Introduction to Market Research

Introduction to Market Research

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Land acknowledgement

PAUL CARL

As educators and students living in the area known as Ka'tarohwi/Àkàdanakwìng, now called Kingston, it is our responsibility to acknowledge that we live and gather to learn on the traditional lands of the Anishinabe (Mississauga, Algonquin) and Haudenosonee (Kanien'keha (Mohawk)) nations. We also acknowledge that these nations still are present on this territory.

We agree to live and learn in a respectful way with all of Creation and respect the treaties of these nations.

As some of us live and learn in other territories, we will acknowledge and respect the nations and all treaties of the territory we live in. We are committed to acting on our acknowledgement by supporting Indigenous healing, sovereignty, and self-determination.

Overview

The intention of the Introduction to Market Research to curate, develop and share the steps to undertake a market research project in a Canadian context. This resource has been developed to be used as a complete course of ten modules or as individual modules, as your context requires. The ten modules are as follows:

1. What is market research and why does it matter?
2. Steps to designing a market research project
3. Indigenous market research
4. Types of market research
5. Identifying a market research problem
6. Identifying target population and sample
7. Quantitative research and how to design a survey
8. Qualitative research and how to design a focus group
9. Data analysis and presenting the research findings
10. AI and market research

Project team

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Project background

Market Research is a core component of any marketer's tool box, and is included in Ontario-based college curriculum for many diploma and certificate-level courses. The development of this open educational resource is intended to provide anyone – both instructors and students – looking for open tools to learn more about market research in a contemporary Canadian context.

Accessibility features

We are actively committed to the accessibility and usability of this textbook. Every attempt has been made to make this OER accessible to all learners and is compatible with assistive and adaptive technologies. We have attempted to accessible learning activities and alternative text.

The web version of this resource has been designed to meet Web Content Accessibility Guidelines 2.0, level AA. In addition, it follows all guidelines in Appendix A: Checklist for Accessibility of the *Accessibility Toolkit – 2nd Edition*.

If you are having problems accessing this resource, please contact us at jfossitt@sl.on.ca

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- The location of the problem by providing a web address or page description
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- The computer, software, browser, and any assistive technology you are using that can help us diagnose and solve your issue (e.g., Windows 10, Google Chrome (Version 65.0.3325.181), NVDA screen reader)

Abstract

Market research is information that helps marketers understand customers, competitors, and changes in consumer behaviour to help make more informed decisions. The goal of this resource is to help new and emerging marketing students to understand why market research matters and to understand the components of identifying a marketing research problem, designing a research framework, executing the research, and analyzing the data with the ultimate goal to be able to make data-driven decisions. This resource will cover primary and secondary research tools as well as qualitative and quantitative approaches within a Canadian context. Over the course of nine modules, students will learn basic market research skills that will help them design a market research project.

Learning objectives

After completing this course, participants should be able to:

1. Define the steps to design a market research project
2. Describe some ways to approach research with Indigenous peoples
3. Identify a market research decision problem.
4. Explain the difference between primary and secondary research
5. Compare quantitative research tools describe how to write a survey
6. Recognize qualitative research tools and best practices for focus groups
7. Illustrate how to use and share research findings to inform recommendations
8. Evaluate AI tools for for use in marketing and market research.

Resources

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Funding declaration

This resource funded by the Government of Ontario. The views expressed in this publication are the views of the author(s) and do not necessarily reflect those of the Government of Ontario.

Personas in this book

Throughout this course, we will use a number of user personas that represent a variety of folks who may live in areas across Canada. These personas are not based on real people, but rather on a snapshot of a few different types of people who might live in our neighbourhoods. User personas are fictional representations (based on real user research) of different types of users that help understand their needs, behaviours, and motivations. User personas originated in the field of user-centred design and were popularized by Alan Cooper in the 1980s as a method of guiding software development. This course will make use of a number of user personas that represent a variety of folks who *may* live in areas across Canada.

Here are the fictional personas that will bring some of the concepts of market research to life thought this resource:

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Isabella (she/her)

Background: Isabella, 49, lives on a farm in rural Saskatchewan. She inherited the farm from her parents and is passionate about sustaining her family's legacy. Isabella manages a small-scale organic produce business alongside her husband. She's motivated to learn more about marketing to expand their reach beyond local farmer's markets.

Education: Isabella attended a community college and graduated with an Agriculture diploma.

Social values: Isabella is passionate about her small, rural community and supports sustainable living and local food.

Hobbies and Interests: Isabella doesn't have a lot of free time due to her work schedule as a farmer, but is passionate about 4-H and teaching young people about farming, gardening, food preparation and food sovereignty.

Marketing Goals: Isabella's goals are to expand some of her organic honey and prepared preserves beyond farmer's markets sales.

Challenges: Limited access to high-speed internet for online learning, understanding urban consumer behaviours, and competition with larger commercial farms.

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Daniel (he/him)

Background: Daniel, 30, resides in a suburban neighbourhood near Toronto. He works as a marketing coordinator for a mid-sized tech company. He's keen on enhancing his market research skills to identify emerging consumer trends and refine their company's product positioning.

Education: Daniel has a bachelor's degree in commerce from an Ontario university. He is considering pursuing an MBA in the future.

Social values: Daniel is very close to his family, who live in a small town outside of Toronto. He wants to ensure that he can help provide support for his grandparents and parents as they age and he isn't interested in having children of his own. Daniel is still in touch with friends from grade school, although most of them still reside in the small town where he grew up.

Hobbies and Interests: Daniel loves to listen to marketing podcasts, and likes to save up for summer vacations throughout Canada. Daniel is interested in participating in marketing or tech-related professional groups, forums, or associations to network, exchange ideas, and gain insights from industry peers.

Marketing Goals: Improve consumer segmentation strategies, utilize data analytics for better decision-making, and understand the impact of socio-economic factors on consumer behaviour.

Challenges: Balancing work commitments with studies, navigating complex data analysis tools, and applying market research findings within the tech industry.

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Maya (she/they)

Background: Maya, 28, lives in downtown Vancouver and works as a freelance graphic designer from her home office. Maya is a single mother with a small child and they rent the top floor of a home. She's eager to delve into market research to broaden her skill set, seeking to offer comprehensive branding services to her clients.

Education: Maya has a college diploma in graphic design.

Social Values: Maya is a first generation Canadian, with parents from another country. Maya is passionate about teaching her children about cultural traditions that are important to her and her parents, who have since passed away.

Hobbies and Interests: Maya doesn't have much time for hobbies, as she spends most of her free time running errands and taking her small child to swimming lessons or playdates. Maya enjoys yoga but does it at home using an app, as she isn't able to get away from her house except on brief breaks during the day when her daughter is at preschool.

Marketing Goals: Learn how market research can enhance design choices, understand client target audiences better, and offer data-driven design solutions.

Challenges: Juggling multiple freelance projects, finding time for additional learning, and applying market research findings effectively in design projects.

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Alex (they/them)

Background: Alex, 54, is an entrepreneur in Montreal who owns a small chain of artisanal coffee shops. Alex grew up in western Canada, but moved to Montreal several years ago. Alex speaks English as a first language, but also speaks French fluently. Alex lives with their partner in a condo in downtown Montreal.

Education: Alex has a Master's Degree in English, and doesn't have any formal training in business or entrepreneurship. Alex worked at a

coffee shop for many years and used that experience to create a chain of coffee shops that specialize in free trade coffee and vegetarian food.

Social Values: Alex is passionate about food and sustainable living, and they work toward building a business that pays a living wage and has a minimal impact on the environment.

Hobbies and Interests: Alex is an avid cyclist and enjoys active vacations with their partner and friends. Alex volunteers for a local climate action organization as a member of their board of directors.

Marketing Goals: Understand customer preferences in the coffee industry, identify opportunities for expansion or diversification, and fine-tune marketing strategies.

Challenges: Limited resources for hiring specialized market research professionals, interpreting market trends accurately, and implementing findings on a small budget.

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Daraja (she/her)

Background: Daraja, 22, is a university student living in Calgary. She's pursuing a degree in business administration and aims to specialize in marketing. Her interest in market research stems from a desire to understand consumer behaviour and its impact on business decisions.

Education: Daraja has a high school diploma from another country and moved to Calgary to pursue her Bachelor's degree. She is in her third year of school.

Social Values: Daraja is passionate about being the first person in her family to be in Canada and to be able to pursue a university degree.

Hobbies and Interests: Daraja works part-time to help with expenses, so doesn't have a lot of time to pursue hobbies and extra-curricular activities, but she enjoys cooking and making art when time allows.

Marketing Goals: Gain foundational knowledge in market research methodologies, apply theoretical concepts to real-world scenarios, and prepare for a career in marketing research or consultancy.

Challenges: Balancing coursework with additional learning, applying theoretical knowledge practically, and gaining industry exposure while studying.

References

Singleton, M. (n.d.). *User Personas*. OERTX. https://oertx.highered.texas.gov/courseware/lesson/4914/overview

Stokes, R. (2018). *eMarketing: The essential guide to marketing in a digital world* (6th ed.). Quirk eMarketing. CC BY-NC-SA 3.0

PART I

MODULE 1: WHAT IS MARKET RESEARCH AND WHY DOES IT MATTER?

Learning Objectives

In Module 1, students will learn how to:

1. Define the purpose of market research, emphasizing its role in comprehending consumer behaviour, industry dynamics, and competitor analysis.
2. Explain the ethical principles associated with market research involving human participants, including adherence to guidelines outlined in the TCPS 2 (Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans).
3. Recognize and articulate the significance of privacy and confidentiality in the context of market research data collection.
4. Demonstrate an understanding of how market research contributes to the comprehension of consumer behavior, industry shifts, and competitive analysis.
5. Interpret the ethical principles within the TCPS 2 and grasp their implications for conducting market research involving human participants.
6. Explain the importance of maintaining privacy and confidentiality throughout the process of market research data collection.

1.1: Introduction to Market Research

The word **research** refers to the process of looking for answers to problems. In the context of marketing, these problems are typically related to changes in consumer and competitor behaviour. These changes can be caused by trends, such as Tiktok, unplanned global changes like the COVID-19 pandemic or climate change, or planned changes, such as the release of a new iPhone. Market research often focuses on consumer needs and preferences, including what consumers buy and how much they are willing to pay for goods and services, as well as identifying the advantages and disadvantages of competitors.

This is important because businesses and organizations across a wide range of industries need to know who they are reaching—and sometimes even more crucially, who they are not reaching.

The following are some reasons why market research should be considered:

- To gain insights into your consumers, this can include:
    - What customers want and need from a brand
    - What customers like and dislike about the brand
    - Why customers buy the brand's goods or services
    - Why potential customers might choose one brand over another
    - Why (or why not) customers make repeat purchases
- Understanding the changes in your industry and business
- Discovering new market trends
- Finding new potential sales avenues, customers, and products
- Finding and engaging new audiences
- Allowing customers to inform the strategic direction of the business

If marketers are able to understand customers and the greater business context, they will be able to market more effectively, meet their needs better, and drive more positive sentiment around their brand. All of this adds up to happier customers and, ultimately, a healthier bottom line.

1.2 Ethical Issues in Market Research

Ethics is the branch of philosophy that is concerned with morality—what it means to behave morally and how people can achieve that goal. It can also refer to a set of principles and practices that provide moral guidance in a particular field. There are a variety of ethical standards in business, medicine, teaching, and market research. Many kinds of ethical issues can arise in research, especially when it involves human participants.

Here is a video that explains the difference between ethics and law, and introduces the concept of ethics in research.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=138#oembed-1

In Canada, there is a best practice for ethics in research created by the Government of Canada, called the Panel for Research Ethics. This panel develops, interprets and implements the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, known as the TCPS 2.

The guidelines in the TCPS 2 are based on the following three core principles:

1. Respect for Persons: This includes respecting the autonomy of research participants by ensuring free, informed, and ongoing consent as well as protecting those "incapable of exercising autonomy because of youth, cognitive impairment, other mental health issues or illness."
2. Concern for Welfare: This includes ensuring that participants are not exposed to unnecessary risks, considering participants' privacy and maintaining their confidentiality, as well as providing participants with "enough information to be able to adequately assess risks and potential benefits associated with their participation in the research."
3. Justice: This refers to the obligation to treat people fairly and equitably, including by considering the vulnerability of participants and ensuring that

historically marginalized groups (including ethnocultural minorities) are not unjustly excluded from research opportunities.

Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans

The Panel for Research Ethics offers a free certification to understand the guidelines of working with human participants in research. Known as TCPS 2: CORE-2022, this certification is open to anyone. This course can be accessed here.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=138#h5p-1

References

Brown University. (2022). *Research Ethics*. Retrieved January 2, 2024, from https://www.youtube.com/watch?v=mtLPd2u4DiA

Chiang, I.-C. A., Jhangiani, R. S., & Price, P. C. (2015, October 13). *Research methods in psychology – 2nd Canadian edition*. Research Methods in Psychology 2nd Canadian Edition. CC BY-NC-SA 4.0

Government of Canada. (2023, January 11). *Tri-council policy statement: Ethical conduct for research involving humans – TCPS 2 (2022)*. Government of Canada, Interagency Advisory Panel on Research Ethics.

1.3: Privacy in Market Research

Privacy is a concern when it comes to marketing research data. For researchers, privacy is maintaining the data of research participants discretely and holding confidentiality. Many participants are hesitant to provide identifying information for fear of it leaking, being linked back to them personally, or being used to steal their identity. To help respondents overcome these concerns, researchers must identify the research as being either confidential or anonymous.

Confidential data is when respondents share their identifying information with the researcher, but the researcher does not share it beyond that point. In this case, the research may require an identifier to match previous data with the new content—for example, a customer number or membership number. Anonymous data is when a respondent does not provide identifying information at all, so there is no chance of being identified. Researchers should always be careful with personal information, keeping it behind a firewall, behind a password-protected screen, or physically locked away.

One of the most important ethical considerations for marketing researchers is the concept of confidentiality of respondents' information must be considered. In order to have a rich data set of information, very personal information may be gathered. When a researcher uses that information in an unethical manner, it is a breach of confidentiality. Many research studies start with a statement of how the respondent's information will be used and how the researcher will maintain confidentiality. Companies may sell personal information, share contact information of the respondents, or tie specific answers to a respondent. These are all breaches of the confidentiality that researchers are held accountable for.

As market researchers, we must prioritize the safety and well-being of human participants, as well as the information gathered throughout the research process, at all times. Using ethical guidelines and protecting respondents' information is a core component of market research.

Insights Association Code of Standards

The Insights Association's *Code of Standards and Ethics for Market Research and Data Analytics* is reviewed annually by IA's Standards Committee with input from members. This ensures that the Code is up to date with current practices of conducting market research and that it adequately protects research participants. This Code is an excellent example of how market researchers should manage market research projects throughout the process. You can read this Code here.

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax, Rice University. CC BY 4.0

Insights Association. (2023, November 1). *Code of standards*. Insights Association.

PART II

MODULE 2: STEPS IN DESIGNING A MARKET RESEARCH PROJECT

Learning Objectives

In module 2, students will learn how to:

1. Define the five steps to effectively design and implement a market research project.
2. Identify the significance and importance of accurately identifying a market research decision problem.
3. Utilize considerations in research design such as data collection methods, timing, budget, and target population.
4. Combine insights from various data collection methods in market research, including surveys, interviews, and focus groups.
5. Recognize the significance of accurate and rigorous data analysis in ensuring reliable research outcomes.
6. Assess the impact of data-supported recommendations on influencing strategic decisions in a real-world context.

A recommended set of five steps should be followed in order to accomplish the goals of gathering insights and finding solutions through market research. While following a set of steps may seem like a lot of work or take too long to solve problems, the time invested in going through the steps will ultimately pay off in the form of research-driven solutions. This module outlines the five steps to designing a market research project; however, individual steps will be covered in greater detail throughout the book.

2.1: Step 1: Define the problem

Since most organizations and businesses have multiple problems, the first step is to gather information to define the **market research problem**(s). If the problem is not defined correctly, then the research design will not be constructed accurately, and all of the steps to designing a market research problem will be inaccurate. The pathway to defining a market research problem is explored in module 5.

2.2: Step 2: Design the Research

Once the research problem has been defined, and it has been determined that primary research is required, the next step in the marketing research process is to do a **research design**. The research design is a "plan of attack." It outlines what data will be gathered and from whom, how and when the data will be collected, and how it will be analyzed it once it's been obtained.

Some questions that should be asked at the research design phase are:

- What type of research is necessary to meet the established objectives of the first step?
- How will this data be collected?
- What is the time frame of the research and budget to consider?If one must have information in the next week, a different plan would be implemented than in a situation where several months were allowed.

These are issues that a researcher should address in order to meet the needs identified.

Data collection is the systematic gathering of information that addresses the identified decision problem. Picking the right method of collecting data requires that the researcher understand the target population and the design picked in the previous step. There is no perfect method; each method has both advantages and disadvantages, so it's essential that the researcher understand the target population of the research and the research objectives in order to pick the best option.

Once it has been determined the methodology of the research – qualitative and / or quantitative – the management and implementation of the data collection process will begin.

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax.

2.3: Step 3: Manages and implements the data collection process

For primary research, the collection of information from a sample of the population through qualitative and/or quantitative methods must be designed.

Quantitative research is typically used when a larger sample size is required and is measuring numbers, figures or objective data. A common quantitative research tool is the **survey**. Surveys are the most frequently used method of collecting market research data and are covered in depth in module 7.

Qualitative research is used when opinions, feelings, motivations, or subjective data is identified as the focus of the market research design. One qualitative method for gathering more detailed responses from research participants is conducting **one-on-one interviews**. These interviews give the researcher the opportunity to ask specific questions that align with the respondent's unique perspective, as well as follow-up questions that build on previously completed responses. Another advantage of conducting one-on-one interviews is that they give the researcher a deeper understanding of the respondent's needs. The disadvantage of conducting personal interviews is that they can be time-consuming and only yield one respondent's answers. Therefore, in order to obtain a large sample of respondents,the interview method may not be the most efficient method.

Another qualitative research tool is the focus group. A f**ocus group** is a small group of people, typically 8 to 10, who meet the sample requirements. They are asked a series of questions together and are encouraged to build upon each other's responses by agreeing or disagreeing with the other group members. Focus groups are similar to interviews in that they allow the researcher, through a moderator, to get more detailed information from a small group of potential customers. Focus groups will be covered in detail in module 8.

Once the methods have been confirmed, the data collection will take place.

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax. CC BY-NC-SA 4.0

2.4: Step 4: Reviews and analyzes the data

Step 4 involves analyzing the data to ensure it's as accurate as possible. Data analysis is not covered in depth in this book, as the process of data analysis is dependent on the skills and resources of those doing the research, as well as the type of research that was done. For example, if someone has deployed an online survey via email, the analysis of the results may simply be reviewing the analytics in the survey software. If a survey was collected by hand, using a pen and pencil, typically the answers are manually entered into a survey analysis software. If a focus group took place, the facilitator should produce a report of the findings, that is often then analyzed along with a transcript or recording of the dialogue. If one has hired a market researcher to design and execute the project, the researcher would typically manage the data analysis and provide the raw data if requested.

References

Author removed at request of original publisher. (2022). *Principles of Marketing – H5P Edition*. BC Campus Open Education. CC BY-NC-SA 4.0

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax. CC BY-NC-SA 4.0

Bhattacherjee, A. (2012). *Social Science Research: Principles, methods, and practices.* CC BY-NC-SA 4.0

Burnett, J. (Ed.). (2011). *Introducing Marketing*. Global Text Project. CC BY 3.0

2.5: Step 5: Transforms the findings into recommendations

The last step in the market research process is putting everything that has happened into one document that can be easily understood by others, usually into a presentation and/or detailed report. Sometimes the findings can reveal negative aspects of the organization or business, and it can be challenging to share that information with colleagues or partners. Marketers and those who are creating market research plans need to make sure that the steps of the research design are clearly explained and, in particular, that the recommendations are supported by the data findings. Analyzing the data obtained in market research involves transforming the primary and/or secondary data into useful information and insights that answer the research questions.

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax.

PART III

MODULE 3: INDIGENOUS MARKET RESEARCH

Indigenous Communities (First Nations, Inuit, and Métis) in Canada require a different approach to understanding their markets depending on who you are, where you are, and the questions you are interested in answering (i.e. positionality). Reflecting on the questions proposed will help in engaging with this module. This module is written in a way that speaks directly to a non-Indigenous audience and may be helpful to Indigenous people who have been disconnected from their community. Specific considerations depend on your relationship with various Indigenous Communities.

Learning Objectives

Upon completion of this module, students will be able to :

- Reflect on your relationship with Indigenous Communities
- Define what allyship can look like
- Examine research concerns and directions
- Scale Matters – Select where to go for information

By Abraham Francis

3.1: Allyship

ABRAHAM FRANCIS

Before proceeding with market research on or with Indigenous Communities, the individual or team must consider their understanding of allyship with Indigenous Communities. Plenty of discussions attempt to define this concept, but remember that there is no one-size-fits-all approach, and it changes over time, so be flexible. There are many resources to draw upon, which is the first step in educating yourself to avoid making mistakes moving forward. Some summarized points provided below bring these concepts into dialogue with each other.

1. Listen to Indigenous People – They are the experts of their reality, which is diverse and context-specific – we all have our own stories of how history affected us (Jonas, 2021).
2. Discomfort is part of the journey – The process is not about being comfortable because you may need to learn biases or make mistakes in the process – accountability is an expression of care and opportunity for growth (Jonas, 2021).
3. Be critical of motivations – Engaging or supporting Indigenous Communities is not an opportunity to "further one's own self-interest, nor are they there as extra-curricular activities" (Swiftwolfe et al., 2019).
4. Start learning – It is not the responsibility of Indigenous Communities to constantly educate non-Indigenous People, and it is an ongoing process – this point will be expanded upon in a future section (Swiftwolfe et al., 2019).
5. Act Accordingly – Move forward with humility and critical self-reflection of on-going learning. Work to build a direct line of communication with an Indigenous Community. Lastly, there are three pieces to carry always: Acknowledging you are a guest on this land; Recognizing multiple nations exists within Turtle Island; and Respecting any cultural protocols and traditions (Swiftwolfe et al., 2019).
6. do not harm the community – This requires a centering of community in your mind and actions because harm can be done unintentionally. This requires a continuous process of consent and checking in, which is a way to be responsible for yourself and identify when to take a step back. Saviours are not

needed here; solidity is (*10 Ways to Be an Ally to First Nations Communities*, 2022).

7. Give back – Use our labour, resources, and skills to help out (*10 Ways to Be an Ally to First Nations Communities*, 2022).

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=231#h5p-9

Resources

10 ways to be an ally to First Nations communities. (2022, July 2). Amnesty International Australia.

Dakota Swiftwolfe. (2019). *Indigenous Ally Toolkit*. Montreal Urban Aboriginal Community Strategy Network.

Jonas, S. (2021, September 30). *Want to be an ally to Indigenous people? Listen and unlearn, say 2 community workers*. CBC.

3.2: Where does education begin?

ABRAHAM FRANCIS

The Indigenous People of Canada have had a challenging relationship with both the Canadian Provincial and Federal governments, stemming from a history marked by physical, biological, and cultural genocide, as well as the dispossession of lands and intergenerational trauma. Three critical pieces of literature, shared below, contribute to helping define this historic pain body and directions forward to address the harm left behind and support Indigenous sovereignty and self-determination.

The first piece that recounts the painful narrative of residential schools is documented in the "Final Report of the Truth and Reconciliation Commission of Canada: Honouring the Truth, Reconciling for the Future," which outlines 94 calls to action spanning child welfare, health, justice, education, language, culture, reconciliation, museums, archives, youth, media, sports, research, newcomers, commemoration, missing children, burial information, and business (TRC, 2015). This report carefully intertwines research and personal stories, vividly portraying history and survivors' experiences.

The second piece recounts the distressing history of Indigenous women, girls, and 2SLGBTQQIA individuals, who have been subjected to state-condoned abuses infringing on human and Indigenous rights, is illuminated in "Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls." This report issues 231 Calls for Justice addressing the Government, Industry, Institutions, Services, Partnerships, and all Canadians (MMIW, 2019). Indigenous Women, Girls, and 2SLGBTQQIA individuals constitute one of the most vulnerable segments of Indigenous communities and play a crucial role in Indigenous societies. It is imperative to consider these histories and stories when the actions of Canadian federal or provincial governments may impact Indigenous rights, as well-intentioned efforts have the potential to cause significant harm to Indigenous Communities.

The third piece is to educate oneself on Indigenous Communities' right to

sovereignty and self-governance, a principle upheld by international laws, notably enshrined in the United Nations Declaration on the Rights of Indigenous People (UNDRIP). Adopted during the United Nations' 107th plenary meeting in 2007, the UNDRIP comprises 46 Articles that affirm Indigenous rights on a global scale (Assembly, 2007). The UNDRIP was endorsed by the Government of Canada in 2016 and, on June 21, 2021, received royal assent as an act and immediately came into force with a two-year action plan to meet the objectives in collaboration with Indigenous Communities (D. of J. Canada, 2021).

Resources

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3.3: Conducting research

ABRAHAM FRANCIS

In one of the most significant statements about research on Indigenous People, Linda Smith (1999) makes the statement,

"[Research] is probably one of the dirtiest words in the indigenous world's vocabulary. When mentioned in many indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful. It is so powerful that indigenous people even write poetry about research."

When we research Indigenous Communities, it's essential to be mindful of their painful history, which requires time and understanding, as described in the allyship section. Smith's work looks at the colonial origins of research and argues for decolonization. This led to the development of Kaupapa Maori Research, an approach where ideas and priorities come from the cultural context of her people. While Smith's work inspired many Indigenous scholars, the concept faced the challenges of being stolen and applied to prioritize non-Indigenous communities' comfort and status quo. Tuck and Yang (2012) affirmed that decolonization isn't just a metaphor. It should center Indigenous Communities and their knowledge. Further, it requires addressing the historical pain body by returning Indigenous land and respecting Indigenous sovereignty and self-determination. Held (2019) looks at research from a different perspective, highlighting the conflict among Indigenous Scholars about whether Indigenous research by non-Indigenous Folks or Institutions is possible or impossible.

Data sovereignty is another consideration; Indigenous Communities own and control their data. This is a massive discussion with many layers about different kinds of data, including collection, validation, and interpretation, as well as sharing results from data. Researchers need to understand that statistics from censuses (quantitative) are only a tiny portion of the story and should be supplemented with community-level stories (qualitative). The First Nations Indigenous Government Center (FNIGC) provides some excellent guidance on this concept through OCAP®, which is described in detail below.

- "Ownership refers to the relationship of First Nations to their cultural

knowledge, data, and information. This principle states that a community or group owns information collectively in the same way that an individual owns his or her personal information.

- Control affirms that First Nations, their communities, and representative bodies are within their rights to seek control over all aspects of research and information management processes that impact them. First Nations control of research can include all stages of a particular research project-from start to finish. The principle extends to the control of resources and review processes, the planning process, management of the information and so on.
- Access refers to the fact that First Nations must have access to information and data about themselves and their communities regardless of where it is held. The principle of access also refers to the right of First Nations' communities and organizations to manage and make decisions regarding access to their collective information. This may be achieved, in practice, through standardized, formal protocols.
- Possession While ownership identifies the relationship between a people and their information in principle, possession or stewardship is more concrete: it refers to the physical control of data. Possession is the mechanism by which ownership can be asserted and protected" (*The First Nations Principles of OCAP®*, n.d.).

These are just the surface of this larger discussion, and community-level protocols should also be researched, depending on the scale of information needed. Further, the FNIGC provides training on their website to help students gain a deeper understanding and application of these concepts.

Resources

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3.4: Scale matters - where to go for information

ABRAHAM FRANCIS

The highest level of information on Indigenous Communities can be obtained from Statistics Canada (StatCan), where you can search a variety of resources that have been developed. The most recent census is from 2021. The set of data from StatCan website that users can manipulate to answer high-level questions on the level of Canadian Federal, Provincial, and Municipality levels are on the page, "Indigenous identify population by gender and age: Canada, provinces, and territories, census metropolitan areas and census agglomerations" (*Statistics on Indigenous Peoples*, n.d.). Another high level of information can be found by exploring the regional office's pages of Indigenous Services Canada (ISC) regional offices (Government of Canada, 2009) and First Nation Profiles of Crown-Indigenous Relations and Northern Affairs Canada (Government of Canada, 2008). This data should be cautiously read due to the lack of engagement from some Indigenous Communities.

The best information comes directly from Indigenous Communities or organizations that represent their interests on the national and regional levels. On the national-level Indigenous Organization, the Assembly of First Nations (AFN) carries the mission of "Advocating for the rights of and quality of life of First Nations people in Canada" and has an informative and well-supplied website with information on current issues and prepared reports (Assembly of First Nations, n.d.). There are regional organizations that operate across Canada; for Ontario, the Chiefs of Ontario (COO) is the regional organizing body that also has a great website for regional scale current issues and prepared reports (Chiefs of Ontario, n.d.). Lastly, it is great to go directly to Indigenous Communities' websites to learn more about what is going on locally and find a way to connect with the community and their different resources and contacts. For example, the Mohawk Council of Akwesasne in Eastern Ontario has a great website that is well maintained (Mohawk Council of Akwesasne, n.d.). It is important to remember that Indigenous Communities have differing capacities, so the websites may not be up to date. It is always best to

connect with someone from the community and develop a relationship who may be able to connect you with community level economic studies or other work.

Resources

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PART IV

MODULE 4: TYPES OF MARKET RESEARCH

Learning Objectives

In Module 4, students will learn how to:

1. Identify primary research as the gathering of new data tailored for specific products or hypotheses.
2. Classify primary research methods such as surveys and focus groups.
3. Define secondary research as the utilization of existing published data sources for information.
4. Evaluate the credibility and reliability of secondary research sources.
5. Differentiate between qualitative and quantitative data, and the advantages and disadvantages of both.

4.1: Primary and secondary research

As briefly mentioned in module 1, there are two main types of market research, primary and secondary research.

Primary research is conducted when new data is gathered for a particular product or hypothesis. This is where information does not exist already or is not accessible, and therefore needs to be specifically collected from consumers or businesses. Surveys, focus groups, research panels and research communities can all be used when conducting primary market research. The two most common primary market research tools, surveys and focus groups, will be covered more in depth in chapters 5 and 6.

Secondary research is also called 'desk research' as it can be done by reviewing existing sources typically through online databases and sources. Secondary research uses existing, published data as a source of information. It can be more cost-effective than conducting primary research.

Existing research can be used to establish the context and parameters for primary research, which can help give insights to the research project in its early stages. Secondary research can be useful for identifying problems to be investigated through primary research. Research based on secondary data usually precedes primary research.

Secondary research can:

- provide enough information to solve the problem at hand, thereby negating the need for further research.
- provide sources for hypotheses that can be explored through primary research.
- provide information to inform primary research, such as sample sizes and audience.
- be used as a reference base to measure the accuracy of primary research.

This video from the University of British Columbia demonstrates some commonly used sources for secondary market research.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=65#oembed-1

A number of market research companies exist in Canada who conduct research using a variety of tactics and then sell this data to interested parties. This is why secondary research is often less expensive, as these companies have experts whose job is to collect data, analyze and publish the results instead of embarking on your own journey of conducting your own primary research. Secondary research could have originally been collected for solving problems other than the one at hand, so they may not be sufficiently specific to your research problem.

It is imperative to carefully go through the secondary research to ensure that the methodology is sound and the source is trusted. Sometimes studies are commissioned to produce the result a client wants to hear—or wants the public to hear. Web research can also pose certain hazards. There are many biased sites that try to fool people that they are providing good data. Often the data is favourable to the products they are trying to sell. Beware of product reviews as well, as unscrupulous sellers sometimes get online and create bogus ratings for products.

The following inquiries can be used to evaluate the calibre and reliability of secondary research:

- Who collected the data?
- Why was the data collected?
- What was the motivation of the individual or group collecting the data?
- Was the data collected and reported methodically?
- Is the data's source regarded as an authority in the field by other experts?
- Does the article offer unbiased proof to back up the claims made?

Ensure that a thorough review of any secondary research is done every time it is being considered to be used as part of a market research project!

The most popular source of secondary research in Canada is Statistics Canada. While exploring the more than 30 subjects of data from Statistics Canada can be overwhelming, it has rich data on Canadians over time. The basis for many Statistics Canada studies is the census, which is a survey in which every member of the population is ideally surveyed, rather than just a sample or portion of it. Currently, Statistics Canada conducts a census every four years, and the data gathered serves

as the basis for many of the studies that are used in daily Canadian life. You can access all of Statistics Canada's data for free, in both English and French, at statcan.gc.ca.

Market Research in Action

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Alex owns a small chain of coffee shops, Java Life, in the Montreal, Quebec area. They are interested in ensuring that food produced locally features promimently in the coffee shop menu offerings. Alex is interested in access some data around diet and nutrition and food prices, but is unsure where to start. Alex's friend works for a marketing company, and suggest that Alex review the Statistics Canada Food Price Data Hub. The information is free to access and includes updated information on the monthly Canadian average retail price of selected food items, food supply chain prices, and the Consumer Price Index (CPI) for food purchased from stores. With this information, Alex can get a better sense of the cost of food and how inflation may be affecting overall supply chain so they can make data-driven decisions about food for their Java Life shops.

Here is a short video from Statistics Canada about why census data is valuable secondary research.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=65#oembed-2

Businesses that have digital properties on the internet have access to a wealth of digitally recorded web analytics data that can be mined for insights. Customer communications, particularly those with the customer service department, are another source of data that can be used. Loyal customers who provide feedback, criticism, or compliments are providing information that can serve as the basis for

customer satisfaction research. Social networks, blogs, and other forms of social media have emerged as forums where customers discuss their preferences.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=65#h5p-2

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4.2: Qualitative and quantitative research

Data can be categorized as either qualitative or quantitative. Exploratory in nature, **qualitative research** aims to learn what prospective customers believe and feel about a particular topic. It also helps identify potential hypotheses, while **quantitative research** seeks to validate these claims with hard data. Finally, quantitative research depends on numerical data to show statistically significant results.

The main differences between quantitative and qualitative research are represented in table below.

	Quantitative	**Qualitative**
Data gathered	Numbers, figures, statistics objective data	Opinions, feelings, motivations, subjective data
Question answered	What?	Why?
Group size	Large	Small
Data sources	Surveys, web analytics data Tests known issues or hypotheses	Focus groups, social media Generates ideas and concepts – leads to issues or hypotheses to be tested.
Purpose	Seeks consensus, the norm Generalizes data	Seeks complexity Puts data in context
Advantages	Statistically reliable results to determine if one option is better than the alternatives	Looks at the context of issues and aims to understand perspectives
Challenges	Issues can be measured only if they are known prior to startingSample size must be sufficient for predicting the population	

Sometimes market researchers will use a combination of both methods, and this

approach is called mixed methods. For example, using a survey to gather information on the research topic and then using that survey to recruit participants for a focus group to probe the topic in more depth can be used.

This resource doesn't go deeply into mixed methods, but the video below by Grad Coach goes into depth about qualitative, quantiative and mixed methods for any research project.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=67#oembed-1

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Grad Coach. (2021, September 27). *Qualitative vs Quantitative vs Mixed Methods Research: How to Choose Research Methodology* [Video]. YouTube. https://www.youtube.com/watch?v=hECPeKv5tPM

PART V

MODULE 5: IDENTIFYING A DECISION PROBLEM

Organizations and businesses tend to want to jump quickly to a solution, or number of solutions, to solve a problem. This makes sense, as problem solving is typically a key part of success in any sector. The challenge with this approach is that, quite often, the person who sees issues or opportunities in their work has unconscious bias towards the work, and sometimes 'can't see the forest for the trees', as the saying goes.

Unconscious, or implicit bias, is bias that we all have as a result of our life experiences, and involves assumptions that can happen without one's knowledge. Employees who are working to solve issues or look for new opportunities in their work, may have a hard time looking critically at the situation due to being so close to the work. This is where market research comes in. A marketer or market research consultant can offer a process to support the identification of a decision problem or hypothesis, and use market research to test and ultimately prove or disprove the decision problem. If a decision problem is not identified correctly, the research design will not be constructed accurately and that will affect every step of the market research project. It cannot be stated enough times that identifying the decision problem is the most important part of doing market research... so take the time to go through these steps.

Unconscious bias is not explored in depth in this resource, but this chapter on the topic as part of Universal Design for Learning (UDL) for Inclusion, Diversity, Equity, and Accessibility (IDEA) open educational resource clearly explains a number of biases.

There are four steps to identifying a market research decision problem that will be explored in this module.

Learning Objectives

In module 5, students will learn how to:

1. Describe the four-step process for identifying decision problems: exploratory research, data review, problem identification, and validation.
2. Formulate a well-defined decision problem as a question guiding the market research project.
3. Relate the common occurrence of multiple issues being revealed during problem identification and the need to prioritize them.
4. Recognize that some business or marketing problems cannot be solved through market research alone and may require alternative strategies or interventions.
5. Explain the significance of taking time to accurately identify the decision problem(s) for a successful market research project.

References

5.1: Exploratory Research

The first step in identifying a decision problem is to conduct some exploratory research, usually through informational interviews with important partners or staff members involved in the research effort. Asking at least three important people a series of open-ended questions will provide insights into the issues at hand. Develop a list of six to ten open-ended questions, ask the same questions in each interview, and make sure to record the answers.

Market Research in Action: Isabella

Isabella is thinking about selling her honey at an additional three farmers' market in the area. She isn't sure if the price that she charges now end up being profitable after the cost of driving to the markets and setting up a booth. Isabella decides to do some exploratory research and decides to identify three people – another farmer who is a friend, a coordinator at the market where she already sells her honey and her husband, who is also her business partner. Here are the questions that Isabella will ask these three people:

1. Do they think that the current price she charges for her honey is competitive with other farmers?
2. How far are the additional three farmers' markets from her location, and what would be the approximate transportation costs?
3. What booth fees or setup costs are associated with each of these new markets?
4. Do they know if there is demand for honey at these new markets?
5. Are there any competitors selling similar honey products at these markets, and at what prices?
6. How does the foot traffic and general market atmosphere compare across these three additional markets?

7. What additional marketing or promotional efforts would be required to attract customers at these new markets?
8. Are there any ways to reduce expenses to expand to these markets such as consolidating trips or sharing booth space?

Isabella will record the answers of all questions so the answers can be reviewed as part of the next step.

5.2: Data review and clarification of the problem

Review the data collected in the informational interviews and consider the following points:

1. Based on the original reason for the market research, is the problem important?
2. Do you recommend spending time and money to research the problem?
3. Is the problem the result of a planned change (such as the expansion of a business or the launching of a new product) or an unplanned change (such as a recession or being acquired by another company)?
4. What are the assumptions that exist with the folks who were interviewed, and what biases are identified that may influence the market research project?

Market Research in Action: Isabella

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After reviewing the answers from the three interviews, Isabella notices some themes from the interviews. These include:

1. There isn't a lot known about the competition at the other three markets, such as how many honey producers are at each one and how much they charge.

2. There are two other farmers who live close by who sell at the other three markets, and they may be interested in sharing a booth and taking turns driving and manning the booth.
3. Two of the three markets are quite busy and may be expanding into online sales in the future.

Isabella decides that additonal market research is worthwhile, as there may be opportunities for increased profit and distribution.

References

Chiang, I.-C. A., Jhangiani, R. S., & Price, P. C. (2015, October 13). *Research methods in psychology – 2nd Canadian edition*. CC BY-NC-SA 4.0

5.3: Identify the problem

After you have the answers to the aforementioned queries, you should create a decision problem for your market research project. Usually, this decision problem takes the form of a question that will direct the market research design at every stage. The question should clearly state the issue that needs to be addressed.

Market Research In Action: Isabella

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Isabella has identified that there are a number of decision problems that could be reviewed, but the one that would make the most impact on her future business would be understanding what is already happening at the other markets and if there is opportunity for a new producer. Once this information is determined, the Isabella can look into possible collaborations with other farmers and assessing the opportunity for online sales. For this market research project, Isabella's decision problem will be "What is the potential market demand for expanding honey sales to three additional farmers' markets in the local area?"

References

Chiang, I.-C. A., Jhangiani, R. S., & Price, P. C. (2015, October 13). Research methods in psychology – 2nd Canadian edition. Research Methods in Psychology 2nd Canadian Edition. https://opentextbc.ca/researchmethods/ CC BY-NC-SA 4.0

5.4: Validate the decision problem

Before you move into the market research project design, validate the decision problem with those who were interviewed, and others if required. Take them through the results from the informational interviews and confirm that this is the problem to be researched.

As part of this exercise, often multiple problems of opportunities are revealed. This is common but not all problems can be solved with one market research project. As well there are some problems that cannot be solved with market research, and those may be revealed in this process but need to be addressed in a different way.

Business problems such as having a purchasing process that involves too many steps, not paying employees a salary that is comparable in the industry, not having a unique selling point (USP) for your products or service, or selling a low-quality product or service can't be solved with market research. For example, if you are able to hire staff through innovative and engaging recruitment efforts, but can't retain staff for more than 12 months, the issue is probably not marketing but challenges within the company culture. Additional marketing to promote open positions won't lead to retention of staff.

Additionally, there are some marketing problems that cannot be solved with research such as having staff who don't understand how to write a marketing plan, or using the 'spray and pray' method of using one message on all of the platforms.

Taking the time to go through the steps of the identification of the decision problem will support a well-designed market research plan with the goal of finding solutions to the problem.

Market Research in Action: Isabella

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Isabella now has her market research decision problem, and takes this back to her three interview candidates to get their feedback and make any adjustments as needed. Isabella also asks some members of the local farming assocation for their feedback on the decision problem.

Once Isabella is confident that she wants to move ahead with the market research and has confirmed the market research decision problem, she will move onto the next step of designing the research.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=80#h5p-3

References

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Kearney, D. B. (2022). *Universal Design for Learning (UDL) for Inclusion, Diversity, Equity, and Accessibility (IDEA)*. CC BY 4.0

PART VI

MODULE 6: IDENTIFYING TARGET POPULATION AND SAMPLE

Once it has been established that your decision problem justifies the creation of a market research plan, the next step is to determine the subject of the research as well as the target population and sample. This is an essential step in any market research process, whether it is qualitative or quantitative.

Learning Objectives

In module 6, students will learn how to:

1. Recognize the significance of using a sample as opposed to a census for market research purposes.
2. Understanding the concept of sample frames and their relevance in defining parameters for market research studies.
3. Identify the importance of accurately identifying and defining the target population for drawing general conclusions.
4. Explain probability sampling methods such as simple random sampling, stratified random sampling, cluster sampling, and systematic random sampling.
5. Illustrate non-probability sampling techniques like convenience sampling, judgeRecognizing the limitations and challenges associated with various sampling techniques, such as bias, limited representation, and generalizabilityment sampling, and voluntary sampling.
6. Recognize the limitations and challenges associated with various sampling techniques, such as bias, limited representation, and generalizability.
7. Interpret the role of statisticians in selecting and validating samples, especially in complex sampling methodologies.

6.1: Identifying a sample

Although a market researcher might want to include every possible person who matches the target market as part of the research project, it's often not a feasible option, nor is it of value. If one does decide to include everyone, it would be a **census** of the population. Getting everyone in a population to participate is time-consuming and highly expensive, so instead marketers use a sample, whereby a portion of the whole is included in the research. It's similar to the samples you might receive at the grocery store or ice cream shop; it isn't a full serving, but it does give a good taste of what the whole thing would be like.

So how does one know who should be included in the sample? Researchers identify parameters for their studies, called **sample frames**. A sample frame for one study may be college students who live on campus; for another study, it may be retired people in Ottawa, Ontario, or small-business owners who have fewer than 10 employees. The individual entities within the sampling frame would be considered a sampling unit. A sampling unit is each individual respondent that would be considered as matching the sample frame established by the research. If a researcher wants businesses to participate in a study, then businesses would be the sampling unit in that case.

The number of sampling units included in the research is the **sample size**. Many calculations can be conducted to indicate what the correct size of the sample should be. Issues to consider are the size of the population, the confidence level that the data represents the entire population, the ease of accessing the units in the frame, and the budget allocated for the research.

The identification of the target population confirms the number of respondents and the way they are selected. If done correctly, general conclusions can be drawn about the views of the target population based on a small number of respondents. For example, when properly selected, a survey of 1,000 citizens can allow a researcher to draw conclusions about the views of all citizens in a country. If, on the contrary, there are mistakes in the selection of respondents, the results of the survey can be biased to the point of being useless.

The process of choosing participants for a market research study is known as sampling methodology in statistics. If the project is being managed by a market research firm, then a team of highly skilled statisticians will assist in choosing

a sample from the target population by performing a series of mathematical calculations. The results of the validity and accuracy of professional surveys, for instance, are typically presented as part of the findings presentation.

For organizations and businesses who may be conducting the market research themselves, there are some key considerations to ensure that the sample selected is representative of the target population.

Market research project designs that indicate the right sample size often assume a 100% response rate. If a response rate is suspected to be lower, the sample size needs to be adjusted upwards. "A high response rate is important for drawing valid result conclusions. This is particularly the case if those who ignore a survey and would have answered differently than respondents. For example, in customer satisfaction surveys, those who are unhappy with the service may answer the survey to channel their anger and to ask for change, while those who liked the service may not bother responding. In this case, survey results are biased and the bias will be more important if the response rate is low," (OECD, 2012).

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax, Rice University. CC BY 4.0

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6.2: Probability sampling

There are two main categories of samples: probability and nonprobability. **Probability samples** are those in which every member of the sample has an identified likelihood of being selected. Several probability sample methods can be utilized.

One probability sampling technique is called a **simple random sample** (SRS), where not only does every person have an identified likelihood of being selected to be in the sample, but every person also has an equal chance of exclusion. Many types of probablity samples are listed here, but it is recommended for businesses or organizations who are leading primary research themselves to select a simple random sample. A statistician is usually needed for most methods of selecting samples that go beyond a simple random sample in order to ensure that the number of subgroups compared, the measurement used, and the level of sampling error are all within acceptable bounds.

Simple random sample

When simple random sample (SRS) is used, everyone in the population has an equal probability of being selected. For example, If a statistics teacher wants to choose a student at random for a prize, she could simply place the names of all the students in a hat, mix them up and choose one. Another example of SRS is if one chooses to give a number to every person in the population and then randomly select numbers from a hat or by using computer software.

There are a number of additional types of probability sampling methods, but as previously mentioned, they tend to be administered by market research professionals.

Market Research in Action: Daraja

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Daraja is a university student living in Calgary, Alberta. She is pursuing a degree in business administration and is interested in putting her newly acquired marketing skills into action for the Mustard Seed, a food bank on campus that provides diverse food staples to students free of charge. Daraja is interested in what types of foods the students are most interested in having stocked at the food bank, particularly since some international students have a challenge to find diverse foods in stores close to campus.

Daraja would like to do a small survey of students but isn't sure where to start. Daraja decides to do a simple random sample of the students who have used the food bank in the past three months.

If Daraja has all of the emails for the students, how could she ensure that the sample is randomly selected? What other considerations should Daraja think about when constructing her sample?

Stratified Random Sample

When it's important for the sample to have members from different segments of the population, one should use a **stratified random sample** method. In this type of sample, the population is first divided into groups called strata by some characteristic. Then, using a simple random sample (SRS), people are randomly selected from each group. This method ensures that each group is represented.

Market Research in Action: Daraja

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As previously described, Daraja would like to conduct a survey of users of the Mustard Seed food bank from the past three months, in order to understand what foods these users are interested in accessing at the food bank. If Daraja is interested in understanding the country of origin of each student (to understand their food preferences) as well as their frequency of food bank use (to determine regular versus occasional users), Daraja could select a stratified random sample. The country of origin and frequency of food bank use are the **strata** in this scenario.

Daraja would then:

1. Determine sample size**:** Decide on the desired sample size from each stratum. It should be proportionate to the size of each group within the population. For instance, if there are more international students than local students, the sample size for international students should reflect that proportion.
2. Ensure representativeness: Ensure that the selected samples from each stratum represent the characteristics and diversity of the entire population. This means the chosen samples should accurately reflect the distribution and variety of preferences among students using the food bank.
3. Random selection**:** Randomly select individuals from each stratum. For example:
    - For nationality-based strata: Randomly select students from each country group that represents the diversity of the student population.
    - For frequency-based strata: Randomly select students from the regular and occasional user groups

Then Daraja would have a stratified random sample for the survey. What are some of the challenges for Daraja with this approach?

Cluster sample

In **cluster sampling**, the population is divided into naturally occurring groups (or clusters). For example, groups could be clustered by country or postal code. After the clusters are formed, some clusters are randomly selected. Then *all* people within those clusters are surveyed.

Market Research in Action: Daraja

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Daraja is interested in understanding the needs of the users of the Mustard Seed food bank, located on the university campus. If, for example, Daraja was interested in categorizing the population based on the student residences on campus, she may want to select a cluster sample. In order to do this, Daraja would:

1. Randomly select clusters: Randomly choose a few clusters several student residences.
2. Survey all individuals in selected clusters: Unlike in stratified sampling where individuals are selected from each stratum, in cluster sampling, all individuals within the chosen clusters are surveyed. Daraja would survey all students residing in the selected dormitories.
3. Ensure representativeness: Ensure that the selected clusters are diverse and representative of the entire population. This means that the chosen clusters should collectively reflect the diversity and characteristics of the entire student population using the food bank.

Cluster sampling can be more practical and cost-effective than other methods, especially when the population is large and dispersed, as it allows for sampling based on naturally occurring groups such as students living in residence.

Systematic random sample

In **systematic random sampling**, after choosing a starting point at random, people are selected by using a jump number. For example, choosing teams in gym class

by counting off by 3's or 4's, is an example of systematic sampling. (Flexbooks, cite here)

Market Research in Action: Daraja

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Daraja is interested in surveying all of the students who used the Mustard Seed Food Bank over the past few months. If Daraja wanted to have a true random sample from this group, she could use systematic random sampling. She would:

1. Determine sample size: Decide on the desired sample size. For instance, if the total number of students who used the food bank is 300 and the desired sample size is 50, then every 6th student (300 divided by 50) from the list will be selected.
2. Random start: Choose a random starting point from the list of students who used the food bank. This can be done by selecting a random number between 1 and the sampling interval (in this case, 6).
3. Select sample**:** Begin at the random starting point and select every *nth* individual according to the sampling interval. For example:
    - If the random start is student #3 on the list, Daraja would then select students #3, #9, #15, #21, and so on, until she reaches the desired sample size.

This approach would offer a balance between randomness and ease of implementation. It allows for a representative sample to be drawn without the complexities involved in other methods, ensuring an unbiased selection from the population of students utilizing the food bank.

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Scholes, S. (n.d.). *Introduction to Sampling Methods* . OER Commons. CC BY-NC-SA 4.0

6.3: Non-probability sampling

Convenience sampling and judgement sampling are two examples of nonprobability sampling that are available to researchers and which we will examine more closely. A nonprobability sample is one in which each potential member of the sample has an unknown likelihood of being selected in the sample. Research findings that are from a nonprobability sample cannot be applied beyond the sample.

Convenience sample

The first nonprobability sampling technique is a convenience sample. Just like it sounds, a convenience sample is when the researcher finds a group through a nonscientific method by picking potential research participants in a convenient manner. An example might be to ask other students in a class you are taking to complete a survey that you are doing for a class assignment or passing out surveys at a basketball game or theatre performance.

One challenge with a convenience sample is selection bias, as the participants are chosen due to their easy access and not representative of the population. Since convenience samples might not reflect the population's true diversity, findings from such samples might not be applicable or generalizable to broader populations or contexts. Another challenge with convenience samples are the risk of self-selection of participants. For example, potential survey respondents on a running trail may be selected since the researcher is at the edge of a park and is looking to get more information on park use, but this might not include folks who have mobility challenges, or parents pushing strollers who aren't able to access the trail.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=91#h5p-6

Market Research in Action: Daniel

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Daniel works for Smoothtech, a mid-size technology company in the Greater Toronto Area who make specialized software and consumer apps for the sports and entertainment industries. Daniel is interested in learning more about how customers at the local theatre company obtain information from the playbill and if there would be interest in moving to a digital format.

Daniel thought that he could go to two Saturday matinees and stand inside the lobby to pass out surveys by the men's washroom. This would be an easy place to find customers as they would be at the theatre already.

What are the challenges with Daniel using a convenience sample, particularly on a Saturday afternoon and by the men's washroom. What biases may occur with this sample?

Judgement sample

A judgement sample is a type of nonprobability sample that allows the researcher to determine if they believe the individual meets the criteria set for the sample frame to complete the research. A judgement sample involves the selection of participants based on the researcher's *judgement* about who would be most informative or representative of the population. For instance, one may be interested in researching mothers, so the researcher would outside a toy store and ask an individual who is carrying a baby to participate. The biggest challenge with a judgement sample is the potential for bias, as the researcher's judgement might unintentionally favour certain individuals or groups, leading to a skewed representation of the overall population.

Market Research in Action: Daniel

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Daniel wants to ensure that he has representative feedback from all parties who might be impacted by the decision of the theatre company to move to a digital playbill, so he considers using a judgement sample. This step will allow Daniel to assess if each respondent would meet the criteria to participate in the research.

Daniel could approach a judgement sample in this way:

1. Identify Key Partners: Determine the individuals or groups directly involved with or impacted by playbills in the theatre company. This might include regular theatergoers, actors, directors, production crew, and marketing / communications staff.
2. Select Diverse Perspectives: Ensure diversity in the sample by selecting participants from different demographics, such as age groups, socio-economic backgrounds, or levels of engagement with the theatre company.
3. Online Surveys: Send out an online survey to the email newsletter list. This can help gather a wider range of opinions and preferences regarding playbills and digital formats.
4. Engage Theatre Subscribers: Reach out to subscribers who purchase season passes to the theatre productions. These individuals might have strong opinions and insights into playbill usage as consistent patrons.
5. Utilize Social Media or Online Platforms: Gather opinions from online theatre communities, forums, or social media groups whereperforming arts enthusiasts discuss preferences and experiences related to playbills and digital mediums.

What are some of the challenges with gathering judgement sample, particularly one of those who are deeply involved in the theatre such as key partners, versus Facebook followers? What would be the benefits to a judgement sample?

Voluntary sample

In a voluntary sample, people “self-select” to participate in the survey. They may be interested in or feel strongly about the topic or they may want the perks or prizes for participating. There may be many motivations for them choosing to participate. The challenges with voluntary bias include self-selection bias, in that the volunteer is

really excited for the prize and are not interested in providing a truthful response to the research. Another challenge with a voluntary sample is ensuring representation, as certain groups or demographics might be overrepresented or underrepresented, leading to findings that are not reflective of the broader population.

Here is a video from Pew Research Center on the recent increase in use of online nonprobability surveys, and its advantages and disadvantages.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=91#oembed-1

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PART VII

MODULE 7: QUANTITATIVE RESEARCH AND HOW TO DESIGN A SURVEY

Learning Objectives

In module 7, students will learn how to:

1. Define quantitative research and its role in understanding market trends, consumer behaviour, preferences, and measurable aspects.
2. Explain various quantitative research methods like surveys, experiments, observational research, and scanner-based research.
3. Identify the advantages of quantitative research, such as large sample sizes, generalizability of findings, objectivity in analysis, and comparative analysis across segments, regions, or demographics.
4. Explain different survey distribution methods like mailed surveys, phone surveys, in-person surveys, and electronic surveys, their pros, cons, and practical applications.
5. Recognize the impact of survey design on the success and reliability of market research projects.
6. Relate the importance of clear, non-biased questions in designing surveys.

7.1: Quantitative research

Quantitative research in market research involves gathering and analyzing numerical data to understand market trends, consumer behaviour, preferences, and other measurable aspects. It focuses on statistical analysis, aiming to quantify opinions, behaviours, and patterns within one or more target markets. One of the most common methods for measuring quantitative research is the survey, and knowing how to design a survey is an important tool in the market researcher's tool box.

When conducting quantitative research, it's essential to consider the decision problem to gauge if this is the right method to help reach solutions. There are a number of different quantitative methods that are used for market research including:

- Surveys: Online, phone, or in-person surveys with structured questions and predefined response options help gather quantitative data efficiently from a large sample size. A deep dive into how to write a survey is covered later in this module.
- Experiments: Controlled studies allow researchers to test hypotheses and measure specific variables' impact on consumer behaviour or preferences. An example of an experiment could be a beverage company wanting to test the impact of different pricing on its customers. They may provide three different price points to a sample of customers and observe and measure how each group responds to the different price points.
- Observational Research: Systematic observation and recording of consumer behaviour in natural settings or controlled environments to derive quantitative insights. One example of observational research is mystery shopping. Stores, particularly ones with multiple locations, engage a market research firm to have people pose as regular customers and track their experiences and report back on exactly what happened during the online or in-person interaction. Businesses can then gather valuable insights into customer behaviour. They might discover trends like popular pathways, areas of high and low traffic, or which product displays attract the most attention.
- Scanner-Based Research: Barcode scanning data is used in retail

environments to track sales and consumer behaviour in order to understand purchasing patterns. One example of this is the department store loyalty programs, like PC Optimum, which match members to their buying patterns in order to support targeted advertising and coupons based on previous purchases.

In module 4, a chart was presented that illustrated the distinctions between qualitative and quantitative research. Both methods of research provide valuable insights to support decision problems, but there are some benefits to quantitative research:

- Large sample sizes: It enables the collection of data from a large number of respondents, providing a broad understanding of the market or consumer base.
- Generalizability: Findings from quantitative research can often be generalized to a larger population, aiding in the making of predictions or inferences about market trends or consumer behaviour.
- Objective insights: Quantitative data analysis tends to be more objective as it relies on numbers rather than subjective opinions, reducing bias in the findings.
- Comparative analysis: It facilitates comparisons across different segments, regions, demographics, or time periods, supporting the identification of patterns or trends in the market or consumer behaviour.

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7.2: Surveys

Surveys are questionnaires with a series of questions centred around a particular topic; they are probably the first tool for market research that most of us think of. Their main use is to easily collect large volumes of quantitative data, though they can also collect some qualitative data.

Surveys are widely used in quantitative research for a variety of reasons. Firstly, they are a great way to collect a large amount of data from a large number of respondents at a relatively low cost, especially when compared to other qualitative methods like focus groups or informational interviews. Secondly, surveys can be administered in-person, online, or by mail. Thirdly, mailed and telephone surveys are less common than online surveys because fewer people find the motivation to fill out a survey and mail it in. Finally, a lot of cell phone numbers are unlisted, which makes it especially difficult to ensure that phone surveys reach a wide sample of the target population, especially those who do not have land lines.

Nowadays, a lot of surveys are made using online, subscription-based software programs like Qualtrics and SurveyMonkey, which are relatively inexpensive to use. These programs are specifically made for conducting online surveys and have robust features like question banks, skip-logic, and screener questions, as well as analytics that make it fairly easy to review both aggregated and individual responses. Some smaller organizations will create an online survey using free tools like Microsoft or Google forms. To set up some in-person interviews, you might need to budget for gas to drive around the province, other travel expenses like meals and lodging while on the road, and the time it takes to drive to and speak with each individual. As a result, surveys are relatively cost-effective.

Survey research also tends to be a reliable method of inquiry because surveys are standardized, in that the same questions, phrased exactly the same way, are posed to respondents. Other methods, like qualitative interviewing, do not offer the same consistency that a quantitative survey offers. This is not to say that all surveys are always reliable; a poorly phrased question can cause respondents to interpret its meaning differently, which can reduce that question's reliability. The benefit of cost effectiveness is related to the survey's potential for generalizability. Because surveys allow researchers to collect data from very large samples for a relatively low cost, survey methods lend themselves to probability sampling techniques.

Surveys are a popular method for gathering primary data because of their versatility. They allow the researcher to ask the same set of questions of a large number of respondents. The number of completed surveys divided by the total number of surveys attempted yields the response rate. Surveys can gather a wide range of data, both quantitative and qualitative. The questions can be simple yes/no questions, select all that apply questions, questions on a scale, or a variety of open-ended questions.

Steps to creating a survey

Although it can be fairly simple to draft some questions and put them into a software program, there are a series of steps, when followed, will contribute to a survey that directly addresses the market research decision problem. These steps are adapted from Organisation for Economic Cooperation and Development's "Good Practices in Survey Design Step-by-Step", (OECD, 2012).

Step 1: Define survey objectives and target group

- Define the objectives
- Define the final use of the results
- Ensure a perception survey is the adequate tool
- Define target group(s)

Step 2: Draft survey questions

- Set up discussions with members of a target group to identify key issues
- Translate those into questions and answer categories
- Draft simple and clear questions
- Keep the questionnaire short to maximize response rate and concentration
- Ensure respondents have the opportunity to report problems

Step 3: Pilot and re-adjusting the questionnaire

- Test the survey on a smaller-scale target group to identify weaknesses in the survey design
- Possibly ask volunteers to think aloud while answering questions and analyse what motivated their answers
- Adjust questionnaire if needed

Step 4: Select respondents and the data collection method

- Select a sample either by random sampling or other methods
- Ensure that the sample size allows to draw valid conclusions from the results
- Choose the data collection method (mailed, email, in person or phone)
- Maximize response rate through appropriate data collection method

Step 5: Run the survey

- Ensure high response-rate through follow-up
- Use trained interviewers (if doing an in-person or telephone survey) to avoid unintentional influence on responses

Step 6: Analyze the results

- Interpret results as perceptions rather than facts
- Take into account the response rate, as a low rate means that no general conclusions can be drawn
- Take into consideration the number and the way respondents have been selected in the result analysis
- Understand how results were reached is essential to draw conclusions
- Attach documentation regarding Steps 1-6 to results and interpret results in combination with other data sources

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7.3: Methods of survey distribution

Mailed surveys

The first method of survey distribution is mailed survey. These are surveys that are sent to potential respondents via mail service,or 'snail mail'. Mailed surveys were once more popular because they could reach every household. For example, every four years, Statistics Canada conducts a population census. The first step in that data collection is to send a survey through Canada Post to every household. The benefit of mailed surveys is that respondents can fill it out at their own convenience. The drawbacks of mailed surveys are the cost and timeliness of responses. Mailed surveys require postage to be paid to the recipient and back. This, combined with the cost of printing, paper, and envelopes, adds up to the cost of mailed surveys.

Also, because of the convenience to the respondent, completed surveys may be returned several weeks after being sent. Finally, some mailed survey data must be manually entered into the analysis software, which can cause delays or issues due to entry errors.

Phone surveys

Phone surveys are conducted over the phone with the respondent; traditional phone surveys required a data collector to speak with the participant; however, modern technology permits computer-assisted voice surveys or surveys where the respondent is asked to press a button for each possible response. Phone surveys take a lot of time, but they allow the respondent to ask questions and the surveyor to request more information or clarification on a question if necessary. One drawback of phone surveys is that they must be completed simultaneously with the

collector, which presents a limitation because there are set hours during which calls can be made. Another major drawback of phone surveys is the decline in landlines over the previous ten years and the demographic of folks who do have landlines – seniors – in contrast to those who only have a mobile phone. Using phone surveys can make it challenging to reach a diverse sample of respondents.

In person surveys

Surveys collected in-person can take place in a variety of ways: through door-to-door collection, in a public location, or at a person's workplace. Although in-person surveys are time-intensive and require more labour to collect data than some other methods, in some cases it is the best way to collect the required data. One of the downsides of in-person surveys is the reluctance of potential respondents to stop their current activity and answer questions. Furthermore, people may not feel comfortable sharing private or personal information during a face-to-face conversation.

Electronic surveys

Digitally collected data has the advantage of being less time consuming and often more cost-effective than more manual methods; a survey that could take months to collect through the mail can be completed within a week using digital means. Electronic surveys are sent or collected through digital means and are an opportunity that can be added to any of the above methods as well as some new delivery options. Surveys can be sent through email, and respondents can reply to the email or open a hyperlink to an online survey. A letter can be mailed asking members of the survey sample to log in to a website rather than return a mailed response. Many marketers now use links, QR codes, or electronic devices to easily connect to a survey.

Professor Hernandez shares an overview of the four most common types of survey distribution in this short video.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=107#oembed-1

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7.4: Designing surveys

How a survey is designed will directly impact on the success on the market research project. Potential respondents must have knowledge about the survey topic and they should have experienced the events, behaviours, or feelings they are being asked to report. If one is asking participants for second-hand knowledge—asking counsellors about clients' feelings, asking teachers about students' feelings, and so forth—it should be clarified that the topic of the research is from the perspective of the survey participant and their *perception* of what is happening in the target population. A well-planned sampling approach ensures that participants are the most knowledgeable population to complete the survey.

Most surveys are made up of closed-ended questions that are measured against a scale. Closed-ended questions ensure that each respondent has to choose one of the provided answers and can ensure consistency and ease of data analysis. Open-ended questions are more qualitative in nature as they allow for the respondent to write their response freely and are not forced into answers that limit the range of their responses. Open-ended questions can provide helpful insights but take longer to answer and can be challenging to analyze across the responses, as the answers can be varied. It is recommended to include at least one open-ended question in a survey, but should be used sparingly. As mentioned in the previous chapter, survey testing will provide insights as to how many – or few – open-ended questions should be included.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=111#h5p-8

Regardless of how a survey is distributed, it's crucial to have the questions written with as few errors as possible. A survey can include any number and type of questions, and more complicated questions should appear only once users are comfortable with the survey.

Market Research in Action: Alex

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Alex would like to create a survey for the current members of their coffee loyalty program, as they have noticed that sign-ups have decreased significantly over the past few months, and email open rates from current members have also been decreasing. After going through the steps to identify a market research program, they have identified it as , "What types of rewards do customers prefer within a loyalty program—discounts, free items, personalized offers, or experiential rewards?". Alex has decided to create a survey for current loyalty program members and email it to them with an incentive. They have created a draft survey in SurveyMonkey and would like to test it with some employees and some marketing colleagues to ensure it is free of errors and biases.

Using common survey design errors, some questions that have errors and some proposed solutions are listed below to ensure the survey that Alex sends out to their customers will have a high completion rate and be directly related to the market research decision problem.

Common survey question errors

Question that is too general

Alex suggested to begin the survey with a fairly simple question:

1. Do you like rewards?

- Yes
- No
- Not sure

This question, although related to the market research decision problem, is very general, as the term 'rewards' could mean many things, not only loyalty programs. Alex would be better to ask a more specific question related to the cafe's rewards program in order to understand the benefits that are most valuable to their customers.

Demographic questions in the wrong place

Alex suggested to include this question near the start of the survey:

2. State your annual household income:

- $20,000 and under
- $20,001 to $50,000
- $50,001 to $75,000
- $75,001 to $100,000
- $100,001 and over

This might not be an uncomfortable for everyone, but a lot of folks don't like talking about how much money they make in a year, particularly if the survey is anonymous. This is why any demographic questions – such as address, phone number, email address, gender, income, etc. – should always be put at the end. The rationale for this is that respondents have already answered the bulk of the survey questions and will be more apt to not abandon the survey if there only these demographic questions remain.

One additional point about demographic questions is that they should only ever be asked if the answer is directly related to the market research decision problem. In the case of Alex's survey, household income *may* be of interest in relation to the benefits of a loyalty program, but other more personal questions such as education level or gender might not provide insights into the decision problem. Also, Alex may already have the contact information for the loyalty member program in a database, do it's not necessary to ask these respondents to fill it in again. In sum, only ask the demographic questions that are vital to the market research decision problem.

Question that is too specific

Alex wanted to really dive into the details of the other loyalty programs that the survey respondents are part of, so they suggested this open-ended question in the survey:

3. Please list the loyalty program that you use the most such as a grocery or gas loyalty program. Think about how many times you accumulate points every year with this program and list 3 to 5 benefits of this program.

As mentioned briefly earlier in this module, open-ended questions are challenging to code because the more broad the questions are, the more wider range of answers the respondents will provide. This makes data analysis really tricky. Secondly, most people don't really remember how many loyalty programs they belong to and defintely wouldn't remember how many times they

would accumulate points every year. Instead, if Alex wants to know what types of loyalty programs their current customers participate in, a closed check-box question could allow Alex insight into any programs that their customers use and then those benefits could be reviewed.

The question could be rephrased to be:

3. Of all of the loyalty programs listed below, please select all that you think you have accumulated points for over the past 12 months. This typically involves using a loyalty program card at a point of purchase like a cash or gas pump. Please select all that apply.

- Gas pump program A
- Grocery program B
- and so on...

Question that is presumptuous

Alex has a hunch that one of the reason's their customers are part of the loyalty program is for a discount, so they suggested this question as part of the survey:

4. *Which discount do you prefer: 10% off or 20% off?*

This question assumes that one of the benefits of the loyalty program to the respondent is a discount, and that they would be able to choose between 10 and 20%. This question is also flawed as virtually no one would answer this question with a preference for 10% discount, so the data from this question would not be helpful to finding solutions to the market research decision problem.

Question based on imagination

Alex is interested in exploring a variety of scenarios for expanding the loyalty program, so has come up with this question for the survey:

5. Imagine that you and a group of friends are coming for a coffee date in the summer. As a loyalty member, you would get 50% off your drink if your friends purchase three drinks at regular price and sit inside. How many times would you take advantage of this offer every year?

This question is about a hypothetical situation that may or may not ever occur. It's always better in surveys to construct question that address past behaviour or ask questions about preferences, and not ask people to put themselves in an imaginary situation.

Question with vague quantifiers

Alex wants to understand the frequency of visits for the survey respondents and will then try to match that information with the data from the loyalty card program tracking software. Alex included this question in the draft survey:

6. Over the past 4 weeks, how often have you made a purchase at the cafe?

- Often
- Quite frequently
- Occasionally
- Rarely
- Unsure

The challenge with this question is there is no universal indicator for 'often' or 'occasionally'. For a frequent coffee drinker, often could be every morning and twice on weekends, where someone who goes one per month might think that is 'occasionally'. It is always best to have a scale that can will be interpreted the same by all respondents. An edit to this question could be:

6. Over the past 4 weeks, how often have you made a purchase at the cafe?

- I didn't make a purchase at the cafe in the past 4 weeks
- 1-2 times
- 3-4 times
- For than 4 times

Question with low recall

Alex knows from the cafe loyalty program database, that members visit the cafe more than once and mostly live in the local area. Alex is really interested in how often the loyalty program members purchase specialty coffees, so they included this question in the survey:

7. Over the past 18 months, how many specialty coffees have you purchased? Specialty coffees is any coffee other than a drip or filter coffee.

- Zero
- One to four
- Five to nine
- Ten to 14
- More than 15

The challenge with this question is that respondents will not be able to remember how many

specialty coffees they purchased over such a long time frame so the recall will not be accurate. Unless the respondent never purchases specialty coffee, this question would probably be a guess by most respondents. Alex should rephrase the question to be in the past week or month, so that the respondent can accurately recall how many lattes, Americanos or cappucinos they have purchased.

Questions with jargon

Alex wrote this question to understand a general level of satisfaction with the existing loyalty program.

8. Please indicate your level of satisfaction pertaining to the gamut of rewards integrated within our loyalty program vis-à-vis your consumer experience.

The challenge with this question is it's overally complicated and used terms like 'gamut' and 'vis-à-vis' that may not be understood by all survey respondents. The best practice is to keep the language as simple as possible so all respondents can understand what is being asked.

Alex could reword this question to be simpler:

8. How satisfied are you with the rewards offered in the cafe loyalty program?

- Strongly dissatisfied
- Somewhat dissatisfied
- Neither Satisfied nor Dissatisfied
- Somewhat satisfied
- Strongly satisfied

Leading question

Based on Alex's knowledge of their customers, they are pretty sure that experiential rewards are a big selling point of the cafe's loyalty program, so Alex included this question in the survey:

9. Given that most customers prefer experiential rewards, do you agree that this should be the primary focus of our loyalty program?

This question is a leading question, as it's priming the respondent with unproven data (the most customer prefer experiential rewards) and then asking the respondent to agree with this finding. This leads the respondent to inevitably agree with the answer. Instead, Alex, should focus on probing

the customer about their individual interested in the cafe's loyalty program, perhaps a ranking question like this:

9. Please rank all of the existing benefits of the cafe's loyalty program in the order of top priority to lowest priority.

- Free drink on birthday
- Double stamp days
- Members-only events
- Pre-sales for member of custom merchandise
- Members-only line at checkout

Double-barrelled question

Alex is interested in understanding the preferences of their customers, particularly related to possible new benefits of the cafe's loyalty program. Alex included this question in the survey:

10. Do you prefer receiving free items or discounts on your favourite menu items?

- Yes
- No
- Not sure

The challenge with this question is that Alex is forcing the respondent to choose between free items or discounts, but perhaps some respondents may prefer both or neither would be a benefit. A double-barrelled question is essentially trying to ask two questions, making it impossible to answer. Alex could reword the question and break it into two questions to probe more about free items and the level or type of discount, so the question could be answered by the respondent more accurately.

Question not related to the market research decision problem

Alex thought that since they are sending out a survey to the cafe loyalty members, it would be a good chance to ask the members some questions about the traffice after the Sunday morning cycling club. There have been some compliants about long lines and cyclists parking their bikes and obstructing the patio and accessible entrance.

Alex added this question to the survey:

11. How much difficulty have you faced accessing the café due to bike parking or congestion caused by the cycling club on Sundays?"

- No Difficulty at All
- Slight Difficulty
- Moderate Difficulty
- Significant Difficulty
- Extreme Difficulty

The issue with this question is that the survey is being sent out to cafe loyalty members with to help find answers to the market research decision problem: "What types of rewards do customers prefer within a loyalty program—discounts, free items, personalized offers, or experiential rewards?". This question is targetted specifically to cafe customers who frequent the cafe on Sundays, and this may or may not include the cafe loyalty members. Also, this question is not related to the survey topic, so additional questions will impede the flow of the questions and inevitably reduce completion rates.

Alex should consider another type of market research to understand any challenges related to the cycling club visits to the cafe on Sundays and not include this question in the survey.

This video from the Pew Research Center shows some examples of commonly found errors in surveys.

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In general, in order to pose effective survey questions, researchers should do the following:

- Ensure the answers to the questions will help meet the objectives of the survey.
- Keep questions clear and succinct so they can be consistently understood the

same way by all respondents.

- Ensure the questions are formulated so questions and answer choices and their order as neutral as possible, i.e. they avoid suggesting answers
- Ensure any key terms are clearly defined.
- Make sure respondents have relevant lived experience to provide informed answers to the questions.
- Use filter questions to avoid getting answers from uninformed participants.
- Avoid questions that are likely to confuse respondents—including those that use double negatives, use culturally specific terms or jargon, and pose more than one question at a time.
- Imagine how respondents would feel responding to questions.
- Ensure sensitive questions, such as demographic information are at the end of the survey, when respondents will feel more comfortable answering them.
- Ensure the survey is short enough to ensure that the respondents will be able to concentrate until the end.
- Get feedback, especially from people who resemble those in the researcher's sample.

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PART VIII

MODULE 8: QUALITATIVE RESEARCH AND HOW TO DESIGN A FOCUS GROUP

Learning Objectives

In module 8, students will learn how to:

1. Define qualitative research and its exploratory nature in understanding consumer perceptions, sentiments, and opinions towards a particular topic.
2. Identify key qualitative research methods such as focus groups, participant observation, and informational interviews and their applications in market research.
3. Explain the purpose and methodology behind focus groups as a means of gathering primary qualitative data in market research.
4. Illustrate the components of a focus group session, including the role of professional moderators, discussion guide creation, and the process from introductions to conclusion.
5. Describe the methodology and advantages of conducting focus groups online, including global accessibility, and technology tools used.

8.1: Qualitative Research

As was briefly mentioned in module 4, **qualitative research** is exploratory in nature and aims to learn what prospective customers think and feel about a particular topic. While quantitative research provides hard data to support these hypotheses, qualitative research helps identify potential ones. The most common methods used by market research for qualitative research are focus groups, participant observation, and informational interviews.

Informational interviews typically consist of a few general questions or prompts that allow participants to talk about what interests them. They can be structured, meaning that the interviewer follows a strict script, or semi-structured interviews, where the researcher has a few consistent questions and can follow up by asking more detailed questions about the topics that do come up. Such interviews can be lengthy and detailed, but they are usually conducted with a relatively small sample. Informational interviews have two advantages: one is that the researcher can establish a connection and trust with the research participant and ask probing questions to obtain a single opinion; on the other hand, the data are time-consuming and reflect a single person.

The basic justification for participant observation is that there may be important information that is only accessible to, or can be interpreted only by, someone who is an active participant in the group or situation. One of the main drawbacks to participant observation is observation bias, which means that the participant knows that they are being monitored or studied, which can significantly change their behaviour and the data that researchers collect. Participant observation is another approach to data collection in qualitative research. In this method, researchers become active participants in the group or situation they are studying.

Conducting focus groups—small groups of people who participate together in interviews focused on a particular topic or issue—is one of the most popular qualitative methods, especially for market research. Because focus groups can sometimes elicit more information than one-on-one interviews, we will go into greater detail about focus groups in this resource because they are the most frequently used qualitative method.

Professor Wolters shares the benefits of qualitative market research in this video.

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Market Research in Action: Maya

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Maya is a graphic designer living in downtown Vancouver and has recently taken some market research courses so she can add this as part of a skill set to clients. Most of Maya's clients are smaller, not-for-profit organizations who don't have the budget to have a full marketing team on staff. One of Maya's clients, GreenTree, is a charitable organization who is interested in stopping some long-standing tree planting programs in some rural parts of British Columbia and creating some new programs that they think would have a bigger impact. They have asked Maya to do a logo for the new program, but Maya thinks that doing some market research before any decisions are made would help make a data-informed approach.

Maya suggested qualitative research would be a good way to understand the impact of the existing tree planting program on participants in rural areas. Since this is a program in a rural area, some of the follow factors need to be considered:

- Is there budget for a professional facilitator for the focus groups, or would Maya have the skills to facilitate them?
- If this is an online focus group, will the internet be able to support it?
- Are the potential participants in the focus group comfortable with computers?
- If some of the potential participants don't speak English as their first language, will they be able to participate equally?
- If the focus group is in person, is there a facility that would be physically accessible so anyone can participate? Would child care be available on site?

What other questions should Maya and the GreenTree team consider before moving ahead with a focus group?

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8.2: Focus groups

Focus groups are perfect for having candid, in-depth conversations with people who are interested in your brand. As a result, the findings result in primary, qualitative data, which is occasionally used, as part of the market research plan, to be used to create quantitative research questions. The content of all focus group interviews is usually recorded and transcribed to facilitate later analyses. However, we know from social psychology that group dynamics are often at play in any group, including focus groups, and it is useful to be aware of those possibilities.

Focus groups are less formal than surveys, so the researcher will have predetermined questions to ask, but as participants share their impressions, the conversation usually flows and deepens. The secret to a successful focus group is to select a sample of fairly homogeneous participants—usually 8–10—who will have shared experiences and viewpoints relevant to the decision problem.

Focus groups, which typically last one to two hours, are used to gather consumer opinions on the following topics:

- New products or marketing campaigns;
- Sentiment surrounding the brand;
- Opinions on a brand's new direction or visual style;
- Suggestions for how the brand could improve its position or branding.

There are several ways to find participants for a focus group: inviting individuals from your existing customer database; using a traditional market research recruiting agent; posting a call out on your website or social media communities. It is customary to provide participants with a small incentive, like a gift card or payment, because focus groups take place during a fairly long period of time.

Components of a focus group

As can be seen in the module 4 table comparing qualitiative and quantitative research, qualitative research is generally more costly and resource-intensive than

quantitative research. One of the reasons for this is the suggestion that a focus group be facilitated by a professional moderator; focus group facilitation is a highly skilled profession, and it can be difficult for employees or those with a connection to the topic or business to be able to remain neutral and not direct the answers for respondents. Typically, the professional facilitator will produce a discussion guide, which is a document that contains all of the questions that will be probed with the group. The facilitator and the client will collaborate to create a discussion guide that contains only those questions that are directly related to the decision problem of the research.

Dr. Richard A. Krueger is considered one of the top researchers of focus groups. This video clearly explains the steps one would take to set up an in-person focus group.

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Components of a discussion guide

The components of a discussion guide typically include:

1. Introductions and welcomes: This is an opportunity for the facilitator to welcome everyone, go through housekeeping items such as where the bathrooms are located, and go through the 'rules of engagement'. This is also the time where the facilitator reminds everyone of if and how the session will be recorded and how the findings will be used. This is also a good time to have some sort of ice breaker exercise, so names can be shared and participants can begin to build rapport.
2. Research objectives: The facilitator will share the objectives of the research and may or may not choose to share the identity client. Sometimes clients will hire market research firms to gather information about a specific product, like diapers, and want to ask parents about their opinions on all types of diapers. Therefore, it may not always be disclosed to the participants who the client is.

3. Warm-up questions: In order to continue to build rapport amongst the participants, one or two questions to get folks talking will typically take place at the start of the session.
4. Key questions: The facilitator will have a number of key questions that have been pre-determined along with the client. These questions will be probed in depth and the facilitator will ensure that everyone has an opportunity to share their opinions and build on the answers of other participants. Once the key questions are close to completion, often the facilitator will connect with the client, who may be observing in an adjacent room with a two-way mirror, to consult on any additional questions that may need to be asked.
5. Conclusion: The facilitator will want to end the focus group on a positive note, so will typically provide a summary of the points discussed, ask participants for any final thoughts, and offer a warm thank you to everyone.
6. Final report: The facilitator will review the recording and transcript of the focus group, and provide an in-depth report with recommendations for the client.

Dr. Richard A. Krueger and Dr. Mary Anne Casey have a comprehensive handout on focus group research methods that can be accessed on their website here.

Online focus groups

Online focus groups involve respondents gathering online and reacting to a particular topic. Typically, the sequence of events is similar to an in-person focus group, but there are differences to participating in a focus group virtually. Respondents can be sourced from all over the world and react in real time, arguably being freer with their responses since they can be anonymous in an electronic environment. Online focus groups can be conducted using a range of technologies. The most common is a tool such as Zoom or Google Meet to schedule a live meeting where reminders and follow-ups by email can occur. These tools allow for video conferencing and can make it easier for the researcher to pick up clues from the respondent's voice and facial expressions, as well as to have the session recorded and transcribed. Certain AI tools that are now available, such as OtterPilot, joins meetings, records audio, writes notes, captures slides, generates summaries, and answers your team's questions.

One advantage of online focus groups is that they offer more opportunities for accessibility. For instance, parents and caregivers may not have the time to travel and participate in a focus group in person, but they can participate online for two hours. Online focus groups can also reach potential participants who live in suburban or rural communities across Canada. Additionally, technological tools like ASL and simultaneous translation can remove barriers that prevent people with disabilities or those who do not speak English as their first language from participating.

Focus groups have certain drawbacks: most require a desktop or laptop computer with high speed internet, which may be prohibitive for people who live in more rural areas; additionally, a basic level of computer knowledge is necessary, which may not be applicable to all potential participants; finally, it can be difficult to establish a rapport with people over the internet, which could compromise the quality of the group's overall insights.

Focus groups conducted online are a great way to quickly gather a large amount of qualitative data. When organizing a focus group, aim to have eight to ten participants, but do not have too many so that some participants are drowned out by others. Technical difficulties are common with online focus groups, especially when participants are connecting from different locations and Internet connections, so allow extra time at the start of the session to make sure everyone can participate in the discussion without experiencing any technical difficulties.

Market Research in Action: Maya

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Maya and the GreenTree team decided to move ahead with an in-person focus group in a facility that is physically accessible and has a one-way mirror so GreenTree staff can observe the discussion. Due to budget constraints, Maya was the facilitator of the focus group, so she created a discussion guide that was approved in advance of the focus group. No translation was needed as all participants would participate in English.

Here is a high-level overview of the focus group.

Introductions and welcomes

- Maya welcomed each person at the door and told them where they could hang their coat, shared the location of the washroom and invited them to take some food and drink.
- Once everyone was seated comfortable, Maya went through a number of housekeeping items, and shared that the session would be recorded and that members of GreenTree were on the other side of the one-way mirror.
- Details of how the data would be stored and used were shared with all participants and they were informed that they could leave at any time.
- Maya then distributed name tags and had a small icebreaker exercise so everyone had a chance to share something about themselves.

Research objectives

- Maya shared the purpose of the research: That GreenTree was wanting to assess the tree planting program in order to make informed decisions about it going forward.
- Maya shared why the participants were selected and that their feedback was very valuable to the GreenTree team.

Warm-up questions

Maya created two questions order to build rapport amongst the participants.

1. How would you describe your relationship with nature or the environment in your day-to-day life?
2. Share a memorable experience you've had in nature that was meaningful to you.

Key questions

- After the group was warmed up, Maya followed the discussion guide and asked a series of open-ended questions that were pre-determined along with GreenTree. These questions are designed to be probed in depth and the facilitator will ensure that everyone has an opportunity to share their opinions and build on the answers of other participants.

Some of these questions could be:

1. What sparked your interest in participating in this focus group discussion about tree planting programs and environmental initiatives?
2. What comes to mind when you think about tree planting initiatives or environmental programs?
3. Are you familiar with any tree planting programs in British Columbia, and if so, which ones?
4. What motivates or discourages you from participating in environmental initiatives or tree planting programs?
5. What qualities or attributes would encourage your involvement in a tree planting program?
6. What do you expect from a tree planting program in terms of impact or outcomes?
7. What new elements or approaches would make a tree planting program more appealing or effective to you?
8. Are there specific areas or communities where you believe tree planting initiatives would be most impactful?

- Once the key questions were close to completion, Maya left the room to ask the GreenTree team if they had any additional questions for the participants.

Conclusion

Maya provided a summary of the points discussed, asked the participants for any final thoughts, and offered a warm thank you to everyone. As the participants left, they were given a fee to compensate them for their time.

Final report:

Maya reviewed the recording, transcript and her notes, and provided an in-depth report with recommendations for the GreenTree team.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/introductiontomarketresearch/?p=118#h5p-4

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PART IX

MODULE 9: DATA ANALYSIS AND PRESENTING THE RESEARCH FINDINGS

Learning Objectives

In module 9, students will learn how to:

1. Define the role of data analysis in market research and its significance in transforming raw data into actionable insights for decision-making.
2. Explain the purpose of data formatting, cleaning, and editing in preparing data for analysis.
3. Identify the importance of involving individuals with domain knowledge in interpreting data and extracting significant insights.
4. Recognize the need for specialized expertise in data analysis for sound interpretation and recommendation generation.
5. Identify the essential components of a comprehensive market research report, including the title page, table of contents, executive summary, methodology, findings, and recommendations.
6. Explain the importance of clear, concise, and reader-friendly reporting, devoid of technical jargon, for effective communication to decision-makers.
7. Articulate the need for condensing key points for presentation slides and providing talking points for presenters to maintain audience engagement.

9.1: Data analysis

After the information has been gathered using the techniques outlined in the market research project plan, **data analysis** can start. Data analysis is the process of condensing the information into a format that is easier to comprehend and use. It can take many different forms, ranging from the application of simple statistics to a more involved data visualization procedure.

Whatever the research questions, the analysis takes source data and applies analytical techniques to provide a clearer picture of what is happening. This process may involve simple or sophisticated techniques, depending on the required research outcomes.

First, the data is formatted, cleaned, and edited to ensure that it is suitable for whatever analytical techniques are being used. Next, data are tabulated to show what is happening: What do customers actually think? What is happening with purchasing or other behaviours? How do revenue figures actually add up?

If a smaller organization or business is doing the analysis, this can be challenging for folks who don't have the necessary background and expertise to do data cleaning and analysis. Part of analyzing the data is to see if it seems sound. Does the way in which the research was conducted seem sound? Was the sample size large enough? Are the conclusions that become apparent from it reasonable? Individuals with a good working knowledge of the business or organization should be involved in interpreting the data because they are in the best position to identify significant insights and make recommendations from the research findings. If there isn't the expertise one a team to adequately analyze the data, consider getting help an expert. One place to look for help is the Certified Analytics and Insights Professionals of Canada. At this website, there is a list of professionals with the CAIP designation, a modern, respected and globally endorsed certification program for Canadian research, analytics and insights professionals.

Good data analysis is important because the interpretation of market research data—the "so what?" factor—depends on it. The analysis combs through data to paint a picture of what's going on. The interpretation goes further to explain what the research data mean and make recommendations about what managers need to know and do based on the research results. For example, what is the short list of key findings and takeaways that managers should remember from the research?

What are the market segments you've identified, and which ones should you target? What are the primary reasons your customers choose your competitor's product over yours, and what does this mean for future improvements to your product?

Once the data analysis is complete, it's time to move onto the last stage of the market research project and to share the results and make recommendations.

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Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax, Rice University. CC BY 4.0

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9.2: Elements of a market research report

The market research report marks the culmination of the project, but it also marks the beginning of the recommendations' implementation and action phase. Having established the decision problem, chosen a research method, identified a target population sample, collected and analyzed data accurately, and, hopefully, produced sound findings, the next step is to prepare the report and possibly present it to a group of decision makers. Usually, this involves writing a report and, occasionally, creating a slide show based on the report.

The six fundamental components of a research report are as follows:

1. Title Page: This section provides an overview of the report, including its purpose, who requested it, when and how it was conducted.
2. Table of Contents: This section lists all of the major sections of the report along with any graphs or charts, along with the page numbers where they are located.
3. Executive Summary: This section provides a brief summary of all the details in the report, suitable for both executives and nonexecutives who may not have the time to read the entire document.
4. Methodology and Limitations: The methodology section of the report explains the technical details of how the research was designed and conducted. The section explains, for example, how the data was collected and by whom, the size of the sample, how it was chosen, and whom or what it consisted of (e.g., the number of women versus men or children versus adults). It also includes information about the statistical techniques used to analyze the data. Every study has errors—sampling errors, interviewer errors, and so forth. The methodology section should explain these details, so decision makers can consider their overall impact. The margin of error is the overall tendency of the study to be off kilter—that is, how far it could have gone wrong in either direction. Remember how newscasters present polls before an election? They always say, "This candidate is ahead 48 to 44 percent, plus or minus 2 percent." That "plus or minus" is the margin of error. The larger the margin of error is, the

less likely the results of the study are accurate. The margin of error needs to be included in the methodology section.

5. Findings: If there is additional research or secondary data that supports the study's conclusions, it can be included in the findings section to help demonstrate that the study accomplished its goals. The findings section is an expanded, more detailed version of the executive summary that provides additional information about the statistics that the research uncovered and that support the study's conclusions.
6. Recommendations. The recommendations section should include a description of the course of action you believe should be followed in light of the research's findings as well as the project's objectives. ***Examples***

Staff members have the most knowledge about the organization or business, so they will know what should and should not be included in the final research report and presentation. When preparing the report, it is important to keep the readership in mind. Avoid using technical jargon that decision makers and other readers will not understand; if you must use technical terms, explain them. Additionally, proofread the document to catch any typos or grammatical errors; ask a couple of people to proofread behind you to catch any mistakes you might have missed. Lastly, since many research reports are presented using slideshows, avoid trying to include every detail of the report on the slides. People attending the presentation will not have the time to go through the lengthy and boring material, and even if they do, it is unlikely that they will be paying attention to the presenter.

During or after the presentation, attendees can review the longer, paper version of the report so they can read the details at a convenient time, if they choose to. Instead of including all the information from the study on the slides, condense each section of the report down to key points and add some "talking points" only the presenter will see.

References

Albrecht, M. G., Green, M., & Hoffman, L. (2023). *Principles of Marketing*. OpenStax, Rice University. CC BY 4.0

Author removed at request of original publisher. (2022). *Principles of Marketing – H5P Edition*. BC Campus Open Education. CC BY-NC-SA 4.0

PART X

MODULE 10: AI AND MARKET RESEARCH

Learning Objectives

In module 10, students will learn how to:

1. Define Artificial Intelligence (AI) and understand its broad applications in market research
2. Identify the ethical considerations associated with the use of AI in market research.
3. Distinguish concerns related to gender, diversity, and accessibility in AI applications.
4. Apply the ROBOT test to assess the reliability, objectivity, bias, ownership, and type of AI tools.
5. Reflect on the importance of ongoing learning in AI literacy for market research professionals.
6. Define key terms related to artificial intelligence in the context of market research.

At the end of this chapter, students are encouraged to try this AI and ethics quiz.

References

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10.1: What is AI?

What is AI?

"Artificial intelligence" (or AI) is a catch-all term that encompasses a wide range of machine learning technologies that use large data sets – collections of information – to make predictions or conclusions. AI technologies have been with us for some time – predictive text, social media algorithms, content recommendation, surveillance, and translation tools all use AI to some extent. Interest in the field of AI has recently grown with the arrival of new and already popular tools like ChatGPT and MidJourney and even newer products steadily moving onto the market, such as Microsoft's Bing and Google's Gemini. AI systems can be differentiated from other computerized systems because AIs have fluid adaptation capabilities, sometimes going beyond what was initially programmed. (Vinchon et al, 2023).

GenAI

Another term that is important to understand is Generative AI. "Generative AI" (or GenAI) is the class of tools where the AI creates – or generates! – something like an image, a paragraph, a video, or a sound file.

The arrival of GenAI has recently changed the public's interest in AI. GenAI can be defined as a system that uses existing information to create new content. (Vinchon et al, 2023).

GenAI tools are increasingly being incorporated into the main products of Big Tech companies like Microsoft, Google, and Facebook. "In November 2022 ChatGPT, a popular artificial intelligence (AI) tool, was released. Although it isn't the first AI technology available… it gained sudden fame, both radical and negative, among scholars, researchers, educators, and students after its release to the public," (Nguyen, 2023).

"ChatGPT is an AI system equipped with various abilities. This sophisticated chat-bot can read, make summaries, solve math problems, produce a comprehensive piece of writing (e.g., an academic essay, proposal, course syllabi draft), or create

a consulting report or art piece. ChatGPT can also tutor students by providing explanations of abstract concepts and theories. ChatGPT can engage in scholarly debates in various fields of study as it can access relevant literature within seconds," (Nguyen, 2023).

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You can explore AI Developments through the 20th and 21st Centuries using this interactive timeline.

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Marketing student feedback

AI matters in marketing, and market research specifically, for a number of reasons. As shared in Module 1.2, ethics in market research should be considered in every step of the process. You will remember that we discussed the three core principles of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans that are respect for persons, concern for welfare and justice. These principles must be considered carefully before using any AI tools and this will be further explored in Module 10.2.

The field of AI is exploding in every sector and changing rapidly. A marketing student cannot be expected to understand exactly how AI works, its in-depth history and how it changes, but should be committed to continued learning and curiosity so ethical considerations can be a priority moving forward in a career in marketing. This chapter will explore AI literacy, some considerations and possibilities for using AI in market research and some open resources that can be used for additional learning.

As part of the creation of this chapter, the Market Research and Consumer

Behaviour class at St. Lawrence College offered some feedback and suggestions on AI from a market research student point of view.

When the students were asked about some of the benefits from AI, here are a few of their answers:

"AI is incredibly helpful for generating content or questions about brands or products for various purposes like surveys. It provides a basic understanding of any topic, aiding in research and exploration."

"When we discussed in class the structure of ChatGPT and realized that it consistently responds similarly to prompts of a similar nature, I was astounded. It's incredible to know how one can identify responses generated by ChatGPT. Moreover, witnessing the pace and manner of AI evolution is truly fascinating. From its initial limitations to processing text, then images, and now even videos, the progression is remarkable. However, I hold optimism, hoping that innovators maintain control over AI advancement rather than AI controlling its own evolution."

"One key advantage or benefit of AI is its automation as it can handle multiple time-consuming tasks and allows the human to finish more tasks than usual."

"AI can complete certain tasks a lot faster than we can. If I need to edit a blog/caption or any copy, I will use Grammarly to edit the writing instead of doing it myself or asking someone else to do it – it's a lot faster this way."

"One key advantage or benefit of AI is its automation as it can handle multiple time-consuming tasks and allows the human to finish more tasks than usual."

The students are still curious and want to learn more about ethical guidelines for responsible use of AI. The students see the future opportunities of AI in market research in automating the process of designing, personalized marketing, predictive analytics, text analysis and overall more efficient data analysis.

When asked what was essential to include in the development of this chapter, the students shared the following recommendations:

- Ethical considerations
- New tools and platforms
- Case studies
- Future trends

Ethical considerations and future trends have been included throughout the chapter, but new tools were not specifically recommended, other than ChatGPT, as we don't want to be recommending private companies and marketing software as the sector is changing so quickly. Case studies will hopefully be included in a future

update of this OER once some additional published research is available using AI and market research.

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10.2: AI literacy and bias

Challenges and ethical considerations of AI

Although AI itself has been around for decades, there hasn't been a significant amount of research on AI in the public sphere, and much of it is quite recent. You will see throughout this chapter a lot of mention of ChatGPT, as this tool is widely publicized and fairly accessible, and is currently used not only by marketing students and professionals in a number of ways, but the ChatGPT API fuels many AI resources used in market research. UNESCO published a ChatGPT and Artificial Intelligence in higher education quick start guide that includes some excellent considerations for both students and anyone interested in learning more about AI, and specifically ChatGPT.

UNESCO shares some challenges and ethical considerations that are helpful to understand and explore when considering using any AI tool:

Lack of regulation

At the time of publication [2023], ChatGPT is not currently regulated. The extremely rapid development of ChatGPT has caused apprehension for many, leading a group of over 1,000 academics and private sector leaders to publish an open letter calling for a pause on the development of training powerful AI systems.This cessation would allow time for potential risks to be investigated and better understood and for shared protocols to be developed.

Privacy concerns In April 2023, Italy became the first country to block ChatGPT due to privacy related concerns.The country's data protection authority said that there was no legal basis for the collection and storage of personal data used to train ChatGPT. The authority also raised ethical concerns around the tool's inability to determine a user's age, meaning minors may be exposed to age-inappropriate responses. This example highlights wider issues relating to what data is being collected, by whom, and how it is applied in AI.

Cognitive bias

It is important to note that AI is not governed by ethical principles and cannot distinguish between right and wrong, true and false. AI tools like ChatGPT only collect information from the

databases and texts it processes on the internet, so it also learns any cognitive bias found in that information. It is therefore essential to critically analyse the results it provides and compare them with other sources of information.

Gender and diversity

Concerns about gender and other forms of discrimination apply to all forms of AI. On the one hand, this reflects the lack of female participation in subjects related to AI and in research/development on AI and on the other hand, the power of generative AI to produce and disseminate content that discriminates or reinforces gendered and other stereotypes.

Accessibility

There are two main concerns around the accessibility of AI, particularly related to ChatGPT. The first is the lack of availability of the tool in some countries due to government regulations, censorship, or other restrictions on the internet. The second concern relates to broader issues of access and equity in terms of the uneven distribution of internet availability, cost and speed. In connection, teaching and research/development on AI has also not been evenly spread around the world, with some regions far less likely to have been able to develop knowledge or resources on this topic.

Assessing AI tools

"In the era of generative AI, one of the most important resources is data. Data, whether labeled or unlabelled, is crucial when training AI models to 'learn' how to complete their intended task(s). However… the procedures that surround data acquisition and dataset formation are largely unregulated by any legal entity," (Fokam, 2023).

Marketers cannot typically understand how the datasets used to train AI are collected, but much of its source data uses "…content from the internet content from the internet, which is unfiltered and can contain hate speech or discriminatory language towards racial and gender minorities. In other words, generative AI, especially in large language models like ChatGPT, can inadvertently perpetuate certain biases and amplify existing socioeconomic disparities," (Fokam, 2023).

When thinking about whether and how to use AI tools to complete a task, one

needs to consider the limitations of AI as well as the opportunities to support faster, more efficient and possibly more accurate output.

There are a number of frameworks for assessing digital and AI tools, including the the ROBOT test developed by The LibrAIry :

Reliability; **O**bjective; **B**ias; **O**wnership; **T**ype

Reliability

- How reliable is the information available about the AI technology?
- If it's not produced by the party responsible for the AI, what are the author's credentials? Bias?
- If it is produced by the party responsible for the AI, how much information are they making available?
    - Is information only partially available due to trade secrets?
    - How biased is they information that they produce?

Objective

- What is the goal or objective of the use of AI?
- What is the goal of sharing information about it?
    - To inform?
    - To convince?
    - To find financial support?

Bias

- What could create bias in the AI technology?
- Are there ethical issues associated with this?
- Are bias or ethical issues acknowledged?
    - By the source of information?
    - By the party responsible for the AI?
    - By its users?

Owner

- Who is the owner or developer of the AI technology?
- Who is responsible for it?

    - Is it a private company?
    - The government?
    - A think tank or research group?
- Who has access to it?
- Who can use it?

Type

- Which subtype of AI is it?
- Is the technology theoretical or applied?
- What kind of information system does it rely on?
- Does it rely on human intervention?

Resources

Fokam, G. M. (2024, January 3). *Breaking the Binary: Navigating Generative AI, Feminism, and Racial Equity in the Era of Digital Redlining*. OER Commons. CC BY-NC-SA 4.0 DEED

Hervieux, S. & Wheatley, A. (2020). *The ROBOT test* [Evaluation tool]. The LibrAIry. CC BY-NC-SA 4.0 DEED

Silberg, J., & Minyaka, J. (2019, June). Generative AI and the future of work in America. McKinsey & Company.

United Nations Educational, Scientific and Cultural Organization. (2023). *ChatGPT and Artificial Intelligence in higher education quick start guide*. CC-BY-SA 3.0 IGO

10.3: AI and market research

Artificial Intelligence (AI) offers a groundbreaking approach to market research, capable of significantly accelerating and enhancing the entire process. AI algorithms can process vast amounts of data at incredible speeds, providing real-time, actionable insights. These algorithms are capable of analyzing customer behaviour, market trends, and even predicting future market conditions, thereby offering startups a competitive edge.

AI-driven solutions can automatically enrich customer profiles with a multitude of data points, such as geographic location, company size, and technology usage. This level of detail enables more effective customer segmentation, allowing customized marketing strategies to different customer personas.

The integration of AI into the market research process represents a significant advancement in the field. By automating much of the data collection and analysis, marketing teams can free up valuable resources to focus on strategy and implementation. Furthermore, the real-time nature of AI driven insights allows marketers to be more agile, adapting to market changes as they happen rather than reacting to them after the fact. (Mallikarjunaradhya & Pothukuchi, 2021).

As discussed in Module 1.2 and Module 1.3, ethics and privacy are paramount when approaching any market research project. Many of the market research AI tools that are being developed and have recently launched are tailored specifically to market research companies for analyzing open coding from quantitative research to quickly review consumer sentiment; to using AI from survey data to predict the success of a new product; to helping a focus group facilitator generate a series of draft questions for qualitative research. However, most students studying market research as part a marketing curriculum will at some point – either in studiesn or in work – will need to conduct a series of informational interviews or deploy a survey. Many of the commonly used market research tools – such as Qualtrics, Glimpse, SurveyMonkey, Cambri, etc. – have AI already built into some of its analytics tools and will probably continue to grow their AI capabilities.

Qualtrics, a market research company, surveyed 250 market researchers in 2018, and at that time 93% of researchers saw AI as a threat, and most respondents felt that support and pure analysis market research jobs in the future would be redundant; conversely, strategic and qualitative jobs are not being predicted to be

affected in a negative way. Interestingly, only 52% of the survey respondents were confident as to what AI even was, so there is a long way to go for folks working in this industry to be literate and ready for what lies ahead.

In conclusion, marketers need to have the baseline knowledge as to how to question secondary sources, how to write a survey without errors, and other best practices covered in this open education resource, as well as a desire to stay curious and learn about the challenges and opportunities that exist with AI.

Here are some helpful charts to help marketers assess when and how AI can be used:

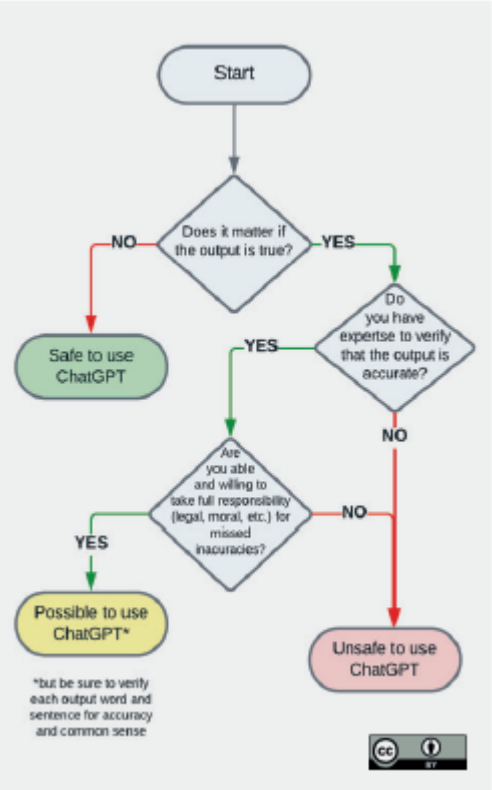

Figure 1: When is it safe to use ChatGPT? (2023)

Figure 2: Possible uses of ChatGPT in the research process. (2023)

Resources for continued learning

AI literacy is a journey that will continue as the field of market research evolves and new AI tools and opportunities arise. In order to maintain AI literacy, ongoing learning is important to make informed choices.

The Market Research and Consumer Behaviour students from St. Lawrence College share some ways that they hope to continue to learn about AI over the rest of their college studies and beyond.

"I will try to keep on exploring different features of AI which sharpen my skills of prompting to AI as well there are various free courses."

"I think it's essential to commit to a continuous process and gain some hands on experience using AI through some internship and project. Those job skills are highly valuable for me."

"Keep researching the latest AI trends/problems/ethical issues. Ask questions to our faculty members. Use it! Stay up to date and learn how to use it properly – keep practicing."

"During studies, take AI courses, engage in practical projects, and join AI-related groups. After graduation, continue learning through online courses and pursue specialized AI certifications. Network with AI professionals, apply AI in marketing roles, and stay informed about industry trends through blogs and publications."

Special thanks to the MARK100 class of Winter 2024 for supporting the development of this OER with your insights!

Here are a number of free or low cost resources that can be explored to learn more about AI. Please note these resources have not been thoroughly reviewed by the OER team, but have been scrutinized from reputable sources and were appropriate to include at the time of publication.

Glossary of terms

Wikipedia Glossary of Artificial Intelligence

AI Lab Glossary

Free / low cost AI training:

AI for everyone from Coursera

IBM Applied AI Professional Certificate from Coursera

Google Cloud Introduction to Generative AI from Coursera

University of London Machine Learning for All from Coursera

University of Pennsylvania AI for Business Specialization from Coursera

Lund University AI, Business & the Future of Work from Coursera

Introduction to Prompt Engineering for Generative AI from LinkedIn Learning

Getting Started – Teaching with Generative AI – LibGuides at BCIT

Digital Partner – The Fundamentals of ChatGPT from Alison

ChatGPT, Midjourney, Firefly, Bard, DALL-E AI course on Udemy

Stanford University Introduction to Artificial Intelligence on Udacity

AI Matters course through The Open University (there is a small cost for those outside of Europe)

Additional resources

Ethics and Governance of AI initiative carried out in conjunction with the MIT Media Lab

Algorithmic Justice League

Indigenous Protocol and Artificial Intelligence Working Group

AI Ethics quiz from Monash University

open verse – extensive library of free stock photos, images, and audio, available for free use

Futurepedia AI resource platform

The Berkman Klein Center for Internet & Society at Harvard University Ethics and Governance of AI

References

Mallikarjunaradhya, V., & Pothukuchi, A. S. (2021). The Future of Saas Startups: How AI Accelerates Market Research and Product Development. *Asian Journal of Multidisciplinary Research & Review*, *2*(4), 444–450. CC BY-NC-SA 4.0 DEED

Qualtrics. (n.d.). *How AI will reinvent the market research industry*.

Teo, W., Teoh, Z., Arabi, A., Aboushadi, M., Lai, K., Ng, Z., Pant, A., Hoda, R., Tantithamthavorn, C., & Turhan, B. (2023, February 19). What Would You do? An Ethical AI Quiz. CC BY 4.0

United Nations Educational, Scientific and Cultural Organization. (2023). *ChatGPT and Artificial Intelligence in higher education quick start guide*. CC-BY-SA 3.0 IGO