**RESEARCH METHADOLOGY**

**NAME :** MUHAMMAD USMAN

**ID:** 12796

**QUESTION 1 , FILL IN THE BLANK**

**1.** Qualitative

**2.** Qualitative

**3.** Quantitative

**4.** Quantitative

**5.** Quantitative

**Q2 : What is Desk Research**

**DEFINATION :**

 Desk Research is gathering and analyzing from already available and known to work technology and info, in this research the researcher collects the already existing information and data from the sources to carry out a research. It is often considered as a low cost research as the researcher does not have to go out to collect data on telephone and other sources like that.

**EXPLANATION:**

Desk research is another name for secondary research. Broadly speaking there are two types of research activity primary research ( where you go out and discover stuff yourself) and secondary research (where you review what other people have done). Desk research is not about collecting data instead your role as a user researcher carrying out desk research is to a review previous research findings to gain a broad understanding of the filed. Before carrying out a field visit developing a prototype, running a usability test, or embarking on any project that u want to be user centered, it makes sense to see what people have done in the past that relates to the products domain . although it’s unlikely that anyone has carried out the exact research activity you’re planning, someone has almost certainly tried to answer related question, reviewing this research is most cheapest and quickest way to understand the domain.

**STEPS:**

 There are some steps that need to be followed for conducting a desk research. Following are

1. Define the objective of your research
2. Define your research plan
3. Conduct the research
4. Conclude and verify the information

**SOURCES:**

 There are free as well as paid sources to collect data about the subject under the desk research.

**THE FREE SOURCES ARE:**

1: **Google advantage source:**

this is the easiest source to begin a desk research by searching about the data, the researcher can find out countless reports and previously done research articles in a moment.

**2: Google Analytics:**

 Another valuable free source of secondary data is google analytics while there is some work to initially set up the tracking code on each page of your website, this tool is very user friendly.

**3: THE PAID SOURCES ARE:**

**SITE ANALYTICS:**

Desk research is very important for feasibility studies, in which syndicated research and demographic data is used to identify market supply for a new product or service. Drive research uses a secondary data tool called demographic.

 **INDUSTRY TREND REPORTS:**

 other common paid options for desk research sources are industry or trend reports these reports can give your business a serious leg up on the competition if relevant. These reports are a bit costly as well.

**QUESTION 3**

**THE SURVEY CONDUCTED TO UNDERSTAND THE AMOUNT OF A TIME DOCTOR…..?**

**EXPLANATION:**

The survey conducted to understand the amount of time a doctor takes to attend his patients when the patients walk into the hospital in an example of Quantitative research. As it is known, in quantitative research the surveys are conducted to gather the data and information.

The quantitative research is defined as a systematic investigation phenomenon by collecting quantifiable data and performing statistical, mathematical, and computational techniques. The purpose of quantitative research is to generate knowledge and create a better understanding of the social world around us. Additionally, this design is aimed at discovering how many people think, act or feel a particular way.

If we look at the example we can easily understand that the research design that is used is quantitative as it deals with the statistical and numerical data. The researcher intends to disvoer the amount of time in which a doctor attends his patients as well as the number of patients he interacts with. The data that the research will gather will be based on the numerical samples. At first the researcher will observe the intended phenomena, afterwards he will collect the data and conclude his research based on that data.

The goal of gathering this quantitative data is to understand, describe and predict the nature of a phenomenon, particularly through the development of models and theories. Quantitative research techniques include experiments and surveys. Also called quantitave design; quantitative inquiry, quantitave methods, quantitave study.

**QUESTION 4:**

**Explain Open ended close ended questions and first hand and second-hand data?**

**EXPLAINTIATION:**

When a researcher is doing a research, he performs the surveys, the researcher provides the participants with questionnaires having open and closed ended questions. The surveys are usually conducted in quantitative research designs and sometimes in qualitative as well.

**Close Ended Questions:**

A closed or a closed ended question is a question that can be answered properly with a simple Yes or no. The participants are provided with such question that can be simple answer by choosing any one of the options. The options are Yes or No.

**The examples of closed ended questions that need only yes or no response are:**

1. Were you born in Karachi?
2. Is Islamabad capital of Pakistan?
3. Do you have pets?
4. Do you think Pakistan is in safe hands?
5. Are you a pathan? etc.

**Open Ended Questions:**

The questions that require more than a one word a answer as well as more thought are called open ended questions. They cannot be answered with a static and a yes or no response. These questions are made in such a way that they need a thoughtful response by the participants. These questions are also used while conducting surveys.

**The example of open-ended questions that need more than a yes or no response are:**

**1:** Tell us about your experience in ABC university

**2:** what measure should government take for the betterment of education system?

**3:** In your opinion, what facilities should be provided to the students living in hostels?

**4:** Which clothing brand is more consentient and why?

**5:** Is a lockdown a good idea to stop the spread of Covid-19?

**First hand data & second-hand data:**

**1: First hand data:**

The data that is collected by the researcher himself while conducting a research is known as first hand data. It is considered as the authentic and more accurate data. The researcher has more information about his subject of research so he can collect the data that can be more useful for him by himself. By counting, collecting polls, conducting experimentations, asking questions and measuring the data, the first-hand data is collected.

**2: Secondary hand data:**

 The data that is collected by someone other that the researcher himself is known as second hand data. This data is not considered as authentic as the first-hand data because it is based on the understanding of a person other that the researcher himself. The other person conducts experimentation, counts the data or other measuring tasks that are needed for the research.

**QUESTION 5:**

**IN WHICH KIND OF RESEARCH DIRECT OBSERVATION IS THE MOST SUITABLE…?**

If we broadly look it, observation is the first step in the steps of a research. Observation is the important key o conduct a research, if we look at it narrowly, the type of research in which the observation is the most important and suitable way to understand the reality is Empirical research.

The empirical research is defined as a research where the results of the study are striclt drawn from the actual observation or experimentation. It is based on the observed and measure phenomena as well as on the actual experience of the researcher rather than any theory or belief. It’s outcome solely relies upon the evidence or scientific data collection methods. However, observation is important to collect the evidences in every research but the Empirical research solely relies upon the observation to collect the data for research.