

Practical Task 7

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Exercise II: Conceptualizing a study design (For quantitative studies)

A: Answers to the following questions will help you to develop your study design (Step II).

1 Is the design that you propose to adopt to conduct your study cross-sectional, longitudinal, experimental, or comparative in nature? If possible, draw a diagram. depicting the design.

The design I propose to conduct my study is cross section in nature.

2 Why did you select this design?

My proposal involves exploring real world implementations, identifying the limitations or implications, and creating a foundation for further development of existing systems.

3 What, in your opinion, are the strengths of this design?

The strength of this design is:

- 1. In depth knowledge gain about current scenarios*
- 2. identification of trends*
- 3. space for finding generalized views about current scenarios.*
- 4. a broad area for further research and development.*

4 What are the weaknesses and limitations of this design?

Limitations:

- 1. hard to find comprehensive data of good quality for comparison.*
- 2. Ethical considerations of the comparison is very important and very hard to tackle with*
- 3. Making interpretation in terms of comparing existing models/design with heterogeneous environment (diverse domains and specification) is merely impossible.*
- 4. Limited control and the future of research according to the study area chosen would make it more difficult.*

5 Who constitutes your study population?

- 1. Users of the system, which is currently implemented,*
- 2. Users of the developers and designers of who uses the technology selected for the implementation of real-world systems.*

6 Will you be able to identify each respondent in your study population? (a) If yes, how will they be identified?

Two approaches have been selected and in thought process for processing with this.

1. *Identify the contact details of people at DMU, who either study here or work part-time of full time in the field.*
2. *Spread a questionnaire on social media and free of choice to people to respond willingly to.*

7 Do you plan to select a sample? In either case, explain the reasons for your decision.

Selecting sample is very important, because of the following reasons,

1. *Cost effectiveness.*
2. *Managing the data at the time of data analysis would be easy.*
3. *To get more focused on the outcomes rather moving with time consuming process.*

8 How will you collect data from your respondents (e.g. interview, questionnaire)?

Questionnaire is the way for approach would be considering for this study.

(a) Why did you select this method of data collection?

1. *Simple and flexible to distribute.*
2. *Analyzing output is easy.*
3. *Time saving process compared to others, especially Interviews.*
4. *Less costly compared to other methods in terms of output.*

(b) What, in your opinion, are its strengths and weaknesses?

Strengths:

As specified above

1. *Simple to perform.*
2. *Cost is less.*
3. *Flexible and convenient.*
4. *Analysis of the data collected would be easy.*

Weaknesses:

1. *Outcome can't be predicted,*
2. *Data quality might be less,*
3. *Response can be biased,*

(c) If you are interviewing, where will the interviews be held?

The place would be chosen depending on the participants' convenience.

(d) If you are using mailed questionnaires:

The questionnaires should be having the following things:

1. *instructions should be clear,*
2. *the person should be appreciated with any incentives or rewards,*
3. *it should be refined and unambiguous,*
4. *ethical considerations should be considered while writing the questionnaire,*
5. *Taking follow up should be important to be noted,*

(i) From where will you obtain the addresses of potential respondents?

Mainly from the database of any institution or organization that is associated with the study focused on, or public domain specific records might be a source which can be approached.

(ii) Are you planning to enclose a self-addressed stamped envelope with the questionnaires?

Yes. I think it is mandatory to be done in such a way, since it helps the participants to help to understand the importance of the response, and Genuity required.

(iii) In the case of a low response rate, will you send a reminder?

Yes. A polite way of reminding us about the importance and making a request for permission to take the follow up would be a best practice which I would like to take.

(iv) If there are queries, how should respondents get in touch with you?

For further information or clarification, the contact details, including email and phone number would be offered in the mail questionnaire.

B: Based on the above information, describe your study design. (For further guidance, consult Chapter 8.)

The study design uses cross sectional study design and the steps involved are as follows,

1. *Purpose of Study:*
finding real world implementation with NLP and finding the limitations and which would create a space eventually to create or extend new approaches or solutions to problems,
2. *Population:*
population includes the persons who interact with the existing systems and their responses take for further investigation.
3. *Sampling:*
Select sample of a certain population which would allow me to compare the whole implementations taken into consideration.
4. *Data Collection Method:*
It would be through questionnaires.
5. *Data analysis*
Group the data according to the criteria described and analyze the data according to the research questions formulated.
6. *Ethics of the study:*
Ethics and standards should be followed, including consent from people or authorities, confidentiality, and participants values.