Lecture 5

Case study

THE CIO DILLEMA

Observation

The chief observation officer (CIO) of a firm observes that the newly installed Management Information System (MIS) is not being used by middle managers as much as was originally expected. The managers often approach the CIO or some other "computer expert" for help, or worse still, make decisions without facts. "There is surely a problem here," the CIO exclaims.

Information Gathering through Informal Interviews

Talking to some of the middle-level managers, the CIO finds that many of them have very little idea as to what MIS is all about, what kinds of information it could provide, and how to access it and utilize the information.

Obtaining More Information through Literature Survey

The CIO immediately uses the Internet to explore further information on the lack of use of MIS in organizations. The search indicates that many middle-level man- agers especially the old-timers are not familiar with operating personal computers and experience "computer anxiety." Lack of knowledge about what MIS offers is also found to be another main reason why some managers do not use it.

Formulating a Theory

Based on all this information, the CIO develops a theory incorporating all the relevant factors contributing to the lack of access to the MIS by managers in the organization.

Hypothesizing

From such a theory, the CIO generates various hypotheses for testing, one among them being: Knowledge of the usefulness of MIS would help managers to put it to greater use.

Data Collection

The CIO then develops a short questionnaire on the various factors theorized to influence the use of the MIS by managers, such as the extent of knowledge of what MIS is, what kinds of information MIS provides, how to gain access to the information, and the level of comfort felt by managers in using computers in general, and finally, how often managers have used the MIS in the preceding 3 months.

Data Analysis

The CIO then analyzes the data obtained through the questionnaire to see what factors prevent the managers from using the system.

Deduction

Based on the results, the manager deduces or concludes that managers do not use MIS owing to certain factors. These deductions help the CIO to take necessary action to rectify the situation, which might include, among other things, organizing seminars for training managers on the use of computers, and MIS and usefulness.

Research Language

- Theory
- Conceptualization
- Operationalization
- Variables
- Hypotheses
- Assumptions
- Population
- •
- Sample
- Validity
- Reliability
- Data
- The research process
- Summary
- Methodological queries
- References

Concepts And Constructs

Constructs include happiness, recreation, love, hate, satisfaction, IQ, morality, etc. Scientist refer to these abstract concepts as constructs because they have been conceptually constructed to represent a name of something real that cannot be directly observed but may be useful to study or describe.

One can describe the difference between constructs and concepts in terms of set theory. Constructs extend over actual cases, whereas concepts extend over both actual and possible cases.

The terms "concept" and "construct" have similar meanings. Yet there is an important distinction. A concept expresses an abstraction formed by generalization from particulars. "Weight" is a concept: it expresses numerous observations of things that are more or less "heavy" or "light."

Constructs can be conceptually defined in that they have meaning in theoretical terms. They can be abstract and do not necessarily need to be directly observable.

Examples of concepts include common demographic measures: Income, Age, Education Level, number of Siblings. We can measure concepts through direct and indirect observations: Direct Observation: We can measure someone's weight or height. And, we can record the color of their hair or eyes.

Unit 2: Research Problem Identification and Formulation

Identification of Research Problem

Formulation of problem is the first and foremost step in a research work. The research problem can be formulated and selected rationally and then the whole research work can be conducted only if the identification of the problem is done precisely. To identify the problem a researcher should have some basic knowledge, which is then developed through discussion with experts or through the literature or by continuation of activities in the related field.

The research problem undertaken for the study must be carefully selected. This task is a difficult one, although it may not appear to be so.. Help may be taken from a supervisor in this connection. A research supervisor can at the most only help a researcher to choose a subject. Identifying the exact nature and dimensions of a problem is of major importance in research work. It is very essential that an investigator should learn how to recognize and define a problem.

The following steps are to be followed in identifying a research problem:

- 1. Determining the field of research in which a researcher is keen to do the research work.
- 2. Develop the mastery on the area or in field of specialization.
- 3. Review the recent research conducted in the selected area.
- 4. On the basis of review, select the priority field of the study.
- 5. Draw an analogy and insight in identifying a problem or employ the personal experience of the field in locating the problem. In this process researcher can take help of supervisor or expertise of the field.

6. Pin-point specific aspect of the problem which is to be investigated.

Ways of Understanding Research Problem

The selection of a suitable problem is not an easy task. It is a serious responsibility to commit oneself to a problem that will inevitably require much time and energy and which is so academically significant. Specifically, the concept for separating out the research problem from the diversified field can be made by the

- i. Discussion among the colleagues
- ii. Discussion with the research guide
- iii. Discussion with some experts and
- iv. Intensive reading all the available literature.

The following are the general ways for understanding problem to which one may proceed for a suitable research:

- 1. Personal experience of the investigator in any field is the main means for understanding a suitable problem.
- 2. The other ways of understanding of problem, most frequently used by the investigator as suggested by the supervisors, is the extensive study of available literature-research abstracts, journals, hand-books of research international abstracts etc
- 3. In the choice of a suitable problem, the researcher has to decide his field of investigation. He should study the field intensively in the specific area; this may enable him to identify a problem from the specific field.
- 4. The new innovations, technological changes and curricular developments are constantly bringing new problems and new-opportunities for social research.
- 5. The most practical ways of understanding problem is to consult supervisor, experts of the field and most experienced person of the field
- 6. It is a general practice that researchers suggest some problems in their research reports. The researcher can understand a suitable problem for his own study.