

CMR Institute of Technology
Department of Management Studies

Answer key

III Internal test – I semester MBA (2018-20 Batch)

Subject: Research Methodology Sub Code: 18MBA23 Date: 29.03.2019

Time: 10-11:30 Duration: 90 mins

Part A - Answer Any Two Full Questions (15*02=30 Marks)

1.a) Is marketing research applied or basic research? Explain

Marketing Research is not a basic research. It is an applied Research. In marketing, we have to gather data from both primary and secondary sources and we need to analyze those data to get results and thus sales forecast we make. So, it is an applied research.

b. Write a short note on focus group .

Focus group is yet another widely used method in exploratory research. In such a method a group of people is chosen and are allowed to express their insights on the topic that is being studied. Although, it is important to make sure that while choosing the individuals in a focus group they should have a common background and have comparable experiences.

For example: A focus group helps a research identify the opinions of consumers if they were to buy a phone. Such a research can help the researcher understand what the consumer value while buying a phone. It may be screen size, brand value or even the dimensions. Based on which the organisation can understand what are consumer buying attitudes, consumer opinions, etc.

c. Explain application of research in business decision and steps in research process.

- Based on the information obtained through the different business research methods, companies whether new or established can undertake some essential business decisions such as the following-
- Possibility of the business to survive and succeed in a new geographical region
- Assessment about competitors

- Adopting a suitable market approach for a product
- Businesses may choose to adopt either one or all of the below discussed research methods to achieve their business goals

1. Case Studies

- The business research method of case study is generally undertaken by those business houses who want a detailed and comprehensive understanding of the consumer response about a particular product or service.
- Case studies primarily help a business in the following ways:
 - Thorough assessment of consumer satisfaction.
 - Consumer attitudes and opinion about a product.
 - Though case study method of business research is time consuming, it helps in the collection of in depth information about customer's likes, dislikes and preferences thus throwing light on strength and weakness of a specific product or service.

2. Conducting Surveys

- Conducting surveys is a very common method adopted by businesses to gather larger amount of information or data immediately at a very low cost. Due to large popularity of this method of business research, a standard survey sample is easily available for companies which they can put together to ascertain relevant information.
- The biggest drawback of survey research method is failure of response from consumers in the specific target market along with less detailed, incomplete surveys and minimum information pertaining to the specific target market.

3. Interviews

- Companies rely on this method of business research to track actual consumer experiences with respect to a particular product or service. Consumers are asked specific questions which they have to answer at length based on which companies get a clear picture about the level of consumer satisfaction, experience of the consumer in lieu to a product or service.

- The main advantage of this research methodology is the chance to ask follow up questions which throws light about the consumer response with respect to a specific product or service. The only drawback is that a careless interviewer can partially influence the response provided by interviewee. Also this method of business research tends to be time consuming.

4. Focus Groups

- Focus group can be described as a in between research methodology among the various business research methods. The idea behind undertaking this method of business research is to obtain an honest suggestion and feedback from the consumers about a specific product or service.
- The focus groups aim to provide a larger sample as compared to interviews and case studies. The only drawback from undertaking this type of research is that there are chances of the facilitator in asking irrelevant questions which might divert the research in a particular direction thus defeating the ultimate purpose of the analysis undertaken.

Steps of Conducting Research:

Step 1: Identify the Problem.

Step 2: Review the Literature.

Step 3: Clarify the Problem.

Step 4: Clearly Define Terms and Concepts.

Step 5: Define the Population.

Step 6: Develop the Instrumentation Plan.

Step 7: Collect Data.

Step 8: Analyze the Data.

2. a. What is experimental Research?

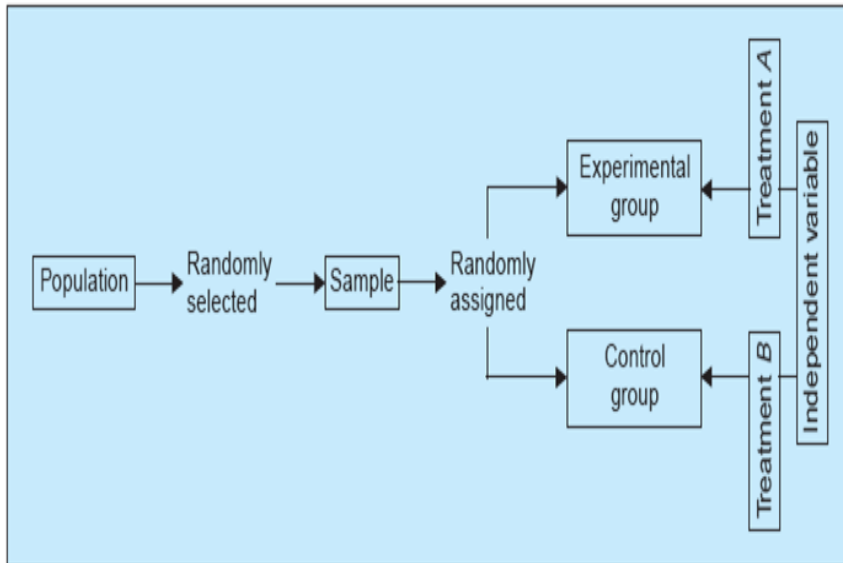
Experimental research is any research conducted with a scientific approach, where a set of variables are kept constant while the other set of variables are being measured as the subject of experiment.

b. What are the differences between Exploratory and Conclusive Research?

BASIS FOR COMPARISON	EXPLORATORY RESEARCH	DESCRIPTIVE RESEARCH
Meaning	Exploratory research means a research conducted for formulating a problem for more clear investigation.	Descriptive research is a research that explore and explain an individual, group or a situation.
Objective	Discovery of ideas and thoughts.	Describe characteristics and functions.
Overall Design	Flexible	Rigid
Research process	Unstructured	Structured
Sampling	Non-probability sampling	Probability sampling
Statistical Design	No pre-planned design for analysis.	Pre-planned design for analysis.

c. Explain Statistical research design in detail.

Research design refers to the type of study that will be conducted, whether it will be pre-experimental, quasi-experimental, or true experimental. Research Methodology concerns how the design is implemented, how the research is carried out.



- **Randomized block design (RB design)** makes use of the principle of local control. Subjects are first divided into groups (blocks). Subjects are relatively homogeneous in regard to selected variables in the RB design. When two extraneous factors are applicable. Latin square design is effective, while items are placed in a square. Out of the many items; say for example, five items are placed in five places each in the square but used only once in each row/column. The two blocking factors on two sides of the square (vertical and horizontal are words. It is generally used in agriculture.

- **Latin Square design:**

The **Latin square design** is used where the researcher desires to control the variation in an experiment that is related to rows and columns in the field. Field marks: Treatments are assigned at random within rows and columns, with each treatment once per row and once per column.

- **Factorial Designs:**

When a large number of factors affect a particular problem, **factorial designs** are used. There can be simple factorial designs and complex factorial designs. Generally two factors are involved in the former, and many factors (multi factors) in the latter. The

independent variable to be manipulated is called experimental variable, and the extraneous variable to be controlled by homogeneity is called control variable.

4 × 3 SIMPLE FACTORIAL DESIGN

Control Variable	Experimental Variable			
	Treatment A	Treatment B	Treatment C	Treatment D
Level I	Cell 1	Cell 4	Cell 7	Cell 10
Level II	Cell 2	Cell 5	Cell 8	Cell 11
Level III	Cell 3	Cell 6	Cell 9	Cell 12

2 × 2 × 2 COMPLEX FACTORIAL DESIGN

	Experimental Variable				
	Treatment A		Treatment B		
	Control Variable 2 Level I	Control Variable 2 Level II	Control Variable 2 Level I	Control Variable 2 Level II	
Control Variable 1	Level I	Cell 1	Cell 3	Cell 5	Cell 7
	Level II	Cell 2	Cell 4	Cell 6	Cell 8

3.a What is Exploratory Research?

Exploratory research is research conducted for a problem that has not been studied more clearly, intended to establish priorities, develop operational definitions and improve the

final research design. Exploratory research helps determine the best research design, data-collection method and selection of subjects.

b. Explain the difference between management problem and research problem

Management Problem	Research Problem
Develop the package for a new product	Evaluate the effectiveness of alternative package design
To select a media for product advertising	To investigate a suitable media
To increase the amount of repurchase behavior of customer	To assess current amount of repeat purchase behavior
To introduce a new product	To design a test market by which the probable acceptance of new product can be forecasted.

c. What are the different types and methodologies of exploratory research?

While it may sound a little difficult to research something that has very little information about it, there are several methods which can help a researcher figure out the best research design, data collection methods and choice of subjects. There are two ways in which research can be conducted namely primary and secondary..

Under these two types, there are multiple methods which can used by a researcher. The data gathered from these research can be qualitative or quantitative. Some of the most widely used research designs include the following:

Primary research methods

Primary research is information gathered directly from the subject. It can be through a group of people or even an individual. Such a research can be carried out directly by the researcher himself or can employ a third party to conduct it on their behalf. Primary research is specifically carried out to explore a certain problem which requires an in-depth study.

Surveys/polls: Surveys/polls are used to gather information from a predefined group of respondents. It is one of the most important quantitative method. Various types of surveys or polls can be used to explore opinions, trends, etc. With the advancement in technology, surveys can now be sent online and can be very easy to access. For instance, use of a survey app through tablets, laptops or even mobile phones. This information is also available to the researcher in real time as well. Nowadays, most organisations offer short length surveys and rewards to respondents, in order to achieve higher response rates.

For example: A survey is sent to a given set of audience to understand their opinions about the size of mobile phones when they purchase one. Based on such information organisation can dig deeper into the topic and make business related decision.

Interviews: While you may get a lot of information from public sources, but sometimes an in person interview can give in-depth information on the subject being studied. Such a research is a qualitative research method. An interview with a subject matter expert can give you meaningful insights that a generalized public source won't be able to provide. Interviews are carried out in person or on telephone which have open-ended questions to get meaningful information about the topic.

For example: An interview with an employee can give you more insights to find out the degree of job satisfaction, or an interview with a subject matter expert of quantum theory can give you in-depth information on that topic.

Focus groups: Focus group is yet another widely used method in exploratory research. In such a method a group of people is chosen and are allowed to express their insights on the topic that is being studied. Although, it is important to make sure that while choosing

the individuals in a focus group they should have a common background and have comparable experiences.

For example: A focus group helps a research identify the opinions of consumers if they were to buy a phone. Such a research can help the researcher understand what the consumer value while buying a phone. It may be screen size, brand value or even the dimensions. Based on which the organisation can understand what are consumer buying attitudes, consumer opinions, etc.

Observations: Observation research can be qualitative observation or quantitative observation. Such a research is done to observe a person and draw the finding from their reaction to certain parameters. In such a research, there is no direct interaction with the subject.

For example: An FMCG company wants to know how it's consumer react to the new shape of their product. The researcher observes the customers first reaction and collects the data, which is then used to draw inferences from the collective information.

Secondary research methods

Secondary research is gathering information from previously published primary research. In such a research you gather information from sources likes case studies, magazines, newspapers, books, etc.

Online research: In today's world, this is one of the fastest way to gather information on any topic. A lot of data is readily available on the internet and the researcher can download it whenever he needs it. An important aspect to be noted for such a research is the genuineness and authenticity of the source websites that the researcher is gathering the information from.

For example: A researcher needs to find out what is the percentage of people that prefer a specific brand phone. The researcher just enters the information he needs in a search engine and gets multiple links with related information and statistics.

Literature research: Literature research is one of the most inexpensive method used for discovering a hypothesis. There is tremendous amount of information available in libraries, online sources, or even commercial databases. Sources can include newspapers, magazines, books from library, documents from government agencies, specific topic related articles, literature, Annual reports, published statistics from research organisations and so on.

However, a few things have to be kept in mind while researching from these sources. Government agencies have authentic information but sometimes may come with a nominal cost. Also, research from educational institutions is generally overlooked, but in fact educational institutions carry out more number of research than any other entities.

Case study research: Case study research can help a researcher with finding more information through carefully analyzing existing cases which have gone through a similar problem. Such analysis are very important and critical especially in today's business world. The researcher just needs to make sure he analyses the case carefully in regards to all the variables present in the previous case against his own case. It is very commonly used by business organisations or social sciences sector or even in the health sector.

For example: A particular orthopedic surgeon has the highest success rate for performing knee surgeries. A lot of other hospitals or doctors have taken up this case to understand and benchmark the method in which this surgeon does the procedure to increase their success.

Part B - Compulsory Question (1*20=20 Marks)

4. a.i) Being a Market Research analyst in a comparatively new company of online travel agency, how will you compete with MMT and Cox and Kings during this time?

Competition exists in every successful market, and you must be able to employ the strongest competition strategies to make the most of your business.

Pricing

Market research should provide evidence of your competitors' prices and the price customers are willing to pay for your products and services. It is vital to set your prices at

a level that ensures your business remains profitable yet prevents your customers from looking elsewhere.

Pricing strategies can include:

discounting - temporarily lowering prices or offering two for the price of one

image pricing - where the perceived image of the product outweighs the actual price, such as in luxury goods.

There are pros and cons to each pricing strategy.

Learn more about pricing products and services.

You can also get guidance on setting prices from the Australian Competition and Consumer Commission (ACCC).

Price wars

Engaging in a price war with your competitors is risky business. When prices are low, customers are often willing to buy more; however, there is no guarantee your product will be the one customers choose. Price wars also often lead to reduced profit margins and lower prices across the market.

To ensure the stability of your business, a sensible strategy that avoids price wars is almost always a better approach. If a competitor engages you in a price war, it can be better to try to reinforce your unique selling proposition to sidestep the challenge.

Quality and service

Though many customers will see a product's price as the crucial factor in deciding where to spend their money, in the long term a business can benefit more from creating good-quality products and offering excellent customer service.

If your customers have a positive buying experience, they are far more likely to come back. Customer retention is important for competition and gives your long-term business prospects a boost.

It is vital to maintain high levels of quality and service - if standards begin to slip, customers may be unforgiving and switch to your competitors. Read more about providing excellent customer service.

Sales and marketing

A good sales team and a solid marketing plan are excellent ways to communicate the benefits of your products and services to customers. Businesses grow by securing new customers, and effective sales and marketing strategies can help you succeed.

ii) What data will you choose from competitor companies for research analysis for making your company's business successful?

It would be the best to collect primary data and do a marketing research on this issue. Primary data is information collected directly from the first-hand experience. This is the information that you gather for the purpose of a particular research project.

Primary data collection is a direct approach that is tailored to specific company needs. It can be a long process but does provide an important first-hand information in many business cases.

Primary data is original data – from the first source. It is like raw material.

Most popular examples of primary data sources are:

- Interview (personal interview, telephone, e-mail)
- Self-administered surveys and questionnaires
- Field observation
- Experiments
- Life histories
- Action research
- Case studies
- Diary entries, letters, and other correspondence
- Eyewitness accounts
- Ethnographic research
- Personal narratives, memoirs

b. What are the different ways by which you will collect data in this case and which type of research will you choose for solving this business problem?

Collection of Primary Data →

Primary data is collected in the course of doing experimental or descriptive research by doing experiments, performing surveys or by observation or direct communication with respondents. Several methods for collecting primary data are given below –

1.Observation Method

It is commonly used in studies relating to behavioural science. Under this method observation becomes a scientific tool and the method of data collection for the researcher, when it serves a formulated research purpose and is systematically planned and subjected to checks and controls.

(a) Structured (descriptive) and Unstructured (exploratory) observation – When an observation is characterized by careful definition of units to be observed, style of observer, conditions for observation and selection of pertinent data of observation it is a structured observation. When these characteristics are not thought of in advance or not present it is an unstructured observation.

(b) Participant, Non-participant and Disguised observation – When the observer observes by making himself more or less, the member of the group he is observing, it is participant observation but when the observer observes by detaching himself from the group under observation it is non participant observation. If the observer observes in such a manner that his presence is unknown to the people he is observing it is disguised observation.

(c) Controlled (laboratory) and Uncontrolled (exploratory) observation – If the observation takes place in the natural setting it is an uncontrolled observation but when observer takes place according to some pre-arranged plans, involving experimental procedure it is a controlled observation.

2.Interview Method

This method of collecting data involves presentation of oral verbal stimuli and reply in terms of oral – verbal responses. It can be achieved by two ways :-

(A) Personal Interview – It requires a person known as interviewer to ask questions generally in a face to face contact to the other person. It can be –

Direct personal investigation – The interviewer has to collect the information personally from the services concerned.

Indirect oral examination – The interviewer has to cross examine other persons who are supposed to have a knowledge about the problem.

Structured Interviews – Interviews involving the use of pre- determined questions and of highly standard techniques of recording.

Unstructured interviews – It does not follow a system of pre-determined questions and is characterized by flexibility of approach to questioning.

Focused interview – It is meant to focus attention on the given experience of the respondent and its effect. The interviewer may ask questions in any manner or sequence with the aim to explore reasons and motives of the respondent.

Clinical interviews – It is concerned with broad underlying feeling and motives or individual's life experience which are used as method to elicit information under this method at the interviewer direction.

Non directive interview – The interviewer's function is to encourage the respondent to talk about the given topic with a bare minimum of direct questioning.

(B) Telephonic Interviews – It requires the interviewer to collect information by contacting respondents on telephone and asking questions or opinions orally.

3.Questionnaire

In this method a questionnaire is sent (mailed) to the concerned respondents who are expected to read, understand and reply on their own and return the questionnaire. It consists of a number of questions printed on typed in a definite order on a form on set of forms.

It is advisable to conduct a 'Pilot study' which is the rehearsal of the main survey by experts for testing the questionnaire for weaknesses of the questions and techniques used.

Essentials of a good questionnaire –

- -It should be short and simple
- -Questions should proceed in a logical sequence
- -Technical terms and vague expressions must be avoided.
- -Control questions to check the reliability of the respondent must be present
- -Adequate space for answers must be provided
- -Brief directions with regard to filling up of questionnaire must be provided

-The physical appearances – quality of paper, colour etc must be good to attract the attention of the respondent

4.Schedules

This method of data collection is similar to questionnaire method with the difference that schedules are being filled by the enumerations specially appointed for the purpose. Enumerations explain the aims and objects of the investigation and may remove any misunderstanding and help the respondents to record answer. Enumerations should be well trained to perform their job, he/she should be honest hard working and patient. This type of data is helpful in extensive enquiries however it is very expensive.

