or through weighting.
- 13. Describe when to use margin of error calculations and confidence levels when reporting results.
- 14. Explain how to use the principles of sampling to make judgments about representativeness and bias in secondary data.
- 15. Describe the challenges researchers face when developing samples for global studies.
- 16. Identify the ethical considerations in sampling as applied to both end users ("clients") and participants.

#### **Qualitative Market Research**

After completing this topic you should be able to:

1. Explain the differences between qualitative and quantitative market research in terms of objectives, sample characteristics, types of data provided, analysis methods, outcomes and when to choose each.

- 2. List some of the types of business decisions that qualitative market research can be used to inform.
- 3. Give examples of misapplications of qualitative Market Research and explain why it should not be used in these ways.
- 4. Identify the different forms of qualitative market research, including direct versus indirect (observational) techniques, and IDIs versus dyads versus focus groups; understand the relative strengths and weaknesses of each; and understand when each should be used.
- 5. Discuss the use of technology in qualitative market research, including the opportunities offered by mobile technologies.
- 6. List the steps involved in planning and conducting qualitative market research, including determining an appropriate qualitative method, selecting qualitative research partners, developing the tools required to execute the research, and understanding the differences between domestic and international projects.
- 7. Describe how a moderator's guide is different than a questionnaire. Discuss the best practices associated with building a successful moderator's guide and observational report.
- 8. Identify how to select the ideal internal or external moderator for the project and understand which attributes to look for when selecting a moderator.
- 9. Identify how to design a screener used to recruit participants.
- 10. Discuss how to manage client participation in qualitative settings and how to set expectations in the interpretation of results.
- 11. Describe how to design a UX (user experience) study.
- 12. Discuss the fundamental and applied methods of analyzing and summarizing qualitative data.
- 13. Give examples of ethical issues specifically related to the conduct and interpretation of qualitative market research.

#### **Quantitative Data Collection Methods**

After completing this topic you should be able to:

- 1. Demonstrate knowledge of the different quantitative survey methods available to market researchers including online, mobile, telephone, in-person, and mail.
- 2. Discuss the opportunities and challenges presented by the widespread use of mobile devices.
- 3. Select appropriate quantitative methodologies based on the specific project needs.
- 4. Describe techniques for improving survey response rates.
- Explain and classify the different observational methods used by market researchers including in-person observation and passive data collection.
- 6. Describe the relative advantages and disadvantages of observational methods and compare them to survey methods.
- 7. List the key milestones that are required to complete quantitative studies.
- 8. Discuss the key considerations involved in implementing surveys and observational methods when doing global market research.

#### Measurement and Questionnaire Design

After completing this topic you should be able to:

- 1. Explain the multiple steps in designing a questionnaire and the guidelines that should be followed at each step.
- 2. Explain how the choice of data collection method and whether using an interviewer or self-administered format influences questionnaire design.
- 3. Describe potential sources of bias in developing a questionnaire and how to minimize them.
- 4. Describe the methods questionnaire writers use to engage participants, encourage response and make the survey-taking experience more enjoyable.
- 5. Describe the key issues to consider when designing questionnaires for mobile devices.
- 6. Identify the best practices for designing observational forms of data collection.
- 7. Discuss the primary scales of measurement and differentiate among nominal, ordinal, interval, and ratio scales. Be able to select the most appropriate scale(s) based on analytic requirements.
- 8. Classify scaling techniques as comparative and noncomparative, and describe the comparative techniques of paired comparison, rank order and constant sum.
- 9. Describe the non-comparative scaling techniques distinguishing between continuous rating scales and itemized rating scales. Identify two commonly used itemized scales: Likert, and semantic differential.
- 10. Discuss the criteria used for scale evaluation and how to assess reliability and validity.
- 11. Discuss the use of software for designing questionnaires.
- 12. Discuss the considerations involved in designing questionnaires and implementing scaling techniques for global research.
- 13. Explain the ethical issues related to questionnaire design and measurement scales.

#### **Introduction to Data Analysis**

After completing this topic you should be able to:

- Describe the process of creating an analysis plan, and give examples of alternative analytic purposes (e.g., explanatory versus confirmatory).
- 2. Describe the key data sources.
- 3. Name and define the key data types (nominal, ordinal, interval, ratio, etc.).
- 4. Explain the process of matching analytic techniques to different situations and needs, and give examples.
- 5. Summarize descriptive and visual approaches used to familiarize oneself with the data and to identify problems with the data.
- 6. Explain how to assess the impact of missing responses, and select and apply appropriate remedies.
- 7. State the reasons for and methods of statistically adjusting data; e.g., weighting, variable re-specification, and scale transformation.
- 8. Assess the characteristics of the distribution of the data and explain the implications of normality, non-normality, skewness, and multimodal data.
- 9. Illustrate the process for creating and testing hypotheses.
- 10. Compare and contrast the differences between type I and type II errors, and their potential impact on business decisions.
- 11. Describe the difference between statistical and business significance in the context of group comparisons, and explain the factors that have an impact on statistical significance.
- 12. Describe the difference between association and causality, and the potential impact on business decisions and outcomes.
- 13. Identify the major computer programs in current use in market research for the analysis of data.
- 14. Explain how to turn findings into market research conclusions, link findings to business decisions, and create actionable recommendations.

#### **Advanced Analytic Techniques**

After completing this topic you should be able to:

- 1. Describe a common framework that distinguishes between multivariate analytic techniques and helps guide the decision of what technique to use when, based on the following factors—dependence, interdependence, number of dependent variables, type of relationship, item being analyzed, nature of metric, and the nature of the business question being addressed.
- 2. Compare and contrast the different patterns that express the relationship between two variables (e.g., nonlinear, linear, curvilinear, s-shaped, etc.).
- 3. Distinguish between interpolation and extrapolation.
- 4. Describe what Factor Analysis is, what it does, what type of input data is generally acceptable, and common applications in market research.
- 5. Describe the concept of Segmentation Analysis, what it does, what type of input data is generally acceptable, various techniques on how one may cluster data (e.g., K-Means, RFM, Pareto, etc.) and common segmentation applications in market research.
- 6. Describe what Perceptual Mapping (including the use of Multidimensional Scaling) is and common applications in market research.
- 7. Describe the different techniques used to measure association (i.e., Correlation, Simple Regression, and Multiple Regression), what they do, what type of input data is generally acceptable, and common applications in market research.
- 8. Describe Conjoint Analysis and Choice Modeling, what they do, what type of input data is generally acceptable, and common applications in market research.
- 9. Describe more advanced measures of association (e.g., Logistical Regression and Structural Equation Modeling), what they do, what type of input data is generally acceptable, and common applications in market research.
- 10. Describe what Discriminant Analysis is, what it does, what type of input data is generally acceptable, and common applications in market research.
- 11. Identify the most popular machine learning techniques and describe how researchers can use them to generate insight.
- 12. Describe what neural network analysis is, what it does, what type of input data is generally acceptable. Describe common applications in market research.
- 13. Describe the concept of Marketing Mix Modeling, what it does, what type of input data is generally acceptable, techniques that are used (e.g., multiple regression, Bayesian regression, etc.) and common applications in market research.
- 14. Describe Time Series Analysis, what it does, what type of input data is generally acceptable, what techniques are used, and common applications in market research.
- 15. Describe the difference between statistical significance and business significance.

### Working with Secondary Data: Syndicated and Big Data

After completing this topic you should be able to:

- 1. Discuss how the integration of technology into our daily lives is creating new opportunities for market researchers.
- 2. Define secondary data as distinct from primary data.
- 3. Describe the various types of data sources available to researchers including syndicated data, transaction data, social media data, and Internet of Things data, emphasizing the strengths and weaknesses of each.
- 4. Describe the various components of the "big data" ecosystem, reinforcing that all data sources-primary and secondary-have compromises and the researcher's responsibility to select the "best available data" given the business issue being studied.
- 5. Identify some of the typical barriers a researcher encounters in gaining access and using secondary data.
- 6. Discuss the related concepts of data governance, data curation, and data provenance and their importance in assessing the quality of secondary data.
- 7. Discuss the value and the challenges that can be realized by linking primary and secondary data, including the role of data brokers.
- 8. Discuss the ways in which traditional analytic techniques can be applied to secondary data.
- 9. Describe what is meant by machine learning and its relevance when working with large secondary datasets.
- 10. Discuss the challenges and emerging solutions that researchers face when dealing with unstructured data-text, photographs, video, etc.
- 11. Discuss the challenges the researcher faces when using secondary data in a global context.
- 12. Describe the ethical issues, especially related to privacy and confidentiality, when using secondary data.

### **Communicating Research Results**

After completing this topic you should be able to:

- 1. Describe the role of the market researcher as a consultant and source of market information.
- 2. Describe the material review and analytic processes required as the foundation of an effective report and presentation with emphasis on data synthesis.
- 3. Explain the difference between a report and a presentation, describing the level of detail that is typically required for different audiences.
- 4. Name at least three elements of effective oral presentations.
- 5. Give examples of actionable, business-oriented recommendations and contrast those with examples that are not actionable or business-oriented.
- 6. Contrast the differences between presenting facts and opinions and how each should be handled in a research presentation.
- 7. Identify options available for online reporting and the implications for both the researcher and the client.
- 8. Describe the role and appropriate use of graphics in business presentations, from the typical types of graphs used as well as newer techniques (infographic and visualizations).
- 9. Describe how to present findings in a manner consistent with the client's culture.
- 10. Describe effective presentation techniques for sharing complex statistics with business audiences that are not statistically oriented.
- 11. Describe the advantages and disadvantages of integrating findings and results from multiple sources into your presentation.
- 12. Discuss the ethical issues related to the reporting and interpretation of research findings.

#### Global Market Research

After completing this topic you should be able to:

- 1. Describe the framework of internal and external environmental factors marketing, sociocultural, governmental, legal, economic, structural, and informational that affect global research, and explain how each may impact steps in the research process.
- 2. Describe the problems and various approaches involved in the design and management of global research projects, including the coordination of fieldwork.
- 3. Give examples of secondary data sources—particularly Internet resources—available for global research and factors that should be taken into account when evaluating them.
- 4. Describe the application (including availability and appropriateness) of different data collection methods (telephone, in-person, online, mobile, mail survey, etc.) in global research.
- 5. Describe how sample options available for online and mobile research vary globally.
- 6. Explain the role qualitative research plays in global research and give examples of differences among countries when using qualitative methods globally.
- 7. State special challenges of executing experimental (causal) research in a global setting.

- Identify problems in designing questionnaires with regard to establishing equivalence of scales and measures as related to
  construct, operational, scalar, and linguistic equivalence when translating (back and parallel) questions into one or more foreign
  languages.
- 9. Demonstrate knowledge of key issues relating to global online research projects including translations, incentives, and the specific challenges of languages requiring double-byte characters.
- 10. Describe the variety of issues that affect interpretation of the results of global research and identify some of the tools to deal with them.
- 11. Explain the different ethical and legal issues that apply in different parts of the world and how these issues may affect research projects and outcomes.
- 12. Understand the culture dimensions that affect cross cultural and global research

### **Emerging Methods and the Future of Market Research**

After completing this topic you should be able to:

- 1. Describe how advances in technology are changing how people live and work.
- 2. Review how social media is impacting both marketing and market research.
- 3. Explain how the shift of power to consumers is radically altering the information that businesses need for their companies to be successful.
- 4. Describe the new research opportunities and attendant challenges with the use of mobile devices.
- 5. Summarize how the market researcher's approach to measurement is changing from a focus on attitudes, opinions, and intentions to measuring and understanding behavior.
- 6. Discuss the increasing use of automation and artificial intelligence, noting their potential advantages and disadvantages.
- 7. Describe how do-it-yourself (DIY) research tools have created new challenges and opportunities for market researchers.
- 8. Describe a number of new methodologies, distinguishing between those that already are or are likely to soon be mainstream versus those that are still niche.
- 9. Describe ways to help clients understand and manage the risks inherent in "hot" new technologies and methods.
- 10. Give examples of how technology continues to impact sampling.
- 11. Discuss the pros and cons of surveys as a source of insight.
- 12. Explain the advantages and disadvantages of conducting in-person qualitative research versus digital qualitative approaches.
- 13. Discuss how the explosion of new research methods and data sources is mandating the use of multiple methods and a need for synthesis.
- 14. Explain how the scope and roles of market research are changing and expanding. Discuss the impact on research professionals from both the client and research agency perspectives.

#### **Ethical and Legal Issues in Market Research**

After completing this topic you should be able to:

- 1. Explain why solid ethical practices are essential to the long-term success of market research and the responsibilities researchers have to the key stakeholders—research participants, clients, the general public, and the research profession.
- 2. Describe the concept of harm and how it applies to those whose data we collect and/or process.
- 3. Describe the concept of personal data sometimes called personally-identifiable data or PII and its evolution over time.
- 4. Describe some of the ways which a transition from primary data collection to increased reliance on secondary data is changing our ethical responsibilities to those whose data we analyze.
- 5. Discuss the universal principles of privacy and data protection as applied in market research in different countries and cultures.
- 6. Distinguish between ethical requirements and legal requirements.
- 7. Describe what a privacy impact assessment or PIA involves.
- 8. List the major industry and professional associations for market research practitioners and organizations worldwide.
- 9. Explain how the market research industry's commitment to self-regulation creates a unique set of legal and ethical obligations.
- 10. Cite major sources of guidance for researchers concerned about their legal and ethical responsibilities.

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