



Principles of Pharmaceutical Market Research

FROM THE UNIVERSITY OF GEORGIA

Fulfilling the core market research educational needs of individuals and companies in the pharmaceutical, biotech, and medical device industries worldwide

*Presented through a unique
partnership between*



The University of Georgia

MRII MARKETING RESEARCH
INSTITUTE INTERNATIONAL



How to Contact Us:

Phone: +1-706-542-3537 or

1-800-811-6640 (USA only)

E-Mail: questions@georgiacenter.uga.edu

Marketing Research Core Body Knowledge (MRCBOK®) Learning Objectives

MODULE 1 — Marketing and Its Interface with Market Research

The purpose of market research is to improve marketing and business decision making. This module gives you a solid grounding in the principles of marketing management and an introduction into its relationship with market research.

Learning Objectives: After completing this module you should be able to:

- Define the marketing management tasks and planning processes that are used to deliver value to customers and build long-term relationships with customers.
- Define and explain the basic marketing information needs and research methods used to analyze and segment consumer behaviors in consumer, business, government, and institutional markets.
- Explain the influences on, and segmentation (categorization) of, customers in consumer, business, government, and institutional markets.
- Define and explain 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.
- Describe, and identify the appropriate use of, advertising, sales promotions, public relations, direct mail and Internet-based communications when developing an integrated marketing campaign.
- Define and explain methods of managing, motivating, and controlling sales personnel.
- Define and explain the need for marketing intermediaries, and explain the selection and management of channels of distribution both physical (wholesalers and retailers) and virtual (Web-based channels) and how these might result in channel conflict.
- Define and explain the supply, demand, and cost influences in the pricing of goods and services.
- Define and explain the methods for entering global markets after appropriate market research related to product adaptation, distribution strategy development, pricing related to cost and growth factors, and development of an advertising and promotion strategy for a specific international market.
- Recognize and define how primary and secondary information relating to products and service levels improve marketing decisions related to price, physical and virtual communications, distribution, and segmentation strategy and tactics.

MODULE 2 — Introduction to Market Research and Planning the Research Process

This module provides an in-depth discussion of how research informs marketing and business decision making and reduces business risk. Learn how to develop research proposals, select the most appropriate research approaches to address a study's objectives, and communicate the value of market research to business managers.

Learning Objectives: After completing this module, you should be able to:

- Explain the relationship between market management and market research.
- Define Market Research
- Ascertain the process by which business management defines essential problems and major challenges.
- Be able to lead a discussion with business management regarding the major business decisions they are facing. Be able to probe in order to discover their obstacles, challenges, opportunities, threats. Find out what they know already and what they must know in order to take the most "informed" actions.
- Translate essential business problems and challenges into cogent research objectives that are tied to specific business actions or decisions.
- Determine the appropriate level and depth of information required for decision-making and differentiate "nice-to-know" information from "need-to-know" information.
- Be able to explain clearly the value of market research and its impact on reducing risk in business management decision making.

MODULE 3 — Research Design

There are many categories of research design, such as exploratory versus quantitative, primary versus secondary, and experimental versus non-experimental. This module compares and contrasts alternative approaches, and discusses when each is appropriate.

Learning Objectives: After completing this module, you should be able to:

- Define research design and identify its role in the market research proposal.
- Identify and distinguish between the three basic research designs: exploratory, descriptive and causal.
- Identify typical sources and application of secondary research data.
- Explain differences between primary research approaches in meeting research objectives (both qualitative and quantitative).
- Define cross-sectional and longitudinal designs and identify at least two advantages for using each design over the other.
- Compare and contrast experimental versus non-experimental research designs.

- Name at least two disadvantages to laboratory experiments compared to field experiments.
- Explain why extraneous variables pose a threat to internal and external validity and what affect extraneous variables may have on dependant variables in an experimental design.
- Identify and explain the major sources of error in a research design.
- Identify the phases of the market research process that are included in a market research proposal.
- Create proposals that clearly articulate the business need/context for the research, research approach, costs and timelines. Explain the relationship between cost variables and research process.

MODULE 4 — Sampling

Researchers rarely survey all members of the population. Rather, they draw samples from a target population or populations, from which they make inferences and statistical projections. This module discusses the principles of developing population samples, alternative sampling methods, and the statistical concepts that play a role in sample size composition and determination.

Learning Objectives: After completing this module, you should be able to:

- Identify the differences between a sample and a census and the reasons for using each.
- Understand the five elements of the sampling process.
 - Define the target population
 - Determine the sampling frame. Identify the different sources for samples, the types of sample available, and when to use each source.
 - Choose a sampling method. Explain the differences between probability and non-probability samples, the benefits and drawbacks of each, and when each might be used. Describe the different sampling techniques for non-probability and probability samples.
 - Determine the sample size. Understand the statistical concepts that play a role in sample size determination.
 - Carry out the sampling process. Explain the effect of incidence and completion rate on initial sample size. Identify the impact of non-response on sample adequacy and methods to adjust for non-response. Describe the processes and procedures for improving response rates.
- Describe Internet sampling techniques and issues.

MODULE 5 — Data Collection Methods

A wide variety of data collection methods exists for both exploratory and quantitative research studies. This module compares and contrasts these alternative methods, provides guidance on which method to use based on a study's research objectives, and outlines how to improve survey response rates.

Learning Objectives: After completing this module, you should be able to:

- Select appropriate survey methodologies based on specific business problem being researched. Be able to differentiate when qualitative or quantitative methods are required and within each category select the most relevant methodology (e.g. qualitative: focus groups vs. in depth interviews; quantitative: Web based survey vs. telephone).
- Demonstrate knowledge of various qualitative methods (focus groups, depth interviews, longitudinal panels, threaded bulletin board discussion groups, etc.) and identify the major reasons for using qualitative techniques.
- Differentiate between individual and group interviews, describe their strengths & weaknesses, and describe the typical uses of both.
- Describe the different data collection methods and the best circumstances for using each type.
- Understand how research is widely seen as suitable for the Internet modality and how it is not seen as suitable, along with an appreciation of the main issues in the debate about suitability.
- Understand the key milestones that are required to complete online quantitative and qualitative studies.
- Describe the different observational methods and when to use them.
- List the pros and cons of using surveys to obtain market information.

MODULE 6 — Measurement Approaches

There are many different ways to format a questionnaire and construct survey questions. Choices depend on whether you are conducting exploratory or quantitative research and the nature of the data collection method you select. This module addresses those issues and the types of measurement scales most appropriate for a specific study.

Learning Objectives: After completing this module, you should be able to:

- Explain the process by which questionnaires (survey instruments) are developed with each survey question tied to specific objectives, information and analytical requirements
- Differentiate among the many questionnaire design formats based on survey methodology and analytic requirements. (For example, select appropriate

questionnaire formats for various types of qualitative research such as focus groups or in-depth interviews; or for various types of quantitative research, such as self-administered Web-based questionnaire or interviewer administered via telephone).

- Identify scaling techniques and be able to select the most appropriate ones based on analytic requirements.
- Explain how to apply the various data collection methods based on target populations and measurement needs..

MODULE 7 — Understanding Data Analysis

You need to select the most appropriate statistical methods when projecting your findings to target populations and determine whether different groups' answers to survey questions are significantly different from each other. This module focuses on alternative statistical analysis methods and developing a data analysis plan.

Learning Objectives: After completing this module you should be able to:

- Describe the procedure for creating a data analysis strategy, a data preparation plan, and the factors influencing the process.
- Explain the data preparation process and the methods used to prepare raw data for analysis.
- Describe proper methods used to treat missing responses: neutral value substitution, imputed response, case-wise deletion, pair-wise deletion.
- State the reasons for, and methods of, statistically adjusting data: weighting, variable re-specification, and scale transformation.
- Explain the frequencies distribution and the use of cross tabulations to explore data.
- Name and explain the correct procedures for calculating descriptive and summary statistics (including mean, median, and standard deviation) for the various types of data (i.e., ratio, interval, ordinal, and nominal).
- Describe the process for creating and testing hypotheses and then turning the findings into market research conclusions.
- Discuss the difference between statistical significance and managerial significance and explain the factors that have an impact on statistical significance.
- Describe common univariate and bivariate statistical tests (e.g., z test, t test, chi-square) used in market research and explain when they are appropriate and when they are not.
- Compare and contrast the differences between Type I error and Type II error and their impact on managerial decisions.
- Identify the major computer programs in current use in market research for the analysis of data.

MODULE 8 — Advanced Data Analysis

This module serves as a primer for some of the more advanced statistical methods you may need as a researcher, such as multiple regression, cluster analysis for segmentation, and factor analysis. You are not expected to memorize complicated formulas. Rather, this module teaches the principles behind commonly used advanced statistical methods and when to use them.

Learning Objectives: After completing this module you should be able to:

- Distinguish the major multivariate data analysis procedures commonly used in market research and their typical uses: e.g., regression, factor analysis, clustering, etc.
- Explain the differences between dependence and interdependence techniques.
- Explain correlation and partial correlation and their relationship to causality.
- Describe simple regression and multiple regression and in what situation you would use them.
- Describe what factor analysis is and its uses and misuses in market research.
- Describe what cluster analysis is and how to use it for market segmentation.
- Outline the uses of conjoint analysis in market research.
- Describe how to apply advanced statistical tools to achieve research objectives.

MODULE 9 — Communicating Research

The best research designs and data analysis will not have the desired impact if you do not communicate the study's findings in an effective and motivating manner. This module helps you translate research findings into reports and presentations that grab the audience's attention, address the study's business purposes and research objectives, and offer sound and useful recommendations.

Learning Objectives: After completing this module you should be able to:

- Name at least 3 elements of effective oral presentations.
- Describe the transitions from analysis of data to the formation of information, to the development of conclusions, and to the development of recommendations based upon research.
- Give examples of actionable, business-oriented recommendations, and contrast those with examples that are not actionable or business-oriented.
- Contrast the differences between presenting facts and opinions and how each should be handled in a research presentation.
- Identify options available for online reporting and the implications for both provider and recipient.
- Describe the role of graphics in business presentations, explain the typical types of graphs used in market research presentations, and discuss the appropriate use of each type of graph.

- Describe the role of the market research professional as a consultant.
- Understand the skills and behaviors needed to become an ongoing center point for marketing information.

MODULE 10 — Global Market Research

As more businesses pursue international and global markets, it becomes critical for market researchers to be well versed in conducting research outside their home countries. Different countries' customs and cultures significantly influence research designs — from drawing respondent samples to developing survey questions.

Learning Objectives: After completing this module you should be able to:

- Describe the framework of environmental factors — marketing, sociocultural, governmental, legal, economic, structural, and informational — that affect international research, and explain how each may impact steps in the research process.
- Describe the problems and various approaches involved in the management of international research projects, including the coordination of fieldwork.
- Give examples of secondary data sources — particularly Internet resources — available for international research and factors that should be taken into account when evaluating them.
- Describe the application (including availability and appropriateness) of telephone, personal, and mail interview methods in international research.
- Describe how sample options available for Internet research vary internationally.
- State how persons of different socioeconomic types can be identified and classified for sampling and data-interpretation purposes and identify reasons why different methods may be required in different countries.
- Explain why qualitative research plays a crucial role in international research and give examples of differences among countries when using qualitative methods internationally.
- State special challenges of executing experimental (causal) research in an international 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.
- Demonstrate knowledge of key issues relating to international online research projects including translations, incentives, and the specific challenges of languages requiring double-byte characters.
- Describe the variety of issues that affect interpretation of the results of international research and identify some of the tools to deal with them.

- Explain the different ethical and legal issues that apply in different parts of the world and how these issues may affect research projects.
- Understand the culture dimensions that affect cross culture and international research.

MODULE 11 — Trends in Market Research

This module explores how the research industry is evolving in response to external forces. This module attempts to keep pace with the rapid rate of technological change and increased attention being directed to truly new research techniques:

- Web-based technology and Web mining
- Changes in market research data collection methods and techniques
- Emergence of social media research applications
- New qualitative techniques and hybrid service offerings
- Privacy concerns
- Data restrictions

Learning Objectives: After completing this module you should be able to:

- Describe how the Web has dramatically changed the conduct of market research.
- Explain how advances in technology are affecting market research.
- Outline how social media is impacting both marketing and market research.
- Explain how the shift of power to consumers is radically altering the information needs for business executives and market research.
- State how the scope and roles of market research are changing and expanding, and the impact on research professionals from both the client and research agency perspectives.
- Explain the impact of market research firm/agency consolidation on the industry.

**For more information about the
Principles of Pharmaceutical Market research,
contact us at questions@georgiacenter.uga.edu
or by telephone at +1-706-542-3537.**

*All contents copyright © 2013,
The University of Georgia Center for Continuing Education.
All rights reserved.
Details subject to change without notice.*