

Three Approaches to the Design, Development, and Implementation of an Integrated Technical Services System: The Chicago, Columbia, and Stanford Experiences

Introduction

A casual review of the automated systems under development at Chicago, Columbia, and Stanford would seem to indicate that each had developed independently, without cognizance of each other. Nothing, in fact, would be farther from the truth. For the past three years, senior technical personnel responsible for systems development in each institution have worked together closely with the objective of testing the feasibility of designing and implementing a common or compatible system. This effort was funded by the National Science Foundation (GN-724) and was called the Collaborative Library Systems Development Project (CLSD). Quite early in the effort it was established that this objective was unrealistic for a variety of technical and logistic reasons, and it was decided that a more realistic and achievable objective would be to attempt to work on a more general design level. Even on this level it was apparent that significant differences existed in terms of philosophy, approach, and scope which could not and, in the opinion of the participants, probably should not be resolved at this stage of library automation development. After lengthy review and discussion it was decided that the most valuable contribution that these three institutions could make would be to develop individual systems that would reflect different yet technically valid approaches to the solution of a common problem. What exists today in each of these libraries are systems that do precisely this. Grossly stated, Stanford's approach is to make the fullest and most innovative use of the on-line, interactive potential of computer technology. At the opposite extreme, Columbia's approach emphasizes using the technology conservatively stressing off-line, batch-oriented operations. Chicago's approach falls between these two extremes stressing the use of batched, on-line operations against fully integrated files.

The purpose of this session was to describe and contrast the existing systems in these three institutions. Given the scale and complexity of these efforts, this was a formidable and challenging undertaking. The method chosen for presentation was to develop a general outline and have each institution describe its experience on each of the topics included. Emphasis was placed on informality and breadth. Three major topics were defined; they were:

1. Origin and history of project including scope, approach, staffing, and budgeting.

2. Major systems design features, including file design, hardware, software, integration of MARC data, and products.

3. Phasing and scheduling of project efforts.

The program was divided into three parts corresponding to these topics and each institution was allowed 20 minutes to make a statement on each topic. A question and answer period followed each part. The transcript of the session was sprawling and disjointed. Therefore, for the sake of clarity and continuity each institution's presentation has been edited separately and is presented here as a unit.