Types of Research - 1

- Basic Research → Concept → Theory based
- Applied Research → Application → Practical

* Basic Research
1) Also known as fundamental Research / Pure Research.
2) This is research carried out to increase understanding of fundamental principles.
3) When knowlege is aquired for the sake of knowledge it is called basic research.
4) Basic research is completely theoretical, that focuses on basic principles and testing theories.
5) It tends to understand the basic law
6) New knowledge to existing knowledge.
7) Concept based.
8) Scientific Nature and universal.

जी गोष्ट माहीत आहे, ती गोष्ट अधिक त्याबद्दलचे information होऊन माहीत करून घेणे म्हणजे basic Research.

9) Basic Research deals with generalization and formulation of theory about human behavior. It is aligned towards collecting information that has universal applicability.
10) Many times the end results have no direct or immediate commercial benefits.
11) Basic research can be thought of as arising out of Curiosity.

12) However, in the long term it is the basis for many commercial products and applied research.
13) Basic Research is mainly carried out by universities
14) Analytical Nature
15) Answer How?

Examples :
① How did the universe begin?
② How the new knowledge can be gained ?

* Applied Research
1) Concern with addressing problem of the world as they are perceived by participants, organization or group of people. → Problem solving.
2) Action oriented and aims to assess, describe, document or inform people concerned about ~~the~~ the phenomenon under investigation. → Research that involve the world
3) Findings are intended to have immediate and practical value.
4) In the field of education, policy, evaluation and contract are all examples of applied research
5) A research the ~~em~~ encompasses real life application of the natural science.
6) It is directed towards providing a solution to the specific practical problems and develop innovative technology.
7) Application of the concepts
8) It is the research that can be applied to real-life situations
9) Research that is aligned towards ascertaining social, economic or political trends.
10) Synthesis in Nature.
11) Answer why ? → Finding Reasons

Examples:
① A product is not getting customer know the reasons?
② what are the measures that will help to control the prices of petrol in India?

Summary

Parameters	Basic Research	Applied Research
Types of knowledge produced	Scientific Discovery (Science)	Technological Application (Technology).
Motivation	Intellectual curiosity	Solving problems
Key Questions	Is it true?	Does it work?
objective	To understand	To come up with solutions
Meaning	Basic Research refers to the study that is aimed at expanding the existing base of scientific knowledge.	Applied Research is the research that is designed to solve specific practial problems or answers certain questions.
Nature	Theoretical	Practical
Utility	Universal	Limited
Concerned with	Developing Scientific knowledge and predictions	Development of technology and technique.
Goal	To add some knowledge to the existing one	To find out solutions for the problem at hand

Types of Research - 2

1. Exploratory Research
2. Descriptive Research
3. Casual Research

} Sequence important **

④ ~~Exploratory Research~~

Exploratory Research	Descriptive Research	Casual Research
• Ambiguous problems ex: Our sales are declining ---- why	• Aware of the problem • ex: who is buying our products	• Problem clearly define • ex: will buyers purchase more if we change the website?

⑤ Exploratory Research : है base बनावत

① Exploratory research, intends merely to explore the research questions and does not intend to offer final and conclusive solutions to existing problems.

② This type of research is usually conducted to study a problem that has not been clearly defined yet.

③ Exploary research is not intended to provide conclusive evidence, but helps us to have a better understanding of the problem.

④ Exploratory research is the initial research, which forms the basis of more conclusive research

⑤ It can even help in determining the research design, sampling methodology and data collection method

⑥ Tends to tackle new problems on which little or no previous research has been done.

Examples :

① A study into the role of social networking sites as an effective marketing communication channel

② An investigation into the ways of improvement of quality of customer services within hospitality in London.

ज्या गोष्टीबद्दल आपल्याला जास्त काही माहीत नाही त्याबद्दल माहीत करून घेणे म्हणजे Exploratory Research.

② Descriptive Research (Page 145 point 19)

Survey

① Also known as Statistical Research.

② Tell us what is / what was ??

③ They are at present with the researcher having no control over variables.

④ Descriptive studies may be categorized as simply the attempt to determine, describe or identify what is.

⑤ Descriptive studies are used to describe various aspects of the phenomenon. It includes research related to specific predictions, features or functions of person or group, the narration of facts, etc.

⑥ In its popular format, descriptive research is used to describe characteristics and/or behavior of sample population.

⑦ Survey and fact findings.

⑧ Observations.

⑨ Case studies

- Three main purpose of descriptive studies

① Describing ② Explaining ③ Validating Research findings.

- Descriptive research can employ a number of variables, only one variable is required to conduct a descriptive study.
- Descriptive research concentrates on formulating the research objective, designing methods for the collection of data, selection of the sample, data collection, processing and analysis, reporting the results.

Examples :

① Market studies
which describe-size of the market, buying power of consumers, availability of distributors & consumer profile.

② Market share studies
which determine proportion of total sales received by a company and its competitors.

③ Sales analysis studies
which describe sales by geographic regions, product line, type and size of account.

③ Casual Research

① Casual Research also known as Experimental Research or Explanatory Research.

② Answer what will be ??

③ Cause and effect relationship

④ To identify the extend and nature of cause-effect relationship

⑤ Causal studies focus on an analysis of a situation or a specific problem to explain the patterns of relationships bet^{n} variables.

~~Examples~~ Examples :

① To assess the impacts of foreign direct investments on the levels of economic growth in Taiwan.

② To analyze the effects of re-branding initiatives on the levels of ~~cust~~ customer loyalty.

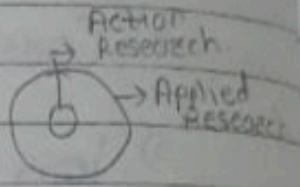
③ Price & Demand.

Summary

	① Exploratory Research	② Descriptive Research	③ Causal Research
Amount of uncertainty characterising decision situation	Highly ~~am~~ ambiguous	Partially defined	clearly defined
key Research statement	Research Question	Research question	Research hypotheses
when Conducted	Early stage of decision making	later stages of decision making	later stages of decision making
Usual Research approach	Unstructured	Structured	Highly structured
Examples	'Our sales are declining for no apparent reason' what kinds of new products are fast-food consumers interested in?	'what kind of people patronize our stores compared to our primary competitor 'what product features are the most important to our customers?	'will consumers buy more products in ~~the~~ a blue package? which of two advertising campaigns will be more effective
Methods	• Expert Surveys • Pilot Surveys • Secondary data • Qualitative Research	• Secondary data • Surveys • Panels • Observation & other data	• Experiments

Types of Research 3

1. Action Research
2. Conceptual Research
3. Empirical Research



1. Action Research

1. It is a part of applied research.
2. Research intends to find out immediate solutions for a problem ~~tt~~ that the society is actually experiencing.
3. Conducted on the basis of application of theories or models for finding a solution for an immediate problem faced by the society.
4. Kurt Lewin. (1940)
5. Also known as Cycle of Action and cycle of inquiry.
6. Practical immediate solutions.
7. Organizational, Academic, Institutional problems
8. Predefined process.
9. Mostly used by classroom.

जेव्हा Research मध्ये किंवा दुसऱ्या कोणत्या ठिकाणी Problem येतो तेव्हा immediate होनाऱ्या Action म्हणजे Action Research होय.

Action Research V/S Applied Research

	Action Research	Applied Research
1)	Goal is to solve problem for local concern	To test theory, produce knowledge for wide population

Library Research → Secondary Research.

2)	Little training is required to conduct study.	Considerable Training is required.
3)	To identify problem for local concern.	To investigate larger issues and concerns.
4)	Carried out by practitioners	Carried out by expert researchers
5)	less rigorous	more rigorous
6)	For local applicability	for general applicability

(2) Conceptual Research
1) Similar to basic research.
2) Related to some abstract idea or theory.
3) Used by philosophers and thinkers.
4) Reinterpret the existing concepts.

जेव्हा आपण theory माहीत करून घेऊन आणि इत्यादया Principle किंवा law मध्ये अजून भर घालतो त्याला Conceptual research म्हणतात. eg: जर आपल्याला law of demand मध्ये नवीन काही मिळाले तर आपण add करू शकतो.

(3) Empirical Research → Experience based, applied research
1) Also known as Experimental Research. Page 138, Point 4.
2) Based on experience and observations alone.
3) Data based research.
4) Conclusions being verified

Real life based Research. आणि त्यामध्ये आपण conclusions verify करून शकतो.

Types of Research-4

① Analytical Research

1) involves in-depth study and evaluation of available information in an attempt to explain complex phenomenon.
2) The researcher has to use facts or information already available and analyze these to make a critical evaluation of the material.

हा Research type descriptive research नंतरचा आहे जो data descriptive research मध्ये collect करतात. त्याचा Use Analytical research मध्ये करतात. ~~की info~~ जी information available आहे तेवढीच use करता येते.

collect data → study collected data

Descriptive Research	Analytical Research
1) Facts finding enquiries and survey methods.	Collected data is analyzed and explained.
2) Ascertains and describes the characteristics of the issue	Beyond merely describing the characteristics

Diagnostic Research → क्या हो रहा है ॥, कैसे हो रहा है।
इसका effect क्या होगा
like doctor diagnos patients.

Conceptual V/S Empirical

Conceptual	Empirical
Research is that related to some abstract idea or theory. It is generally used by philosopheers and thinkers to develop new concepts or Re-interpret the existing ones	Research is that in which experience or observation alone are the tools of research. It is data-based research and it can be further verified by observation or experimentation.

3)	Describes of the state of affairs as it exist at present	Explain existing state of affairs from available data.
4)	No control over the variables	~~Words~~ works within the constraints variables

(2) Experimental Research → Use of Replication
1) Correlational Research / Causal Research
2) The researcher ~~manu~~ manipulates the independent variable. There are a number of experimental group designs in experimental research. Some of these qualify as experimental research, others do not.
3) In true experimental research, the researcher not manipulates the independent variable, he or she also randomly assigned individuals to the various treatment categories (i.e. control and treatment).

ह्यामध्ये आपण फक्त Independant variable ला manipulate करू शकतो. Dependant variable ला नाही करू शकत. आणि हा Research Lab मध्ये होतो.

Examples of Independent and Dependent variables in experimental Research

	Independent variables	Dependant Variables
1)	Type of treatment: different types of drug treatments or psycological treatments	Behavioral variables measures of adjustment, activity levels eating behaviour, smoking behaviour.
2)	Treatment factors: brief vs long term treatment, inpatient vs outpatient treatment.	Physiological variables: measures of physiological responses such as heart rate, blood pressure and brain wave activity.
3)	Experimental manipulation: Types of beverage consumed (alcoholic v/s nonalcoholic)	Self report variables: masure of anxiety, mood, or marital or life satisfaction.

↳ Sort of

3) Quasi Experimental Research :

1) In quasi experimental research, the researcher does not randomly assign subjects to treatment and control groups.

2) In other words, the treatment is not distributed among participants randomly. In some cases, a researcher may randomly assigns one whole group to treatment and one whole group to control.

3) In this case, quasi experimental research involves using intact groups in an experiment, rather than assigning individuals at random to research conditions. (Some researchers define this latter situation differently. For our course, we will allow this definition.).

Half experiment होना है, half नहीं होना.,
Randomly assign होना नहीं.

* Experimental ~~VS~~ Research VS Quasi experimental Research

Experimental Research	Quasi experimental Research
1) Experimental research design. The researcher has control over the experiment in terms of sample selection, treatment, environment etc.	Quasi experiment: The researcher dose not have control over the experiment rather the experiment occures in natural settings.
2) Experimental designs are typical in psychology, medicine, education etc.	Quasi-experimental design are typical in economics, sociology, public administration, urban planning, political sciences etc.

↱ after fact / effect

4] Ex Post Facto → Post molem ⇒ Casual-Comparative Research

1) It is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher.
2) It is also often applied as a substitute for true experimental research to test hypotheses about cause-and-effect relationships or in situations in which it is not practical or ethically acceptable to apply the full protocol of a true experimental design
3) In causal comparative (ex post facto) research, the groups are already formed.
4) It does not meet the standards of an experiment because the independent variable in not manipulated

Part of descriptive research and this Research comes after effect.

It also known as Non-experimental Designs. or Causal-Comparative (Ex-Post facto).

Characteristics

1) Groups already differ on some dependent variable ex: One group may possess a characteristic that the other does not or each group possesses the characteristic but in differing amounts.
2) Researcher attempts to identify retrospectively a major factor (the independent variable) that led to group differences.

∴ independant variable find करनी है.

Types of Research - 5

① Longitudinal Research Page 135 Point 14

1) Any social or developmental research involving collection of data from the same individuals (or groups) across time.

2) Observing change in these individuals gives a better basis for causal inference than a cross section study, because of the temporal sequencing involved. In this sense the longitudinal study is a form of 'quasi-experimental' design.

3) longitudinal studies repeatedly draw sample units of a population over time.

Diagnostic Research : Frequency of things
Evaluation Research : like summetive evaluation

Ex-post Facto study	Experiment
After the fact report on what happened to the measured variable	Study involving the manipulation or control of one or more variables to determine the effect on another variable.

5] Historical Research
1) Systematic collection and evaluation of data to describe, explain and thereby understand actions or events that occurred sometime in the past.
2) No manipulation or control of variables and primarily focuses in the past.

जेव्हा तुम्ही future साठी Past चा study करता. तुम्ही यातील Variables चा Control करू शकत नाही.

4) One method is to draw different units from the same sampling frame.
5) A secound method is to use a "Panel" where the same people are asked to respond periodically.
6) On-line survey research firms ~~recu~~ recruit panel members to respond to online queries.

एकाच group ला सारखे सारखे study करणे.
ex. Suppose group A Jan ~~mad~~ मध्ये study केला. then तोच group एप्रील मध्ये study केला, then परत June मध्ये study केला. . . .

हा Research online पण केला जातो.

2] Cross-Sectional Surveys
1) attempt to simulate longitudinal data in a shorter time frame.
2) Data are gathered from multiple samples of the same population simultaneously.
3) May be used to study a phenomenon at one time or to gather data from multiple groups at the same time.

जेव्हा एकाच Population मधून वेगवेगळे Sample घेऊन केली जाते त्याला Cross-sectional survey म्हणतात. Study हा longitudinal सारखा नेहमी नेहमी नाही तर फक्त एकदाच study केला जातो.

	Longitudinal	Cross-Sectional
~~0~~	~~One point in tin~~	
1)	Several points in time	One point in time
2)	Same Samples	Different samples

3)	change at the individual level.	Snapshot of a given point in time, change at a societal level.
4)	Ex: British birth cohort studies, understanding society	Ex: British social attitudes survey, labour force survey.

3] Primary Research → Raw data वरती study.
4] Secondary Research. → Analysed data.
↳ first hand ↳ second hand.

	Primary Research	Secondary Research
Meaning	Research conducted to gather first-hand information for the current problem is called primary research.	Secondary Research is one that involves use of information gathered originally by primary research.
Based on	Raw data	Analysed & interpreted info.
Carried on by	Researcher himself	Someone else
Data	Specific to the needs of researcher.	May or may not be specific to the needs of researcher.
Process	Very involved.	Rapid and easy.
Cost	High	Low
Time	Long.	Short.

जर तुम्ही एका college चा a ~~Research~~ Research करत आहात
तर तो Primary Research आणि तुम्ही तो Research complete झाल्यावर Publish
केला. आणि तो Publish झाल्यावर दुसर कुणी study केला तर Secondary Research