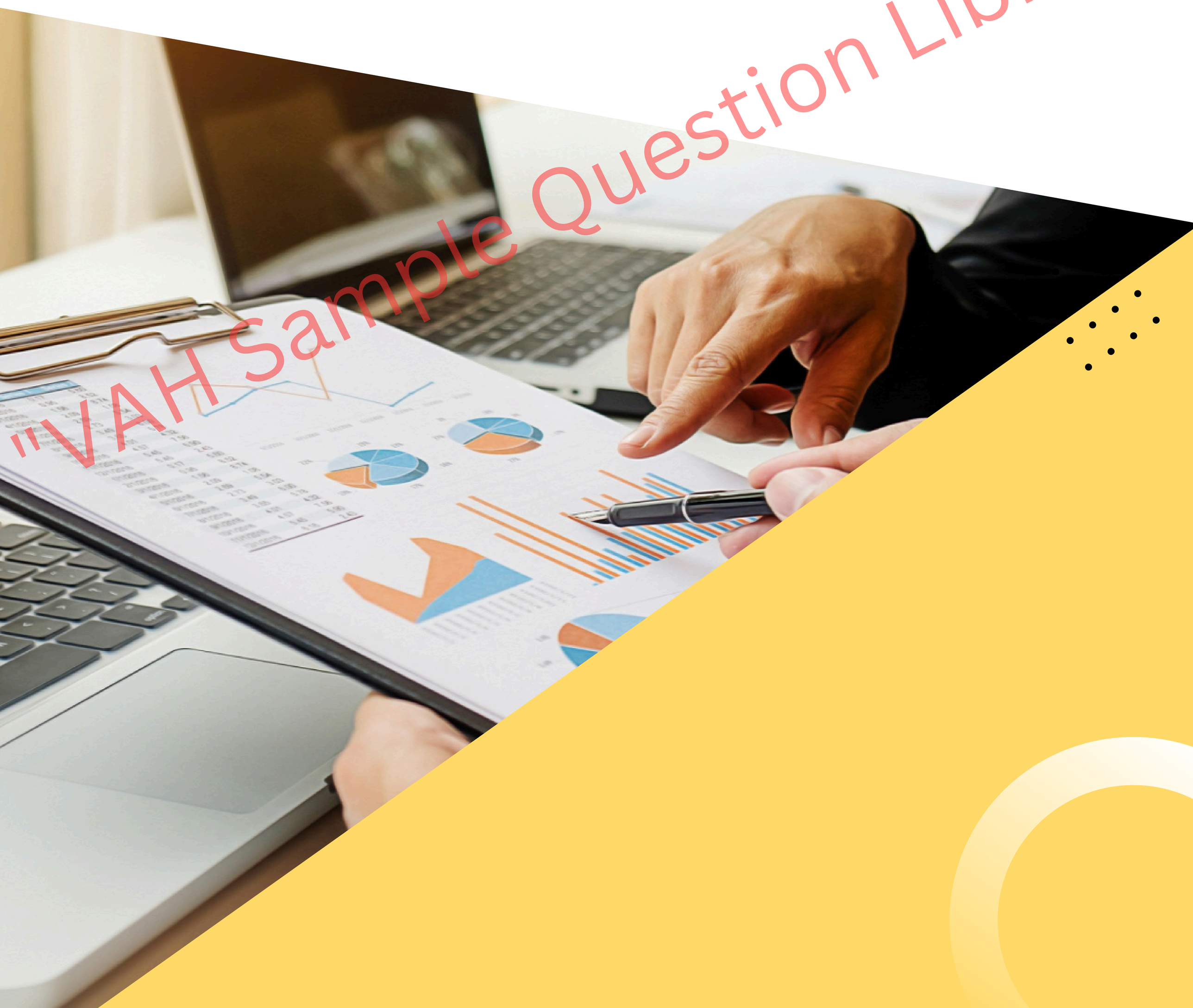
BSBINS6O3

INITIATE AND LEAD APPLIED RESEARCH



BSBINS603 - Initiate and lead applied research

Chapter 1

What is the need for a research strategy?

A research strategy is like a roadmap guiding the entire research process, ensuring that the study is well-planned, systematic, and efficient

What are the research strategies based on an inductive approach?

Inductive research is about starting with observations and then building up to broader generalizations and theories.

Describe what a qualitative research report entails.

A qualitative research report provides a detailed account of the research process and findings, emphasizing the context and depth of the data. Here are the key components:

- **Introduction**: Outlines the research problem, objectives, and significance of the study.
- **Literature Review**: Summarizes existing research relevant to the topic.
- **Methodology**: Describes the research design, data collection methods, and analysis techniques used.
- **Findings**: Presents the data collected, often in the form of themes or patterns.
- **Discussion**: Interprets the findings, discussing their implications and how they relate to existing knowledge.
- **Conclusion**: Summarizes the main findings, their significance, and potential areas for future research.

- **References**: Lists all the sources cited in the report.

Chapter 2

What is research integrity?

Research integrity refers to the adherence to ethical principles and professional standards essential for the responsible practice of research.

What are tertiary documents?

Tertiary documents are reference materials that summarize or compile information from primary and secondary sources. They are useful for obtaining an overview of a topic and for locating primary and secondary sources.

What is a research methodology?

Research methodology refers to the systematic plan for conducting research. It outlines the strategies, methods, and techniques used to collect, analyze, and interpret data

Chapter 3

Why is the procurement plan important?

A procurement plan is essential for the successful execution of any project or operation. Here's why:

- **Cost Efficiency**: Helps in budgeting and ensures that resources are used effectively to avoid unnecessary expenses.
- **Time Management**: Streamlines the acquisition process, reducing delays and ensuring timely delivery of goods and services.
- **Quality Assurance**: Establishes criteria for selecting vendors and suppliers, ensuring that high-quality materials and services are obtained.
- **Risk Mitigation**: Identifies potential risks and outlines strategies to mitigate them, ensuring smooth procurement processes.
- **Transparency and Accountability**: Provides a clear framework for procurement activities, promoting transparency and accountability within the organization.

Evaluate how research findings such as trends and changes will impact on learning strategy.

Research findings, such as trends and changes, can significantly influence learning strategies in the following ways:

- **Adapting to New Technologies**: Research can highlight emerging technologies that enhance learning experiences, prompting the integration of tools like virtual reality or AI-driven personalized learning platforms.

- **Curriculum Development**: Trends in industry demands can lead to the inclusion of new subjects or skills in the curriculum, ensuring that learners are equipped with relevant knowledge.
- **Teaching Methods**: Research may reveal effective teaching methods or approaches, encouraging the adoption of techniques like flipped classrooms, project-based learning, or blended learning.
- **Learner Engagement**: Understanding changes in learner behavior and preferences can lead to strategies that foster greater engagement, such as interactive content or gamification.
- **Assessment and Evaluation**: Research on assessment techniques can result in the implementation of more effective evaluation methods, ensuring that learning outcomes are accurately measured.

What is storing and retrieval?

Storing and retrieval refer to the processes involved in managing data or information so that it can be efficiently saved and accessed when needed.

Class discussion questions:

1. **Define applied research and give some examples of applied research.**

The practical application of scientific information and methodologies to address particular, real-world issues is known as applied research. Creating innovative medical therapies, enhancing production methods, and creating educational initiatives are a few examples.

2. **How does applied research work begin?**

Finding a specific issue or need is usually the first step in applied research. After reviewing the body of current literature, researchers develop a hypothesis or research question and plan a study to gather information and evaluate it.

3. **Explain methods to evaluate qualitative data.**

Thematic analysis, content analysis, narrative analysis, and coding are techniques used to assess qualitative data. In order to derive significant insights and conclusions, these techniques entail locating patterns, themes, and categories within the data.

4. **What are the key report factors affecting the reliability and validity of data?**

Measurement instruments, researcher bias, data collection techniques, and sample size are important variables influencing validity and reliability. The validity and dependability of the data are preserved when the research process is conducted with objectivity, correctness, and consistency.

5. **What are the guidelines to assess relevant research against all relevant elements of ethics, work plan, and code of conduct?**

Obtaining informed consent, maintaining confidentiality, steering clear of conflicts of interest, and following institutional review board (IRB) procedures are among

the guidelines. Additionally, researchers must to adhere to field-specific codes of conduct and ethical norms.

6. **List essential guidelines to be implemented when creating a timeline.**

Make sure your timeline is adaptable, realistic, and precise. To keep on course, divide work into manageable chunks, set due dates, assign resources, and periodically check on progress.

7. **What are the ethical principles that should be considered when performing applied research?**

Respect for people' autonomy, beneficence (doing good), non-maleficence (avoidance of harm), and justice (ensuring fairness) are examples of ethical principles. Throughout the research process, researchers should also uphold honesty and openness.

8. **What is the need for research strategy? Explain with an appropriate example.**

Effective planning and organization of the research process are facilitated by a research strategy. For instance, a research plan would specify the procedures for preclinical research, clinical trials, and regulatory approval for creating a new medication.

9. List steps involved in a research process to address practical problems.

Steps include:

1. Identify the problem
2. Review existing literature
3. Formulate a research question or hypothesis
4. Design the study
5. Collect data
6. Analyze data
7. Interpret results
8. Report findings

10.Define Research Methodology.

The methodical, theoretical examination of the approaches used in a field of study is known as research methodology. It includes the ideas, instruments, and methods for gathering, evaluating, and interpreting data.

11.What are the factors to be considered in the methods of data collection?

The study question, population/sample size, data collection methods (such as surveys and interviews), and the validity and dependability of the data are some of the variables.

12. What are the important methods of collecting primary data, particularly in surveys and descriptive research? Important methods include:

- Surveys (online, paper-based)
- Interviews (structured, semi-structured, unstructured)
- Observations
- Focus groups

13. Differentiate between primary and secondary resources.

Original, first-hand reports or information, such as surveys, trials, and interviews, are known as primary resources. Books and review articles are examples of secondary resources, which are interpretations or analyses of original sources.

14. Give a brief outline of a research report.

A research report typically includes:

1. Title page
2. Abstract
3. Introduction
4. Literature review
5. Methodology
6. Results
7. Discussion
8. Conclusion

9. References
10. Appendices (if applicable)

15. Briefly explain the concept of Academic Research Report with its elements.

The results of a scholarly investigation are presented in an academic research report. A concise introduction, literature review, methodology, findings, and discussion are all included. It seeks to add to the corpus of knowledge already in existence and is typically subjected to peer review prior to publication.

Class Activities:

Activity 1:

Within the group, the students need to discuss the most effective way to plan, conduct and report on applied research relevant to organisational strategic practices and outcomes.

1. Planning the Applied Research:

Clearly state the goal of the study and make sure it is in line with the organization's goals. For Apple, the emphasis may be on how innovation affects brand equity, market expansion, and consumer loyalty.

Create targeted, precise study questions. Determine the pertinent parties both inside and outside the company.

2. Conducting the Applied Research

To collect trustworthy, varied data, combine qualitative and quantitative approaches.

3. Analysing the Data:

Following data collection, insights directly related to corporate strategy practices and their results will be synthesized during the analysis phase.

Activity 2:

In this activity, students are required to choose and organisation that they can use to consider

innovation drives and three implications. Students must conduct an online research to identify the organisation.

For that organisation, students are required to formulate a research proposal or plan which includes:

- **specific research questions or hypotheses**
- **valid population or sample size**
- **description of the geographical, cultural, social or institutional context within which the research will be carried out**
- **full description of the data collection methods**
- **analysis of the limitations to research design including the reliability and validity of data**

Research Proposal

1. Research Questions or Hypotheses

- Research Question: How do McDonald's innovation drives impact customer satisfaction and operational efficiency?
- Hypothesis 1: McDonald's introduction of digital kiosks has significantly improved customer satisfaction.
- Hypothesis 2: The use of automated kitchens has increased operational efficiency by reducing order preparation time.

2. Valid Population or Sample Size

- Population: Customers and employees of McDonald's outlets in Australia.
- Sample Size:
    - Customers: 500 respondents from various McDonald's outlets across major cities.
    - Employees: 100 employees from different roles and levels within the organization.

3. Description of the Context

- Geographical: The research will be conducted in urban and suburban areas across Australia.
- Cultural: Consideration of the multicultural customer base and workforce in Australia.
- Social: Focus on the fast-food industry's role in the Australian society, including eating habits and customer preferences.
- Institutional: Analysis within the context of McDonald's corporate policies, innovation strategies, and market position.

4. Data Collection Methods

- Surveys: Online and in-person surveys targeting customers to gather data on satisfaction and experiences with innovative services.
- Interviews: Semi-structured interviews with McDonald's employees to understand the impact of innovations on operational efficiency.
- Observations: On-site visits to observe the implementation of digital kiosks and automated kitchens in action.
- Secondary Data: Review of McDonald's corporate reports, market analysis, and previous research studies on fast-food innovations.

5. Analysis of Limitations

- Reliability: Ensuring consistent data collection methods and standardized survey questions to maintain reliability.
- Validity: Addressing potential biases in customer and employee responses by using anonymous surveys and diverse sampling.
- Contextual Limitations: Acknowledging that results may vary across different regions and cultural contexts beyond Australia.
- Data Collection Challenges: Potential difficulties in accessing internal company data and employee willingness to participate.

Activity 3:

In this activity, students are required to identify the tools and techniques that will be most effective to design an applied research project. The outcomes are to be documented in the section provided below

Tools and Techniques for Designing an Applied Research Project

1. Literature Review Tools

- Google Scholar: For accessing a wide range of academic papers and articles related to innovation in the fast-food industry.
- ResearchGate: A platform for connecting with researchers and accessing their publications on relevant topics.
- JSTOR: An extensive digital library for academic journals, books, and primary sources.

2. Data Collection Techniques

- Surveys:
  - Online Survey Platforms (e.g., SurveyMonkey, Google Forms): For designing and distributing surveys to customers and employees.
  - In-Person Surveys: Conducting face-to-face surveys at various McDonald's outlets.

- Interviews:
    - Structured Interviews: Pre-determined questions to ensure consistency.
    - Semi-Structured Interviews: Flexibility to explore topics in more depth.
    - Interview Recording Tools (e.g., Otter.ai, Rev): For recording and transcribing interviews.
- Observations:
    - Field Notes: Detailed observations during visits to McDonald's outlets.
    - Photography and Videography: Capturing visual evidence of innovations in practice.
- Secondary Data Collection:
    - McDonald's Corporate Reports: Annual reports and press releases available on McDonald's website.
    - Market Analysis Reports: Industry reports from sources like IBISWorld or Statista.

3. Data Analysis Techniques

- Quantitative Analysis:
    - Statistical Software (e.g., SPSS, R, Excel): For analyzing survey data and identifying trends.
    - Descriptive Statistics: Mean, median, mode, and standard deviation calculations.
    - Inferential Statistics: Hypothesis testing, regression analysis, and correlation studies.
- Qualitative Analysis:
    - Thematic Analysis: Identifying patterns and themes in interview transcripts and observation notes.

    - Coding Software (e.g., NVivo, MAXQDA): For organizing and analyzing qualitative data.

- Data Visualization:
    - Data Visualization Tools (e.g., Tableau, Power BI): Creating charts, graphs, and dashboards to present findings.

4. Project Management Tools

- Project Management Software (e.g., Trello, Asana): For planning, tracking progress, and collaborating with team members.
- Gantt Charts: Visual timelines to manage project schedules and deadlines.
- Collaboration Tools (e.g., Microsoft Teams, Slack): For communication and document sharing among team members.

By documenting these tools and techniques, students will have a comprehensive guide to designing and conducting their research project on McDonald's innovation drives