

ABSTRACT

The purpose of this study is to help develop new ideas in the field of computer use by organizations. Different approaches were discussed in detail for analyzing a problem and designing a suitable system for it to be solved using an automatic computer.

Once a system is set, Chapter III shows the best way of implementing it, offering solutions for many possibilities and considering some special circumstances and variety of situation's conversions of old systems and of creating new systems for new problems.

The use of a computer is expensive. Using a computer for the first time in an organization or changing the old computer to a bigger one has to be justified before taking that decision. To justify it, a carefully prepared study of all present systems and planned systems has to precede the decision. There is a distinction between data and information. Data are facts collected from observations or measurements, while information is the meaningful interpretation and correlation of data that allows one to make a decision. Detailed discussion of this distinction was made in Chapter V.

Cost and savings in time, effort, and money have to be considered. Chapter IV deals with justifying a system.

Both Appendix A and Appendix B were concluded from a study which was conducted in a questionnaire that was made to several institutions in support of the concepts discussed in this dissertation.

The first one is an example of an institution using the computer for the first time. The second is an example of two institutions with past computer experience who are changing their computers to better systems.