Course Title: Business Research

Course Code: 01ABBAB24412

Unit-1 Introduction of Research

1.1 - Meaning of the Research & Objectives of the Research.

1.2 - Component/Process of Research.

1.3 - Types of Research.

1.4 - Key concepts and terminology in Research.

Why we call it Research?

What is Research?

- Dictionary definition: A careful investigation or inquiry specifically through search for new facts in any branch of knowledge.

- Research refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analyzing the facts and reaching certain conclusions either in the form of solution(s) towards the concerned problem or in certain generalizations for some theoretical formulation.

- According to Fred Kerlinger, research is an **organized** enquiry designed and carried out to provide information for solving problem.

Business Research

- Business research refers to the systematic and objective investigation and analysis of a business problem or opportunity, with the aim of providing useful information that can be used to make informed business decisions.

- The goal of business research is to identify and address challenges or opportunities faced by a business, and to gather data that can be used to make informed decisions about how to improve business processes, products, or services.

Nature of Research

The nature of research is multifaceted, and the following are the key characteristics that define it:

1) **Systematic:** Research is a systematic process that involves following a specific plan or method. It is a step-by-step approach that involves defining the research problem, developing a research design, collecting data, analyzing data, and drawing conclusions.

2) **Empirical:** Research is an empirical process that relies on data gathered through observation, experimentation, or other objective methods. The data collected must be valid, reliable, and verifiable to ensure that the research findings are credible and trustworthy.

Nature of Research Continued

3) **Objective:** Research is an objective process that seeks to minimize the influence of personal bias or opinion. The researcher must remain impartial and neutral, and the research methods used must be unbiased and objective.

4) Logical: Research is a logical process that follows a rational and logical approach to investigate a research problem. The research questions or hypotheses are developed based on existing knowledge and logical reasoning, and the research findings are interpreted using logical principles.

Nature of Research Continued

5) **Replicable:** Research is a replicable process that allows other researchers to reproduce or replicate the research findings. The research methods used must be clearly documented and communicated, and the data collected must be accessible to other researchers.

6) Generalizable: Research is a generalizable process that seeks to generalize the research findings to a larger population. The research sample must be representative of the population being studied, and the research findings must be applicable to the larger population.

Nature of Research Continued

7) **Creative:** Research is a creative process that involves generating new ideas and knowledge.

- Researchers must be innovative and imaginative in developing research questions, designing research methods, and interpreting research findings.

Objective of Business Research

The ultimate aim of research is to find (search) answer to questions by applying a scientific research process. Although, there are different research objectives for different research studies, some general objectives are:

1) To gain familiarity with a phenomenon or to achieve new insights into it (exploratory or formulative research studies)

2) To describe accurately the characteristics of a particular individual, situation or a group. (descriptive research)

Objective of Business Research

3) To determine the frequency with which something occurs or with which it is associated with something else. (studies with this object known as diagnostic research)

4) To test a hypothesis of a causal relationship between variables. (such studies are known as hypothesis testing research)

Purpose of Business Research

The following are the key purposes of business research:

1) Identify Business Problems and Opportunities
2) Generate Knowledge
3) Improve Business Operations
4) Support Decision Making
5) Measure Performance
6) Forecast Future Trends

Qualities of a Good Business Research

- Purpose clearly defined
- Research process detailed
- Research design thoroughly planned
- High ethical standards applied
- Limitations frankly revealed
- Findings presented unambiguously
- Conclusions justified

Process of Business Research

The following are the steps involved in the process of business research:

1) **Identify the Research Problem:** This involves determining what needs to be researched, why it needs to be researched, and how it can be researched. Gap, Difficulty in understanding, Conflict etc.

2) **Conduct a Literature Review:** Once the research problem has been identified, the next step is to conduct a thorough review of the relevant literature. This involves searching and reviewing published research, articles, and reports related to the research problem.

Process of Business Research

3) Formulate Research Question/ Objectives/Hypothesis: Based on the literature review, the research question or hypothesis is formulated. Developing a clear and concise question or hypothesis that the research will aim to answer.

4) **Choose the Research Design:** The research design is the plan or strategy that outlines how the research will be conducted. It includes the research methodology, data collection methods, sample size, and data analysis techniques.

Process of Business Research

5) **Collect Data**: Once the research design has been chosen, the next step is to collect the data. This involves selecting appropriate data collection methods, such as surveys, interviews, observations, or secondary sources, and collecting the data from the identified sample.

6) **Analyze the Data:** After the data has been collected, it is analyzed to identify patterns, relationships, and trends. This involves using appropriate data analysis techniques such as statistical analysis, content analysis, or thematic analysis.

Process of Business Research

7) **Interpret and communicate the Results:** Once the data has been analyzed, the results are interpreted in the context of the research question or hypothesis. This involves drawing conclusions from the data and making recommendations based on the findings.

Communication involves preparing a report that presents the findings, conclusions, and recommendations in a clear and concise manner. The report should be targeted to the audience and should be presented in a format that is easy to understand.

QA 1

Choose any one type, Process, quality or requirement of research and give a brief idea in two minutes.

Types of Business Research

1. Quantitative Research
2. Qualitative Research
3. Applied Research
4. Basic Research
5. Exploratory Research
6. Explanatory Research
7. Descriptive Research
8. Primary Research
9. Secondary Research
10. Cross-sectional Research
11. Longitudinal Research

1. Quantitative Research

- Quantitative research is a type of research that relies on numerical data and statistical analysis.

- It involves collecting data through surveys, experiments, or other structured methods, and analyzing the data using statistical techniques to draw conclusions.

- The purpose of quantitative research is to provide numerical data that can be used to identify patterns, relationships, and trends in the data.

Characteristics of Quantitative Research

- **Objective:** Quantitative research aims to provide objective data that can be analyzed statistically and used to draw objective conclusions.
- **Structured:** Quantitative research involves using structured methods such as surveys or experiments to collect data in a systematic and standardized way.
- **Large sample size:** Quantitative research typically involves collecting data from a large sample size to ensure that the results are representative of the population being studied.
- **Statistical analysis:** Quantitative research involves analyzing the data using statistical techniques such as regression analysis, ANOVA, or correlation analysis to draw conclusions.

2. Qualitative Research

- Qualitative research is a type of research that relies on non-numerical data such as words, images, or observations.

- It involves collecting data through methods such as **interviews, focus groups, or observation**, and analyzing the data using **interpretive techniques** such as **content analysis or thematic analysis**.

- The purpose of qualitative research is to provide rich, in-depth data that can be used to explore complex phenomena and understand the meaning and context of the data.

Characteristics of Qualitative Research

- **Subjective:** Qualitative research aims to provide subjective data that reflects the perceptions and experiences of the participants.
- **Unstructured:** Qualitative research involves using unstructured methods such as interviews or observation to collect data in a flexible and open-ended way.
- **Small sample size:** Qualitative research typically involves collecting data from a small sample size to allow for in-depth exploration and understanding of the data.
- **Interpretive analysis:** Qualitative research involves analyzing the data using interpretive techniques such as content analysis, grounded theory, or thematic analysis to identify patterns and themes in the data.

3. Applied Research

- Applied research is conducted with the goal of solving practical problems or answering specific questions related to business practices or operations.

- It involves using existing knowledge and theories to develop solutions to real-world problems.

- Examples of applied research include product development research, market research, and customer satisfaction research.

Characteristics of Applied Research

- **It is problem-oriented:** The research is designed to solve a specific problem or address a specific question.

- **It is goal-directed:** The research aims to produce practical solutions or recommendations that can be implemented in the real world.

- **It is specific:** The research is focused on a particular issue or problem.

Example:

A retail store in Bangalore wants to reduce customer waiting time at billing counters. A study is conducted to find which billing method (manual, QR-based, or self-checkout) reduces waiting time the most.

4. Basic/ Pure Research

- Basic research is conducted with the **goal of advancing knowledge** and **understanding of a particular field or topic**, often without a specific practical application in mind.

- It is also known as fundamental or pure research.

- Basic research is typically conducted in academic settings, such as universities and research institutions.

Characteristics of Basic Research

- **It is curiosity-driven:** The research is motivated by a desire to understand a particular phenomenon or topic, rather than to solve a specific problem.
- **It is theory-oriented:** The research is focused on developing or refining theories that explain a particular phenomenon or topic.
- **It is general:** The research is designed to produce knowledge that can be applied to a wide range of situations, rather than to a specific problem or issue.
- **It is often conducted independently:** Basic research is often conducted independently of any particular organization or business.

- Example: A researcher studies how motivation affects employee productivity

5. Exploratory Research

- Exploratory research is conducted to explore a topic or issue that is not well understood or to generate ideas or hypotheses.
- It involves gathering information and insights from a variety of sources to gain a better understanding of the problem or issue.
- Exploratory research can be qualitative, quantitative, or mixed-methods.
- A new café notices a decline in weekend customers and conducts informal interviews and surveys to explore possible reasons.

Characteristics of Exploratory Research

- **It is preliminary:** The research is often conducted at the beginning of a research project to help refine the research question and develop hypotheses.
- **It is flexible:** The research design is often flexible and open-ended, allowing for the collection of a wide range of data.
- **It is unstructured:** The data collection methods are often unstructured, such as interviews, focus groups, or observation.
- **It is often qualitative:** Exploratory research is often qualitative, allowing for the collection of rich, detailed data.

6. Descriptive Research

- Descriptive research is used to describe a phenomenon, such as consumer behavior or market trends.
- It involves collecting and analyzing data to provide a detailed, accurate picture of the phenomenon.
- Descriptive research can be quantitative or qualitative.
- To describe Characteristics, trends, or situations without explaining cause-and-effect. Market trend, consumer preference.

Descriptive Research Characteristics

- **It is factual:** The research is focused on collecting factual information about the phenomenon being studied.
- **It is structured:** The research design is often structured, allowing for the collection of standardized data.
- **It is quantitative**: Descriptive research is often quantitative, allowing for the analysis of numerical data.
- **It is often cross-sectional:** Descriptive research is often cross-sectional, collecting data at a single point in time.

7. Explanatory Research

- Explanatory research is conducted to test hypotheses and explain the relationships between variables.

- It involves collecting and analyzing data to determine the causal relationships between variables.

- *A study tests whether offering discounts directly leads to higher online sales for a fashion brand.*

Here, a hypothesis is tested:
"Discounts → increase sales."

Characteristics of Explanatory Research

- **It is causal:** The research is focused on determining the causal relationships between variables.
- **It is structured:** The research design is often structured, allowing for the collection of standardized data.
- **It is quantitative:** Explanatory research is often quantitative, allowing for the analysis of numerical data.
- **It is often longitudinal:** Explanatory research is often longitudinal, collecting data over an extended period of time to track changes or trends.

8. Primary Research

- Primary research involves gathering new data directly from the source.
- This can involve conducting surveys, interviews, focus groups, observations, or experiments.
- Primary research is often conducted when no existing data is available on a particular topic or when the existing data is outdated or incomplete.

Characteristics of Primary Research

- **It is original:** Primary research involves gathering new data directly from the source, rather than using existing data.
- **It is customized:** Primary research can be customized to meet the specific research needs and objectives.

- **It is time-consuming:** Primary research can be time-consuming and expensive, depending on the research methods used.
- Primary research can be qualitative, quantitative, or mixed-methods.

9. Secondary Research

- Secondary research involves gathering data from existing sources, such as books, journals, government reports, and online databases.

- This can involve reviewing literature, conducting a meta-analysis, or analyzing existing data sets.

- Secondary research is often conducted when existing data is available on a particular topic or when the research budget is limited.

Characteristics of Secondary Research

- **It is non-original:** Secondary research involves using existing data sources, rather than gathering new data.
- **It is standardized:** Secondary research uses standardized data sources that are widely available and accessible.
- **It is cost-effective:** Secondary research is often less expensive than primary research, as it doesn't involve collecting new data.
- **It is often quantitative:** Secondary research is often quantitative, but can also be qualitative.

10. Cross-sectional Research

- Cross-sectional research involves collecting data from a sample of individuals or groups at a specific point in time.

- The data collected can be used to provide a snapshot of a particular situation or to compare groups or variables.

- Cross-sectional research is often used to study prevalence, incidence, or risk factors of a particular condition or phenomenon.

Characteristics of Cross-sectional Research

- **It is observational:** Cross-sectional research involves observing and measuring a sample of individuals or groups at a specific point in time.
- **It is cost-effective:** Cross-sectional research is often less expensive than longitudinal research, as it involves collecting data at a single point in time.
- **It is quick:** Cross-sectional research can be conducted relatively quickly, as it involves collecting data at a single point in time.
- **It can be quantitative or qualitative:** Cross-sectional research can be quantitative, qualitative, or mixed-methods.

11. Longitudinal Research

- Longitudinal research involves collecting data from a sample of individuals or groups over an extended period of time.

- The data collected can be used to track changes, trends, or patterns over time.

- Longitudinal research is often used to study the development of a particular condition or phenomenon, or to evaluate the effectiveness of an intervention.

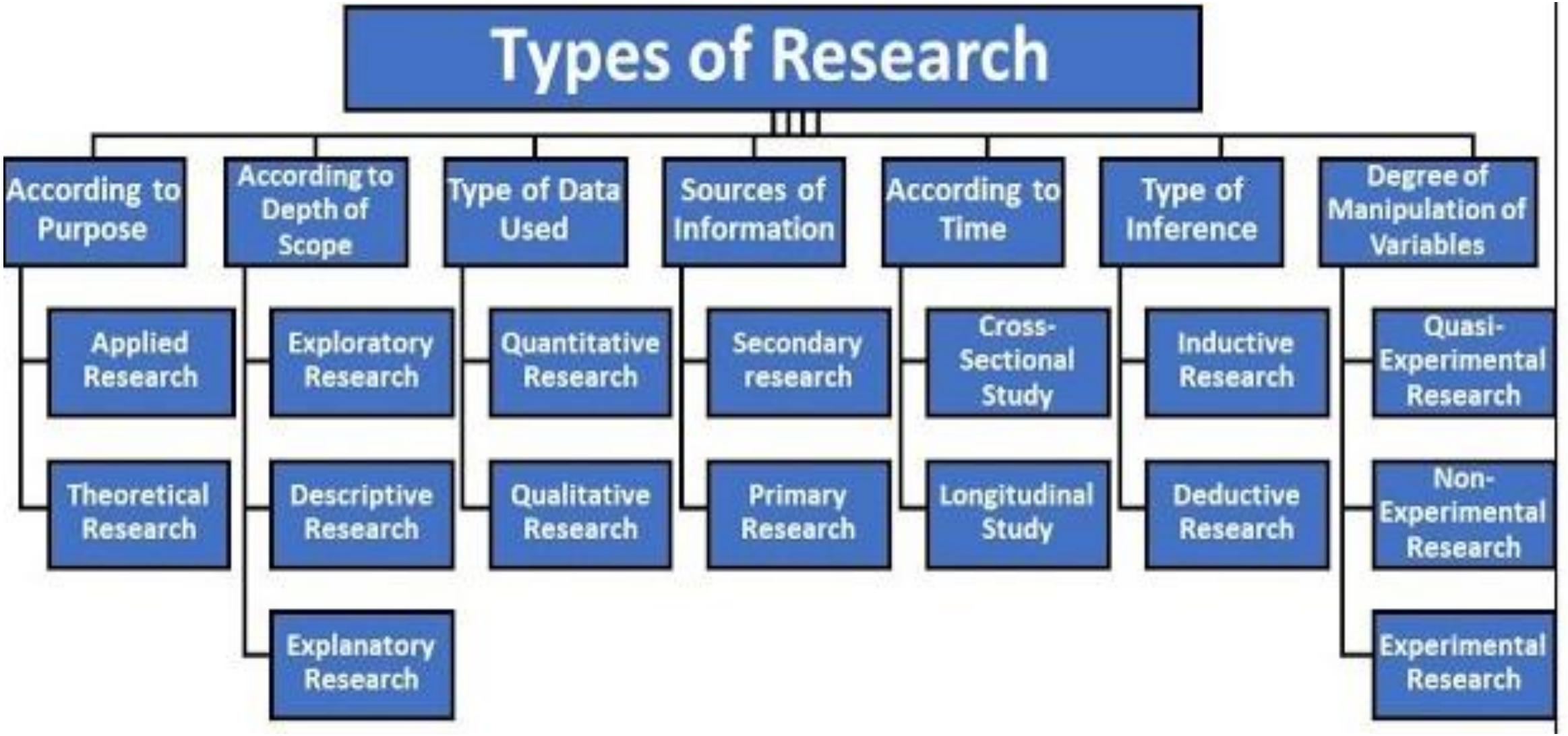
Characteristics of Longitudinal Research

- **It is observational:** Longitudinal research involves observing and measuring a sample of individuals or groups over an extended period of time.

- **It is expensive:** Longitudinal research is often more expensive than cross-sectional research, as it involves collecting data over an extended period of time.

- **It is time-consuming:** Longitudinal research can be time-consuming, as it involves collecting data over an extended period of time.

- **It can be quantitative or qualitative**


Types of Research
According to Purpose
According to Depth of Scope
Type of Data Used
Sources of Information
According to Time
Type of Inference
Degree of Manipulation of Variables
Applied Research
Theoretical Research
Exploratory Research
Descriptive Research
Explanatory Research
Quantitative Research
Qualitative Research
Secondary research
Primary Research
Cross-Sectional Study
Longitudinal Study
Inductive Research
Deductive Research
Quasi-Experimental Research
Non-Experimental Research
Experimental Research

Research Types

- Survey research
- Historical research
- Experimental research
- Case study research

Key Concepts and Terminology in Research

- **Research -** The process of systematic study or investigation to discover new knowledge or expand on existing knowledge.

- **Research method -** A means of collecting data (Primary and Secondary Research).

- **Theory -** A theory is a set of interrelated concepts, definitions, and propositions that explains or predicts events or situations by specifying relations among variables.

Research Terminologies Continued

- **Population vs. Sample -** A population includes all members of interest whereas the sample includes only a portion (subset) of the population.
- **Sampling -** The process of selecting a subset of participants from the pool of all potential participants.
- **Variables -** An attribute or characteristic that can be measured and takes on different values (changes) among and between participants.
- **Independent variable -** An attribute or characteristic that the researcher manipulates or changes, and which the researcher expects has an effect on the dependent variable(s)

Research Terminologies Continued

- **Dependent variable -** An attribute or characteristic that changes as a result of another variable (typically the independent variable)
- **Hypothesis -** An informed and educated prediction or explanation about a relationship or phenomena.
- **Primary data** - Data collected from original sources, not from something already published.
- **Secondary data** - Data collected from sources that have been published, not collected from original sources

THANK YOU!