

Medical research methodology

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Research Philosophy

This study will adopt realism because the objectives of the present study is to establish the opinions of designers, engineers, behavioral scientists, and users to assess whether design has strengthened the companies' awareness of different internal and external challenges and how to address these challenges. Borrowing from Kothari (2008), realism is a combination of both positivism and interpretivism and is useful when the investigator wants to establish the opinions and beliefs of research participants regarding the topic under study.

Research Techniques and Design

This study will adopt a mixed research method. Specifically, the investigator will adopt both qualitative and quantitative research techniques to answer the research questions proposed in this study (Nitta, Holley & Wrobel, 2010). Qualitative research technique will be critical for this study because it would explore the feelings, attitudes, and beliefs of the subjects regarding the processes that characterize the development of technology-enabled cancer care solutions and to whether design has strengthened the companies' awareness of different internal and external challenges and how to address these challenges. Quantitative research articles will also provide important information regarding the extent at which business firms are employing design thinking and whether this approach has succeeded in addressing various internal and external challenges they face. Quantitative research study, as argued out by Rubin and Babbie (2009) involves the utilization of

statistical approaches with an aim of extracting information from measurable variables.

This study will adopt phenomenological research design to explore the lived experienced of research subjects concerning whether design has strengthened the companies' awareness of different internal and external challenges and how to address these challenges. Borrowing from Kothari (2008), phenomenological study aims at exploring the feelings, beliefs, and altitudes of the subjects to answer the proposed research questions.

Population

The population for this study will encompass all external and internal partners and customers. According to Mertens and Ginsberg (2009), population in a study is defined as all subjects understudy. Twenty people will be selected from the entire population to answer the proposed research questions for this study.

Data Collection

The study will employ both secondary and primary data. Primary will be obtained from the semi-structured interview while secondary data will be obtained from scholarly journal articles, books, company's official website, publications, magazine, and newspaper articles (Finlay, 2009). The semi-structured interview will contain both close-ended and open-ended questions to allow researchers to freely express their opinion, altitudes, and beliefs (Saunders, Lewis & Thornhill, 2007).

Sampling Approach

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The study will adopt convenient sampling to choose 20 subjects who will participate in this study. The investigator will request a list of possible people who will take part in the present from the head of Human Resource Department. The research will then use this list to conveniently select 20 people who will assist in completing this project. One of the advantages of convenient sampling is attributed to the fact it is lastly costly and saves time (Mason, 2010).

Data Analysis

Building on Kothari (2008), data analysis is described as a procedure employed by the investigator to draw inferences from the answers or responses provided by the research participants. For the semi-structured interview that will be adopted in this study, the investigator will a broad range of qualitative techniques such as description, explanation, as well as, augmentation while analyzing the responses of the research subjects (Walsh & Wigen, 2003).

Reliability and Validity of the Study

So as to improve both the validity and reliability of the present study, the investigator will conduct a pilot study aimed at testing the data collecting instrument that would be adopted in this study (Salkind, 2010). This instrument encompasses the semi-structured interview. If the pilot test meets the objectives and aims of this study, the investigator will conclude that the research study will be valid. Moreover, the researcher will have a prolonged engagement with the research participants with an aim of

ensuring that all research questions are effectively and successfully answered.

Research Limitations and De-limitations

This study will be associated with a broad range of limitations. First, the respondents may lack the morale and dedication to answer some of the questions because of their sensitivity. However, the research will address this problem by ensuring that the research participants are kept anonymous as well as protecting the information they will provide. Moreover, since the study will last for a period of six months, some employees may leave the firm before answering the semi-structured interview but the investigator will keep the contacts of all research participants to ensure that they take part in the present study even if one leaves the organization.

Ethical Consideration

The investigator will take the issue of ethics seriously and do what is humanly possible to adhere to the practice and spirit of ethical research study (Creswell, 2009). Specifically, the researcher will ensure that the privacy and confidentiality of all research subjects are protected. Additionally, all the subjects will be treated with respect and dignity. Any participant would decide to withdraw from the research process will be allowed to do so without being coerced. All participants will be allowed to sign the consent form before taking part in the research process (Creswell, 1998). This will ensure that they have read and understood the objectives and aims of the research study and are willing to participate in the research process (Walsh & Wiggins, 2003). The information that will be collected by <https://assignbuster.com/medical-research-methodology/>

the researcher will be kept in a safe place and no data will be revealed to third party without the consent of the research participants.

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