AUTOMATED INFORMATION SYSTEMS:
Implementation Guidelines

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AUTOMATED INFORMATION SYSTEMS: PLANNING AND IMPLEMENTATION GUIDELINES

A Monograph for Court Users
Written by the Staff of the
State Judicial Information Systems Project

U.S. Department of Justice
National Institute of Justice

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Introduction

Data processing activity has been historically one of the most casually managed activities in business as well as in government. Managers have been swayed by the mystique of automation and have tended to accept the judgment of computer specialists as to the efficiency and cost-effectiveness of data processing activity.

Management ultimately bears the responsibility for establishing the policy and direction for every business and governmental activity. The data processing activity is no exception. Management should participate in the development of an expert—philosophy that includes, at a minimum, a statement of purpose for an information system (be it manual or automated), an explanation of the organizational relationships within data processing and between data processing and the court administrators (i.e., clerks, judges), an indication of the process by which the information system is expected to meet the objectives of management, and basic guidelines for the day-to-day operation of the information system. The establishment of a management philosophy for an information system will strengthen the relationship between all parties involved and ensure a smoother path for the accomplishment of the stated goals and objectives of judicial administration at every level.

This monograph will discuss the essential steps that judicial managers should take in developing and implementing an automated information system. The level of discussion is intended to be non-technical in nature, and does not purport to be a definitive treatise on computer technology or management science.*

What is data processing?

Data processing is the performance through manual or automated means of a planned sequence of operations upon data. In the court context, “data” might mean case-related information such as defendant’s name, case number, and next event; a listing of eligible jurors for jury duty; or merely accounting entries such as fees paid, citations paid, and payroll.

The growth of the computer industry has resulted in part from the paperwork explosion, which threatens to debilitating both large and small organizations. Courts find themselves in the same paperwork dilemma; in addition, caseloads are increasing, procedures are inadequate, and personnel and financial resources are limited. Although courts have turned to computers much later than most organizations, many court officials now see the computer as the best means for solving court information problems. Many court operations such as preparing calendars and notices, tracking case progress through the court process, and preparing statistics are amenable to computerization.

The growing availability of lower-priced computers, coupled with increasing court information-processing problems, leads to the expectation that courts will continue to develop and utilize computer technology. In developing new systems, however, a court needs to avoid pitfalls already encountered in other jurisdictions. Although much has been written about the general field of data processing and specifically about information systems in the courts, court managers seldom have the time or the expertise to wade through volumes of information and extract relevant materials.

This monograph attempts to bring together in one place the guidance and relevant instructions that court managers will need in developing and implementing an automated information system.

When does a court need an automated information system?

When court efficiency lags, the court manager recognizes that he has problems. Although the real problems may be unknown, the symptoms are readily recognized. Such symptoms may surface as the inability to:

• to respond to requests for certain types of information,
• to predict the workload of the court,
• to comply with speedy trial statutes or rules of court,
• to comply with privacy and security regulations in the dissemination of case-related information.

If these problems can be corrected by changing procedures, the court manager can study his needs and issue the necessary revised procedures to the operating personnel. With periodic monitoring and control, the problems should disappear.

More complex problems become apparent when long-standing needs go unfulfilled. Lack of detailed, accurate, and current management information, for example, could make the court manager aware of the following needs:

• There is a need for information about all the record-keeping activities within the court; solutions such as the addition of more judges and clerks may have reached the saturation point.
• There is a need for information about the volume and movement of cases and people through the system.
• There is a need to evaluate the performance of personnel involved in the expediting of cases through the court.
• There is a need to measure the court’s performance against standards or against other courts’ performance.

When enough of these problems exist and their solution is not readily apparent, the court manager should undertake an evaluation of whether alternate techniques for managing information—either new or enhanced manual procedures, or an automated system—are needed in this court.

The systems approach

The systems study. The key for developing an adequate, workable information system is the systems study. Through careful analysis of the information flow—where information comes from, who needs it, what is done with it, and what happens because of it—the proper system can be developed to meet the court’s needs.

The “systems approach” is a process by which the systems analyst and the court manager determine the court’s needs and recommend the most appropriate system. It is a method for integrating people, machines, and procedures into a system designed to attain specific goals and solve specific problems.

Each step of the systems approach is important in bringing the court closer to staking its goals. Shortcuts and deviations generally lead to errors in the decision-making process; in fact, most court information systems failures have resulted because one or more steps were omitted or circumvented. Because of the high cost and complexity of data processing

* Much of the material presented in this book is adapted from several previous Publications of the National Center for State Courts. It comes largely from Data Processing and the Courts—Guides for Court Management and Planning and the Courts—Reference Manual; Cost-Benefit Methodology for Evaluation of State-Statistical Systems; State Court Information System and Statistical Reference Series, Vols. I, II, and III; and Guidelines for Development of Computer Training Curricula for Court Personnel. Details of publications will be found in the Bibliography.
Feasibility study

The preliminary step in the systems approach is to state clearly the objectives of the proposed system. Other
relations to the overall goals of the court. Many systems fail
because the courts or agencies involved have not agreed
on the objectives or do not accept projects as essential.
The objectives of such a system must be defined at the
beginning of the system design and at regular intervals
during the design process.

In addition, the objectives of the system must involve not
only the court but also other agencies with which the
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Figure 2: Example of workflow in planning stage of an automated information system

Source: National Center for State Courts, Oklahoma Court Information System Study, 1981
PART I: DECIDING WHETHER AN AUTOMATED INFORMATION SYSTEM IS THE ANSWER

Careful analysis of the current records systems will often reveal inefficiencies within the system and the presence of superfluous or duplicate records maintained by the court. One of the most common mistakes, however, is considering the use of any technology in the courts—especially data processing—so as to make the court's responsibility and the form and content of records subject to their preferences. Often these assumptions are inaccurate. Conversion to a data processing system often highlights the failures of the underlying records systems; unfortunately, the new system is often blamed for the shortcomings inherited from the old ones.

General system overview/conceptual design

At this stage the systems analysis should examine the current system to determine whether information paths and processes can be streamlined. The presence of every form of information in a court record or a filing system should be traceable to some legal or practical court requirement. The goal of the system development process is to reduce, where possible, the types of records kept by the court and to minimize the time required to process them.

Identification of problems and alternate solutions

No single data processing design is appropriate for all courts. The type of system designed will depend upon a wide variety of factors, including the political environment of the court, the need to share information with other courts or criminal justice agencies, the requirements of the staff providing the data, the availability and capabilities of computer facilities, and the requirements for information privacy and security. Each design consideration must be carefully examined and weighed in order to ensure that the system developed will meet the defined need.

In many cases, an individual court can develop a computer system without coordinating its efforts with other criminal justice agencies. However, the courts do not operate in a vacuum; other governmental agencies and courts are dependent on information generated by the trial court. Therefore, courts must be cognizant of the information needs of others when developing a data processing system.

In some cases, the requirements of other agencies can be accommodated directly by an integrated computer system. In other cases, the court can develop a computer system independently and then exchange data with other agencies through either manual or computerized methods.

Data processing support

The need for courts and other criminal justice agencies to share information is one factor in determining whether they should develop a computer system jointly. Court participation is also influenced by who controls the budget for the computer, who has the strongest political influence, and who has an available computer. Data processing may be centralized, decentralized, or a combination of the two in a distributed network. (Descriptions of how each function will be found under "Selection of a systems approach," page 10.) Each has advantages and disadvantages.

Centralized data processing. Centralized data processing means that the computer facilities, the operation, and most systems staff are at one central location, or that the same centralized judicial processing is being performed at several sites. A trial court may participate (or may be required to participate) in one of three types of centralized computer systems: government computer systems, criminal justice information systems, and statewide trial court information systems.

Government computer systems. City, county, or state governments often operate large centralized computer systems to serve the needs of their agencies. The court is often required to utilize the existing capacity of the government computer rather than an outside source.

Courts forced to use nonjudicial branch government computers for cost-saving reasons may find that these systems are not adequate to meet their needs. Courts are often given a low priority for systems assistance and are frequently assigned data processing personnel who may not be knowledgeable in court applications. Lacking the leverage needed to select other types of consulting and data processing services, many courts throughout the country are locked into local government systems that do not meet their needs.

Criminal justice information systems. Many courts participate in criminal justice information systems, which facilitate the sharing of information between courts, law enforcement agencies, and prosecutors. Courts already exchange information with police and prosecutors through manual methods; computers merely facilitate this exchange by reducing redundancy in the recording and storage of information.

Unfortunately, these systems have often been designed for law enforcement needs (the emphasis is put on criminal cases, which are only a small part of court caseload) and not specifically to meet court requirements, although the courts still have the major responsibility for providing most of the common data. The cost to the courts in manpower, when compared with the benefits received, often negates the system's value to courts.

Statewide trial court information systems. A statewide trial court information system allows all courts in the state to perform trial-level operations and to provide local and state-level statistics. In 1980 there were eighteen states that had developed or were developing automated trial court modules as part of a state-level judicial information systems.
Figure 3: Typical workflow schematic for the appeals case in superior courts in California

Source: Court Equipment Analysis Project, Data Processing and the Courts, page 7.
Selection of systems approach

Types of automated systems

If a new technology appears to provide a solution to existing problems, then court managers should consider which type of computer system is appropriate and cost-effective for the required processing. Basically, the computer system consists of a central processing unit and main memory, auxiliary storage devices, peripheral devices (e.g., terminals, card readers, printers), and communications devices (to connect remote input/output devices). In such a network, however, would probably be somewhat inhibited using a service bureau computer, although computer-to-computer interfaces are possible. This means that, for example, if individual judicial districts were automated, case data could be sent directly to the central computer and then transferred directly to the service bureau computer. If new technology appears to provide a solution to existing problems and operational support for each trial court. Some juristiciiaries are not confronted with a decision on whether the system represents a substantial commitment and computer system selection because they already have a computer that is suitable for the planned computing. In other cases, the court may wish to consider the potential for using existing resources. For example, if individual judicial districts were automated, case data could be sent directly to the central computer and then transferred directly to the service bureau computer. Selection of systems approach

Three basic alternatives exist with respect to problems in the current system that provide the basis for consideration of various aspects of a given records or information system.

Maintaining the status quo. Occasionally the problems are so numerous that a decision to correct them is made. In these circumstances the records system may be improved or expanded in its intended function. In other cases, the court may wish to consider the potential for using existing resources. For example, if individual judicial districts were automated, case data could be sent directly to the central computer and then transferred directly to the service bureau computer.

Improving the present system without new technology. Unless there are less than ideal, and the court may wish to consider the potential for using existing resources. For example, if individual judicial districts were automated, case data could be sent directly to the central computer and then transferred directly to the service bureau computer.

There are several methods of acquiring the types of computer equipment. Small-scale computers, and minicomputers. Small-scale computers are available without the substantial investments in computer hardware and system software. If such staff are available, the initial cost of a new technology by managers and nondescript advantages.

Distribution of processing. This increasingly popular concept utilizes the idea that functions lend themselves to efficient processing at remote computer sites and that some "non-better processed at a central site. Distributed processing, the eavesdropping, involves a central computer joined in a communica­ tions network with remote computers. In such a network, some functions are performed by the central computer and some at the remote computer. The central computer can be either a large or small-scale computer, and the remote computers can range from large-scale through small-scale computers (e.g., minicomputers) to intelligent terminals. If intelligent terminals are used, they normally provide a comprehensive range of processing capabilities.

As above, every effort should be made to use existing computer facilities in judicial districts or trial courts. Total centralization. All data processing activities (e.g., data entry from reports, file generation) are performed at a central computer site. Typically, in a judicial application, case data are entered in standard forms by clerks in the trial courts and mailed to the court in which they are entered onto the file computer. Similarly, reports are generated at the central computer site and distributed to the judicial districts or trial courts.

Several important considerations are encompassed in this totally centralized concept. The central computer could be either a mainframe or a minicomputer, (i.e., small or small business) computer. Moreover, there could be multiple computer sites performing more than one centrally judicial processing around the state.

Centralized processing uses, remote input/output. Some input/output (e.g., data entry, on-line query/response) is performed remotely, using terminals in the judicial districts and trial courts. This approach requires that the acquired computer can accommodate all anticipated processing. Another consideration in the case of an on-site computer is whether staff are available to operate and maintain the computer hardware and software. If such staff are available in-house, they must be trained or recruited through an external management contract. In any event, the costs must be considered with acquisition costs. Purchase. It will be advantageous to purchase a computer system. After purchase costs are projected over the system's life span, its residual value should be included as a final-year value.

Lease. Lease arrangements are common with large-scale computers, although support for each terminal (e.g., intelligent terminals and terminal and central computer terminals) is usually purchased.

Lease with option to purchase. This is a combined lease and purchase plan, where, during some predetermined period, the lessee could exercise an option to apply some of the previously paid rental toward purchase of the computer system.

Commercial service bureau. Computer processing time is available from service bureaus in most localities. The general heading of commercial services bureau encompasses commercial batch-processing and time-sharing services, university data processing facilities, and county or city government data processing facilities. The economic viability of any approach is that powerful computers are available without the substantial investments in money and time required for procurement, installation, operation, and maintenance, because costs are distributed among all users. There is no advantage in lack of complete user control over privacy of data and processing priorities.
costs. These costs, which can be either one-time or recurring charges, are generally related to the period that a cost-benefit analysis is needed. They may also be variable cost items, depending upon the growth anticipated in the size of the computer system. The financial costs of these items include the purchase price of the computer and peripheral equipment and personnel (recruiting costs.)

- Consultants used in completing design work or developing computer software (one-time or recurring)
- Remote staff and off-site computer (one-time or recurring)
- System maintenance fees (recurring)
- Personnel (recruiting or ongoing)

Several of the above examples fall under both the fixed and the variable cost category. For example, personnel costs for year one could be calculated as being a fixed cost, yet this cost item can be a variable cost over a period of time because of increases in staff size, cost-of-living raises, and other inflationary factors.

Variable costs. The variable cost items are probably the most difficult to identify and project in completing the cost-benefit analysis. Such costs will vary according to the anticipated expansion of the system, increases in personnel, and enhancements to the overall quality of the system. Examples of variable cost items are as follows:

- Repairs or purchase or lease of computer hardware and peripherals
- Expansion of rental space
- Office costs (recurring)
- Personnel costs
- Data sets, files, and storage (as needed for expansion and other applications development)
- Additional data processing, whether through contracts or the addition of temporary staff

Tangible benefits. Tangible benefits include reductions in cost estimates where savings can be projected with some degree of certainty. They include costs that are fixed or directly connected to the computer system. The cost savings under tangible benefits should be translated into dollar figures based on the normal operating cycle. The cost-benefit analysis can be evaluated similar to the benefits of automated information systems. Examples of tangible benefits are as follows:

- Reduction in redundant paperwork (i.e., multiple filings, notices, and associated reports)
- Cost savings resulting from automation of the process as a result of decreases in personnel needs through the implementation of the system
- Reduction in case processing time because precise and accurate information can be provided to the court from the computer system
- More efficient production of court calendars, administrative records, and other legal document forms

Intangible benefits. Intangible benefits are items to which a dollar value cannot be placed. They are usually based upon judgment and management experience and a projection of increased or saved revenue, investment and payment of wages, salaries, and other repetitive tasks.

Intangible benefits are items to which a dollar value cannot be placed. They are usually based upon judgment and management experience and a projection of increased or saved revenue, investment and payment of wages, salaries, and other repetitive tasks.
This, then, is the challenge of most cost-benefit analyses: how to evaluate benefits and relate them to costs in the most meaningful way. Throughout the entire analysis, emphasis is placed on systematically developing costs and benefits in a step-by-step fashion and on complete supporting documentation, with text augmented by tables and graphs.

Cost evaluation. Costs are evaluated over the system's life span for each system alternative. This includes data processing costs, user costs, and a composite cost formed by adding data processing and user costs.

Data processing costs are connected with centralized processing of data received from various sources. For example, at court administrative offices data may be received from district courts, recorded, stored, and compiled into summary statistical reports; costs associated with these activities would be data processing costs. The processing may be manual, automated, or some combination thereof.

Such costs involve the development, implementation, operation, and maintenance of manual processing and of computer hardware and software for each system alternative. These costs are established for the system's life span.

User costs are connected with decentralized processing of source data. For system alternatives that involve centralized reporting, these costs usually involve those incurred by court clerks in receiving and recording case data and then sending the data to a central location.

The cost item (e.g., clerks) for which costs will be computed and the units (e.g., "man" hours) in which costs will be expressed should be established at the outset. Then costs are computed by forming the product of the dollar rate per unit of cost item and the number of cost items. Sometimes rate per unit of cost item and number of cost items are readily available. It is often necessary, however, to obtain one or both of these factors indirectly through intermediate steps. This is particularly true of the number of cost items, since these must be projected over the system's life span.

In developing a separate set of costs for each alternative, costs for the current (e.g., manual) system are usually developed first. Then costs for the other alternatives are usually developed using the current system costs as a basis and incrementing or decrementing individual cost items as appropriate.

Composite costs are then developed for each system alternative and each year of the system's life span by adding data processing and user costs.

Benefit evaluation. As previously stated, the ideal way to evaluate benefits is to assign dollar values to them so that they can be mathematically related to costs. This is often impossible to do in an accurate way, because many benefits are either cost savings or unquantifiable items (e.g., increased data accuracy, improved report timeliness, increased user confidence, and so forth) that are inherently unsuitable for dollar evaluation.

If there are quantifiable benefits that can be mathematically related to costs, the question arises whether they are significant enough to make such a relationship worth computing. If the most significant benefits are cost savings and unquantifiable, then numerical relationships between costs and the other benefits (i.e., benefits that are neither cost savings nor unquantifiable) are meaningless.

An alternate method of quantitatively evaluating benefits in a manner that permits them to be mathematically related to costs is to devise a weighting scheme for benefits. This approach is based on the theory that all benefits can be ordered according to their relative importance to a composite group that can include system users, system developers, and those who fund, monitor, and manage the system and related activities. Then, for each system alternative, a rating of how well the alternative provides each benefit is assigned. These values are then used to determine a benefit score for each alternative.

Cost-benefit relationship. This is dependent upon whether a mathematical relationship exists between costs and benefits. If quantifiable benefits permit such a relationship, it is usually formed by subtracting costs from benefits. If a weighting scheme is used, the relationship is formed by dividing benefits into costs.

Unquantifiable and cost savings benefits cannot be easily related mathematically to costs, but various documentation techniques can be devised that permit the reader to correlate easily the costs and benefits of each system alternative. For example, benefits could be shown in a table that, for each system alternative, gives a textual summary (including cost savings for quantifiable benefits) of each applicable benefit juxtaposed with the annual cost of that alternative over the system's life span.

Results. Ideally, the cost-benefit analysis should identify the single most cost-beneficial system alternative. The "bottom line" will not always be so conclusive, and even when it is, extraneous factors that cannot be included in the analysis (e.g., political considerations, structure of the court system, availability of funding) may influence the result.

What will be gained is an identification of several cost-beneficial system alternatives and, by rigorously going through the analytical steps, a deeper insight into the cost-benefit attributes of each alternative. A cost-benefit analysis is, therefore, a necessary step in the development of any automated or manual system.
PART II. DEVELOPING AND IMPLEMENTING AN AUTOMATED SYSTEM

Introduction

Ideally, the cost-benefit analysis has identified the single system alternative that should be adopted. In many instances, this ideal situation may not be realized. One reason for this is that the cost-benefit analysis reflects the situation at the time the analysis is conducted, and this situation may change over the system's life span. Another reason is that it may be unrealistic to identify a single alternative as the most cost-beneficial. And even when a single alternative emerges as most cost-beneficial, other considerations (e.g., structure of the court system, political considerations, and availability of funding) may dictate that other alternatives remain under consideration.

Excluding these other considerations, the cost-benefit analysis should at least reduce the choices to the two or three most cost-beneficial alternatives. If several alternatives are identified in this manner, the selection among them becomes a more subjective process into which the other considerations must once again be interjected.

In a situation such as this, the top two or three alternatives may be forwarded to the appropriate group (e.g., the legislature or supreme court), with a discussion of positive and negative points for each alternative.

Another benefit derived from the cost-benefit analysis is that the rigorous development of cost and benefit evaluations forces the judiciary to focus on the cost-benefit attributes of each system alternative. As a result, the alternatives will probably be viewed from a somewhat different perspective than would have been possible if the analysis had not been done. This should greatly enhance the credibility of the judiciary in the selection process as well as the selection itself, and it should produce a greater cost-benefit payoff over the system's life span.

Staffing, organization, and planning

Users group

A representative users group should actively participate in any information system development or transfer project. The users group should exist from the start of the project, be aware of the basic system objectives, and actively voice the interests of the judiciary (including support personnel). The users group and the project manager should work closely together.

Data processing staff

Technical staff for an automated information system should be acquired as soon as the decision to automate has been made. The staff should include a project director who is designated when the scope and direction of the project are outlined. The project director should know computers and courts and understand judicial processing needs. System analysis and data processing programming personnel should be directly involved throughout the system implementation.

Project planning

Documented project planning should be completed by the judiciary as soon as management selects the most cost-beneficial alternative. Failure to plan adequately may result in a system that costs too much, is not accepted by its users, or does not meet all functional requirements. The system objectives identified prior to the feasibility study should be reviewed and refined. Optimally, the entire judiciary should participate in the definition of objectives, which should be compatible with the overall goals and objectives of the judiciary. Any effects and problems associated with these objectives, especially in areas involving cooperation among elements of the judiciary and among the judiciary and other agencies, should be identified and resolved. The resulting system objectives should be incorporated into the project plan.

In addition to providing an instrument for project management, a project plan should describe the probable benefits an automated system can bring the judiciary and should assess and enlist the judiciary's readiness to absorb the impact of the changes that will result from automation. The plan should document these considerations for circulation to and endorsement by the total judiciary.

Software development

If the decision is made to implement an automated information system, a selection team should be formed to identify the criteria and make choices among the viable alternatives. This team should be composed of management, functional user, and data processing personnel. Its members should have a thorough understanding of all operations and user functions, system requirements and impacts, and constraints and resources associated with system installation and operation. Selection criteria should be listed and understood by all team members.

Method of software development

Application software (programs that comprise the judicial information system) can be acquired in several ways. The decision will depend on considerations such as the system's development capabilities of the judiciary (i.e., analysis, design, programming) and, in the absence of any or all of these judicial capabilities, any statutes or other regulations requiring that such work be done through a state data processing agency. The choice is among developing the software in-house (i.e., by judiciary personnel), having it developed by nonjudicial state data processing personnel, having it developed by a private contractor, obtaining pre-programmed software (i.e., software packages or transfer modules), and combinations of the above approaches.

Transfer modules. Systems or modules that have been developed, implemented, and proven in another jurisdiction or state may be suitable for transfer, saving considerable time and cost, permitting the recipient actually to see the system in operation, and thus easing the implementation and training procedures. The decision to opt for transfer rather than original development should be based on a careful weighing of the various advantages and a detailed analysis of the pros and cons of the system or modules available. Guidelines for system transfer are contained in Volume 2 of SCISSRS, Technology Transfer: Guidelines and Selected Modules (National Center for State Court, 1980).

In house. Sometimes the judiciary has, or plans to build, a data processing staff. This can include people who will perform some or all of the following developmental tasks:...
AUTOMATED INFORMATION SYSTEMS

requirements analysis, cost-benefit analysis, software design, programming, system testing, and user and operator training. The test team should be able to perform some or all of the initial tasks in systems development (requirement analysis, cost-benefit analysis, conceptual design) and to monitor the later tasks (detail design, programming, testing, etc.). This would at least ensure direct judicial participation in the stages when judicial systems are being justified and functionally defined, and it would provide a legal mandate for systems development, which is usually defined as a nonjudicial state data processing staff. This can be for areas where the court's needs are not served by eithersole source procurement. Because data processing systems are so complex, there is rarely served by sole source procurement. The court manager should assemble the court users committee to participate actively in the systems evaluation and selection process, which consists of four main steps: (1) identifying selection criteria; (2) classifying criteria according to importance; (3) evaluating each vendor's proposal; and (4) selecting the vendor. Identifying selection criteria The intent in developing a list of criteria or elements to be used in the selection process is to focus on those elements that are crucial to a well-informed, unbiased decision; to establish the relative importance of each element so they can present their best system, and to provide a basis for evaluating a vendor's proposal. Classifying criteria according to importance After the criteria are specified, an appropriate weighting of the elements should be agreed on. Both the mandatory and desirable criteria must be considered. Mandatory criteria. Mandatory criteria represent the absolute minimum elements that a court must have in order to proceed with the system. Missing elements may result in the rejection of a proposal. Examples are:

- Hardware: On-line printer must print 150 character positions at a rated speed of not less than 600 lines per minute.
- Vendor capability: Vendor must respond to equipment failure in no more than two business days.
- Contract: Equipment must be delivered by October 1.
- Miscellaneous: Equipment must be new.
- Cost: Purchase price for all equipment proposed should be within a range of $10,000.

The inclusion of mandatory requirements in a request for proposal is beneficial to both the court and the vendor. The court benefits by avoiding a lengthy evaluation of a proposal that cannot possibly satisfy the court's needs, while the vendor benefits by avoiding the preparation of a costly Procurement process

PART II. DEVELOPING AND IMPLEMENTING AN AUTOMATED SYSTEM

When the preliminary-system design is complete, the source of funding is confirmed, and the court's committee is prepared to submit the request for proposal (RFP), the system implementation should begin. The following paragraphs outline the steps necessary to complete the design and implementation activities:

1. Feasibility study: A feasibility study is needed to determine the technical requirements of each program to be developed for the system. There must be an agreement among the users that the selected software will perform its intended functions. The detailed design and implementation requirements of the software should be specified in the feasibility study. An outline format for a detailed design document is found in Technology Transfer: Guidelines and Selected Modules (Volume II of SCISSRS) on page I.I.13.

2. General system specifications: Documentation must include an overview of the system for management-level understanding and initial technical review. Source program listings should be available to permit an appraisal of program logic and coding during system selection and implementation phases. Judges and lawyers should be able to test the system installation and maintenance. The general system specifications and documentation should cover the following descriptions of the system:

- General overview of the system
- Functional overview of the system
- Technical overview of the system
- Operational overview of the system
- System documentation
- System design
- System requirements
- System specifications
- System performance
- System implementation
- System maintenance
- System support
- System documentation
- System design
- System requirements
- System specifications
- System performance
- System implementation
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- System support
- System documentation
- System design
- System requirements
- System specifications
- System performance
- System implementation
- System maintenance
- System support

Documentation of system

It is very easy to plan, install, and implement an information system without documenting it. “Funding constraints, tight schedules, and general programmer distrust for writing documentation” have generally relegated program documentation to the lowest rung on the priority ladder. The courts have been no exception. In management, system documentation is extremely critical. The effort required to develop and maintain it is justified by the good it accomplishes. Documentation is the tool that makes it possible for new staff to work with the system, to modify or refine it, to expand or replace parts of it. Documentation provides the understanding of the system that is critical to its implementation, testing, and training, as well as to its continuing maintenance of the system.

The following system documentation should be completed and made available:

- Requirements analysis: to identify the functional requirements of the system and the possible approaches to satisfying them.
- General system description: an overview of the system for management-level understanding and initial technical review.
- System documentation: to specify for analysts and programmers the requirements, operating environments, design characteristics (i.e., inputs, outputs, processing, data files, interfaces), and program specifications for the system and its composite modules.
- System overview: to identify the functional components of the system that can be developed.
- System implementation: to provide guidelines and procedures for developing the system.
- System maintenance: to provide guidelines and procedures for maintaining the system.
- System support: to provide guidelines and procedures for supporting the system.
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The ability of the vendor to meet the criteria might be assigned according to the following guidelines:

<table>
<thead>
<tr>
<th>Description</th>
<th>Wgt.</th>
<th>Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial strength</td>
<td>7</td>
<td>9</td>
<td>63</td>
</tr>
<tr>
<td>Systems support</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Maintenance support</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Educational facilities</td>
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<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Acquisition plans</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Delivery date</td>
<td>9</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Timeliness</td>
<td>7</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>Vendor</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>45</td>
<td>405</td>
</tr>
</tbody>
</table>

The criteria described above are mandatory. Those individuals waives its mandatory criteria in response to these ploys is unsure of its needs and is not prepared to begin the bidding process.

Evaluating each vendor's proposal

Evaluators should agree on terminologies and weightings of critical importance. Those individuals waives its mandatory criteria in response to these ploys is unsure of its needs and is not prepared to begin the bidding process.

PART II: DEVELOPING AND IMPLEMENTING AN AUTOMATED SYSTEM

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<td>On-site</td>
<td>5</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Average access time</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Appearance</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Floor space occupied</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Transfer rate</td>
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<td>1</td>
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The above point ranges provide for a high degree of precision in the evaluation. Although a 9, 7, 6, 5, 4, 3, 2, and 1 scores are basic, the even points provide a degree of refinement when the vendor's capability does not fit neatly into one category or another.

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Evaluating each vendor's proposal

Evaluating each vendor's proposal

Evaluating each vendor's proposal
AUTOMATED INFORMATION SYSTEMS

Implementation and training

Unlike most other technologies, the implementation phase of a data processing system often requires a year or more. The computer manager must appoint an implementation project manager for the duration of the project. Frequently, one systems analyst who directed or conducted the feasibility study before the conversion will be the project manager. However, since the qualifications needed for systems analysts and for project managers are the same, the court manager may select another qualified person, perhaps someone with better management skills and a more thorough understanding of the court's needs. The project manager will then direct the following steps of the implementation phase:

Planning and monitoring schedules

Because of the complexity of the implementation effort, a plan must be developed and time lines must be established. One such plan is often referred to as a "PERT." PERT is often used to determine such information as the number of people required to complete the project, the sequence in which operations must be performed, and the cost associated with each portion of the project. Periodic meetings between the project manager and the court manager will help keep the implementation phase on schedule.

Conversion

A smooth conversion of existing procedures to computer procedures is not always possible. It is the user's first in-depth encounter with data processing. Prompt and error-free results will assure continuing enthusiasm and support for the computer project.

Direct conversion. A direct conversion involves the implementation of the new system and immediate discontinue of the old system. This approach is preferred when both systems can be used in parallel. If one of the systems is more reliable than the other, the resulting output of both systems can be reviewed and any discrepancies may be investigated and reconciled.

Indirect conversion. Parallel or phased conversion. Parallel conversion is a method of converting the old and new systems simultaneously. It is often used for limited periods of time. With parallel conversion, the results obtained are better in distributions, local wiring, and any discrepancies are investigated and reconciled.

The major advantage of parallel conversion is the precaution that both systems are operational in case of failure. This approach offers a greater measure of security to the court.

Disadvantages of parallel conversion include the increased costs that are necessary in design, the need for programming personnel and machines, and the possible duplication of facilities. The disadvantages include the fact that the old system is still in place, the new system is still in use, and the system is made as soon as possible after the decision is made.

Most computer installations, various types of personnel will require training in order to implement the system. Training will cover such concerns as personnel, operation, and maintenance of the computer system. This will be especially true for court management personnel who will benefit from such training.

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Ongoing monitoring and evaluation

The evaluation of the computer system should be continuous by all people involved in the data processing environment. In addition, periodic comprehensive evaluations and audits should be made by specialists to assure the integrity and operational efficiency of the system.

Daily monitoring
Routine operational audits are performed by the personnel who are involved in all phases of data processing as part of the daily routine. Users of the system should be involved in such as they are most affected by the performance of the system. As likely areas of improvement are discovered, they should be reported in some formal manner to the director of data processing, the court manager, and the users committee.

Formal evaluations of operations
Periodically, formal operational audits should be conducted, preferably by knowledgeable auditors, evaluators, or consultants. Formal operational audits are directed primarily toward the following types:

1. Procedural audits. The purpose of the procedural audit is to determine whether the system controls are operating as designed. This type of audit involves such tasks as comparing output totals to input totals, reviewing console logs and error registers, and verifying that input, processing, and output procedures are being met. Actual operating procedures are compared against standard operating procedures. The procedural evaluation also ascertains that the separation of duties concept is followed (e.g., systems analysts and programmers are not involved with day-to-day computer operations; operators do not revise programs).

2. Financial audits. The financial audit is typically of audits conducted by accounting firms. A large court may have an internal auditors for this function. The purpose of the audit is to determine whether the organization is conforming to generally accepted accounting practices. Courts, for instance, require a financial audit in departments where large sums of money are involved, such as in jury management, traffic citations, and alimony and support cases.

System evaluation. A system evaluation involves review and evaluation of the more technical aspects of data processing. Normally, this evaluation is conducted by knowledgeable data processing specialists who have the expertise and tools, including specially developed software, to measure system performance. It is essential that performance be compared in a plan and that variances be noted, investigated, and explained. The following areas are generally evaluated:

- Overall system logic and design
- Programming logic, operating system performance, compiler efficiency
- Computer configuration design and equipment selection methods
- Computer operation performance measurement
- Backup and contingency plans
- Data and system security
- Adherence to privacy regulations
- Adequacy of documentation

Refining the system

Owing to the rapid advancements in data processing technology, chances are good that new equipment and software packages will be available on the market even before the current system is fully operational. A misdirected tendency at this point is to recognize the shortcomings of the present system and to plan for another conversion as soon as possible. Some computer systems have never achieved their primary goals because they have been in the process of conversion from the time they were installed. From a practical standpoint, the court manager should endeavor to improve the installed system rather than immediately look at new ones.

At some point, however, the court manager should consider the possibility of substituting equipment. Compatible devices such as main memory, disk and tape subsystems, printers, and CRT's may offer better or equivalent performance at substantially reduced prices. Before a decision is reached, however, the same cost-benefit methodology as discussed in Part II should be used to determine whether the switch is cost-effective. Some considerations include the following:

- Is the device less expensive because it has less capacity?
- Is the device more powerful than required by the court?
- What is the cost and time for conversion?
- Will a longer-term lease or purchase reduce the cost of the present device?
- What is the useful life of the present device?

- What effect, good or bad, will the replacement device have on relations with the present vendor?
- Can the device be tested in the installation before acquisition?
- Will the vendor providing the new device guarantee in writing the complete functional compatibility of the device in the court system and assume full liability for any damage to other components of the existing system?

Old and new vendors offer new hardware and software in the data processing marketplace every week. Together with the data processing tools already in use today, these aids are highly functional and can be used by the court. The key to determining whether or not a change should be made is to determine the value of the change. One type of analysis for determining the value of a change is the cost-benefit analysis. This analysis is used to determine whether a change will be cost-effective. The analysis is conducted by comparing the costs and benefits of the change. The costs include the costs of the change, such as the cost of the hardware and software, and the costs of the impact on the court. The benefits include the benefits of the change, such as the benefits of increased efficiency and accuracy.
Appendix A:
Requirements for a request for proposal

APPENDIX A

General Requirements Section of a Request for Proposal

General requirements explain the purpose of the RFP, the procedures that must be followed, and the criteria by which proposals will be evaluated.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>RFP Element</th>
<th>Purpose or Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RFP COVER LETTER</td>
<td>The cover letter specifies the RFP's purpose and its administrative details. This permits vendors to quickly determine if they should prepare proposals.</td>
</tr>
<tr>
<td>1a</td>
<td>Issuing Office: Name and Address</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>1b</td>
<td>Procurement Officer</td>
<td>For formal vendor contact.</td>
</tr>
<tr>
<td>1c</td>
<td>RFP Issue Date</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>1d</td>
<td>RFP Purpose</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>1e</td>
<td>List of RFP Contents</td>
<td>To ensure that the vendor has all necessary materials.</td>
</tr>
<tr>
<td>1f</td>
<td>Proposed Schedule</td>
<td>The schedule informs vendors of anticipated proposal deadlines—e.g., initial response date, pre-bid conference dates, proposal due date and location, contract award date, and system installation date.</td>
</tr>
<tr>
<td>2</td>
<td>PROPOSAL CONDITIONS</td>
<td>This section includes the RFP terms and conditions; in short, it lists the rules of the procurement.</td>
</tr>
<tr>
<td>2a</td>
<td>Right to Reject Proposals</td>
<td>&quot;The Court reserves the right to reject any or all proposals received as a result of the RFP, and to negotiate separately with any source whatsoever in any manner necessary to serve the best interest of the Court. This RFP is made for information or planning purposes. The Court does not intend to award a contract solely on the basis of any response made to this RFP; such information may be utilized in determining the suitability of equipment and software. Subsequent procurement, if any, will be in accordance with appropriate court contractual action.&quot;</td>
</tr>
<tr>
<td>2b</td>
<td>Incurring Costs</td>
<td>&quot;The Court is not liable for any cost incurred by vendors prior to the issuance of an agreement, contract, or purchase order. The Court does not intend to pay for the information obtained; such information may be utilized in determining the suitability of equipment and software.&quot;</td>
</tr>
<tr>
<td>2c</td>
<td>RFP Addenda and Updates</td>
<td>&quot;In the event that it becomes necessary to revise any part of this RFP, an addendum to the RFP will be provided to each vendor.&quot;</td>
</tr>
<tr>
<td>2d</td>
<td>Proposal Submissions</td>
<td>&quot;To facilitate the evaluation process, __ copies of the proposal are requested. Proposals must be received on or before ___. Bidders mailing their proposals must allow sufficient mail delivery time to ensure receipt of their proposals by the time specified. Proposals should be prepared simply and economically, providing a straightforward and concise delineation of the vendor's capability to satisfy the requirements of the RFP, and be adequate for evaluation.&quot;</td>
</tr>
<tr>
<td>2e</td>
<td>Technical Information</td>
<td>To ensure that copies of technical literature about the equipment configuration, software, and maintenance options are forwarded with the proposal.</td>
</tr>
<tr>
<td>2f</td>
<td>Proprietary Information</td>
<td>&quot;Any restrictions on the use of data contained within a proposal must be clearly stated in the proposal itself. Proprietary information submitted in response to this RFP will be handled in accordance with applicable Court procurement regulations.&quot;</td>
</tr>
<tr>
<td>2g</td>
<td>Multiple Proposals</td>
<td>&quot;Vendors may submit more than one proposal involving various equipment configurations to meet the RFP requirements. The additional proposals or alternate configurations can be contained within the prime or principal proposal. The additional configurations must be clearly identified as Alternate I, Alternate II, etc. A complete and separate detailed configuration is required for each proposed alternate, showing quantity, type and mode, features, description, purchase price, monthly rental, etc., for each component. Additional proposals need not be accompanied by extra copies of technical literature, except when requested.&quot;</td>
</tr>
</tbody>
</table>
APPENDIX A

1. Equipment Description: Configuration components must be listed and described. Vendors must at least list the quantity, make and model, features and condition (new or used) of equipment components along with a general description.

2. Software Description: The vendor's software description must include:
   - (1) software identity (name or package number, brief description, positions of memory or other storage required, and the number of installations using the software);
   - (2) a statement of the vendor's policy for support and maintenance of the proposed software, and
   - (3) a statement of the vendor's policy regarding software modifications by the Court.

3. Maintenance Description: The vendor's maintenance description should include:
   - (1) description of preventive maintenance (number of hours/day, shift differentials, etc.),
   - (2) response time for on-call maintenance and mean-time-to-repair, and
   - (3) available maintenance personnel.

4. Site Preparation Description: This includes recommended floor layouts of working space and access aisles; special flooring, ducts and troughs, cable racks and drilling, wall rerow, etc.

5. Installation and Transportation Description: This includes shipping costs, cables and testing, and installation.

6. Systems Support Description: Vendors should describe the extent of systems support to be provided after installation and the number of available personnel.

7. Training Support Description: Vendors should describe the training program and materials they will provide.

8. Supplies Description: Vendors should describe the types of supplies necessary.

---

3. Cost Data Section

This section is for detailing of system costs for the various acquisition plans. A good design permits ready cost comparisons between vendors. The following subsegments are offered for consideration.

1. Equipment Purchase: Each piece of equipment offered for purchase should be identified and priced. Basic information includes quantity, make and model, features, unit purchase price, and age of original used equipment.

2. Installation Costs: Equipment offered through rental/lease plans should be priced and identified. Basic information includes quantity, make and model, features, and monthly rental.

3. Other Acquisition Plans: When other acquisition plans are offered, such as lease with purchase option, suitable price information and equipment identification must be provided.

4. Equipment Maintenance Costs: This portion is for detailing the costs for the various maintenance plans, by piece of equipment if necessary.

5. Software Costs: This is for presenting the costs of the various software packages.

6. Site Preparation Costs: Vendors may be required to provide an estimate of the costs of site preparation.

7. Installation and Transportation Costs: Vendors should present the cost of equipment installation and transportation, by unit if necessary.

8. Systems Support Costs: The extent of systems support and its hourly rate schedule should be outlined here.

9. Training Support Costs: The costs of training and manuals should be presented.

10. Supplies Costs: Unit prices should be presented for the various required supplies, and the rate at which they are consumed.

---

4. OTHER QUESTIONS

Vendors often neglect to provide vital information, not out of carelessness but because direct questions are not asked. This problem can be remedied by directly posing these questions in a separate section. The following checklist is provided as an example:

- Can the company guarantee delivery and installation of the proposed equipment? If so, what is the latest date?

- What is the company's policy concerning an unidentified service problem in a multiple vendor shop where all vendors have checked out their equipment and are satisfied that the problem is not theirs; however, the problem still exists?

- What is the company's policy with regard to "trade-in" of purchased equipment on faster peripherals, larger capacity units, etc.?
How many maintenance people are available locally to service the proposed equipment and where is their assigned territory?

What percent of service parts are stocked locally for the proposed equipment?

Where are the additional parts located and how long does it normally take to receive them?

State the date that the proposed equipment was made available.

State the estimated installation time required to check out the equipment and make it operational.

How many installations of the proposed equipment are currently in service?

How many installations of the proposed equipment are currently owned or used by courts?

Identify three (3) users of the proposed equipment and software (if applicable) giving the names and telephone numbers of the people to contact.

What is the company's policy with reference to maintenance or replacement of equipment when a particular device is continually down or high maintenance is required?

Does your company manufacture all the major components proposed? If no, identify the original manufacturer and unit name.

What is the capability and time required for your company to replace the proposed equipment or any component in case of physical disaster?

During installation, are there any special personnel needed to unpack and place proposed equipment?

Is any special rigging, drayage, or device needed during delivery or installation of your proposed equipment?

Who is responsible or liable during delivery and installation of the proposed equipment for the risk of loss or damage to the equipment?

What back-up facilities are available to the (Court) for the proposed computer equipment? If available, identify by name and location.

If requested, where will you demonstrate the proposed equipment? Indicate by yes or no response your control over the proposed equipment:

Do you design ______ manufacture _______, inspect ________, test ________, recondition _______

APPENDIX A

Specific requirements section of a request for proposal

Specific requirements explain the data processing needs of the court in terms of system concept, specific processing requirements, and system implementation.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>RFP Element</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System Concept Summary</td>
<td>The system concept summary should describe the basic needs and wants which the system should fulfill. It introduces the vendor to the envisioned work applications and synthesizes the Phase I system design. It should normally outline what functions each participant (vendor, court) will perform.</td>
</tr>
</tbody>
</table>
| 2        | System Requirements   | The system requirements section should detail the court's system needs and wants in a number of ways:  
1. Physical System Description: A description of the system configuration envisioned. The description should be nominal, not over-specific. Over-specific descriptions will limit the initiative and creative suggestions of vendors. Total system performance is more important than the specifications of one component.  
2. Activity Description: A description in flowchart form of what the system should do. However, the description should not be overly detailed, but should describe the nominal activities of the system.  
3. Performance Requirements: This states important parameters of system performance—e.g., response time, volume throughput, accessibility, security expansion capabilities.  
4. Information Description: A description of the volume, type, origin, and destination of information which is being handled. When possible, envisioned files and reports should be briefly described. Again, however, over-specific descriptions of files (e.g., file format) may be restrictive to vendor initiative. |
| 3        | Implementation Requirements | This section details the various stages of system implementation and project start-up. The implementation schedule (court timetable) is presented to notify vendors of the court's time requirements. |

This section informs vendors of evaluation and selection methods and procedures. Part E of this Reference Manual is devoted to this topic.

To communicate court needs via the RFP, many court terms and data processing terms (as understood by the court) should be defined. This section of any RFP spells out such definitions.
Appendix B:
Guidelines for development of computer training curricula for court personnel

# Guide to Suggested Personnel Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Characteristics of the Category</th>
<th>Typical Members of the Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-A</td>
<td>Determines or recommends overall court policy; maintains policy-level relationships with non-court agencies; is responsible for program justification to funding authority; actively enforces programs within the court; is a recipient and user of management information and exception reports</td>
<td>Administrative Officers, Court Budget Officers, Court Legislative Liaison Personnel, Presiding Judges, Judicial Committees</td>
</tr>
<tr>
<td>I-C</td>
<td>Source of funding for court operations or projects</td>
<td>County Boards of Supervisors, City Councils, State Legislators and their Staffs, Judicial Councils, State Court Administrators' Staff, State Planning Agencies</td>
</tr>
<tr>
<td>II</td>
<td>Recommends policy to category I-A and B, supervises operational personnel, basi-er-level operational responsibility, uses daily computer output for management of the department, supervises operational changes into departments as a result of computer use</td>
<td>Assignment and Scheduling Officers, Administrative Assistants and Clerks, Departmental Supervisors from the Civil and Other Related Agencies, and Data Quality Control Supervisors</td>
</tr>
<tr>
<td>III</td>
<td>Works with well-defined procedures on integral functions within the court system; uses daily operational data in performance of job; may recommend procedures for case progress control; supplies data for input to computerized information system on regular basis</td>
<td>Courtroom Clerks, Minute Clerks, Bailiffs, Deposition Clerks, and Other Clerical Personnel</td>
</tr>
<tr>
<td>IV</td>
<td>Operates terminals for input and output of data, performs systems analysis of programming for system</td>
<td>Computer Operators, Operations Supervisors, Terminal Operators, Systems Analysts, Computer Programmers</td>
</tr>
<tr>
<td>V</td>
<td>Potential use of computer system output, but not involved in input of data to system; and court personnel who will not be involved in the computer system</td>
<td>Attorneys, Members of the Public Defender's Office and Prosecutor's Office, Judges' Messengers or Bailiffs (who do not have any data preparation or input responsibility), and Personnel from the Court and Other Related Agencies Who Will Not Be Directly Involved in Computer Use, Judges As a Group, Members of the Public</td>
</tr>
</tbody>
</table>

## Guide to Curriculum Module Use

- **Appraoch-Oriented Curriculum Module**
  - Separate presentations for different audiences are appropriate
  - May be repeated later

- **Computer and Systems Concepts Curriculum Module**
  - Portions may be presented at different times
  - Separate presentations for different audiences are appropriate

- **Specific Subsystem Application Curriculum Module**
  - Repeat for each application as necessary

- **Skills Development Curriculum Module**
  - Repeat as often as necessary for skill development

---

*Note: Diagrams and additional text are not transcribed due to the nature of the content.*
# ACCEPTANCE-ORIENTATION MODULE

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>AUDIENCE</th>
<th>PRIORITY FOR THE AUDIENCE</th>
<th>ESTIMATED DURATION</th>
<th>INSTRUCTIONS</th>
<th>PROJECT PHASE</th>
<th>EDUCATIONAL TECHNIQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEED FOR THE PROPOSED SYSTEM</td>
<td>B &amp; C</td>
<td>B</td>
<td>90 minutes</td>
<td>Director of Information Systems and Lead Analyst</td>
<td>Before project activities begin</td>
<td>Lecture, discussion, Q &amp; A, films, slides, charts, handouts of comparative information</td>
</tr>
<tr>
<td>Problem Description</td>
<td>A &amp; B</td>
<td>A</td>
<td>30 minutes</td>
<td>Court Administrator &amp; Dir. of Information Systems</td>
<td>Before project activities begin</td>
<td>Lecture, discussion, Q &amp; A, films, slides, charts, handouts of comparative information</td>
</tr>
<tr>
<td>Causes</td>
<td>A &amp; B</td>
<td>C</td>
<td>30 minutes</td>
<td>Court Administrator &amp; Dir. of Information Systems</td>
<td>Before project activities begin</td>
<td>Lecture, discussion, Q &amp; A, films, slides, charts, handouts of comparative information</td>
</tr>
<tr>
<td>Expected Benefits of Automation</td>
<td>B</td>
<td>B</td>
<td>30 minutes</td>
<td>Presiding Judge and Court Administrator</td>
<td>Before project activities begin</td>
<td>Lecture, discussion, Q &amp; A, films, slides, charts, handouts of comparative information</td>
</tr>
<tr>
<td>Procedures Set in Other Courts</td>
<td>V</td>
<td>D</td>
<td>mean &amp; group release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRACTICAL CONSIDERATIONS IN COMPUTER USE</td>
<td>I &amp; A-B</td>
<td>C</td>
<td>1 hr. max.</td>
<td>Director of Information Systems and Lead Analyst</td>
<td>Before project activities begin</td>
<td>Same as above plus possible presentation by personnel from another court</td>
</tr>
<tr>
<td>Impact on Court as a Whole</td>
<td>I-C</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost VS. Benefits or Other Savings</td>
<td>IV &amp; V</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSONNEL ASPECTS OF CONVERSION TO COMPUTER USE</td>
<td>I-A</td>
<td>I</td>
<td>60 minutes</td>
<td>Director of Information Systems</td>
<td>Before project activities begin</td>
<td>Lecture, Q &amp; A, small group discussion</td>
</tr>
<tr>
<td>Common Employee Fears</td>
<td>I-A &amp; A-C</td>
<td>A</td>
<td>2 hrs. possible</td>
<td>Court Administrator and Dir. of Information Systems</td>
<td>Before project activities begin</td>
<td>Same as above plus possible repeat (same persons later)</td>
</tr>
<tr>
<td>Possible Reorganizations or Relocating of Tasks</td>
<td>A &amp; B</td>
<td>B</td>
<td>2 hrs. possible</td>
<td>Court Administrator and Dir. of Information Systems</td>
<td>Before project activities begin</td>
<td>Lecture, Q &amp; A, small group discussion</td>
</tr>
<tr>
<td>Potential New Curror Paths</td>
<td>E-IV</td>
<td>U</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Anticipated Training Programs</td>
<td>IV-V</td>
<td>U</td>
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<td></td>
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<tr>
<td>Educational Requirements/Training</td>
<td>I-A</td>
<td>I</td>
<td></td>
<td></td>
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<tr>
<td>CDP-ADP Lesson Being Project</td>
<td>I-A</td>
<td>I</td>
<td></td>
<td></td>
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<tr>
<td>ORGANIZATION OF ACTIVITIES FOR PROJECT</td>
<td>I-A</td>
<td>I</td>
<td>30 minutes</td>
<td>Director of Information Systems</td>
<td>Before project activities begin</td>
<td>Lecture and discussion</td>
</tr>
<tr>
<td>Project Organization and Management</td>
<td>I-A &amp; C</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Budget</td>
<td>I-A &amp; C</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>User Committee for Planning</td>
<td>I-A &amp; C</td>
<td>U</td>
<td></td>
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<tr>
<td>Jointly Established Process</td>
<td>I-A &amp; C</td>
<td>U</td>
<td></td>
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<td></td>
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<tr>
<td>CONCLUSION</td>
<td>I-A</td>
<td>I</td>
<td>as much time as necessary</td>
<td>Whoever leads the session</td>
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<td></td>
</tr>
</tbody>
</table>
# COMPUTER AND SYSTEM CONCEPTS MODULE

## TOPIC

<table>
<thead>
<tr>
<th>Topic</th>
<th>Audience</th>
<th>Priority</th>
<th>Estimated Duration</th>
<th>Instructors</th>
<th>Project Phase</th>
<th>Educational Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction of the Module</td>
<td>I-A</td>
<td>I</td>
<td>20 minutes</td>
<td>Project Leader, Lead Analyst</td>
<td>Prior to beginning system analysis and design</td>
<td>Lecture, illustrated with charts, as appropriate</td>
</tr>
<tr>
<td>Curriculum Purpose</td>
<td>I-B</td>
<td>I</td>
<td>20 minutes</td>
<td>See I-A</td>
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<tr>
<td>Personnel Selection</td>
<td>I-C</td>
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<tr>
<td>Program Philosophy</td>
<td>I &amp; V</td>
<td>I</td>
<td>20 minutes</td>
<td>See I-A</td>
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</table>

## Description of Computer Project

<table>
<thead>
<tr>
<th>Description of Computer Project</th>
<th>Audience</th>
<th>Priority</th>
<th>Estimated Duration</th>
<th>Instructors</th>
<th>Project Phase</th>
<th>Educational Techniques</th>
</tr>
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<tbody>
<tr>
<td>Suitable for above</td>
<td>I-A</td>
<td>I</td>
<td>20 minutes</td>
<td>Project Leader, Lead Analyst</td>
<td>Prior to beginning system analysis and design</td>
<td>Lecture, illustrated with charts, as appropriate</td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-B</td>
<td>I</td>
<td>40 minutes</td>
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<td>I-D</td>
<td>I</td>
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<td>45 minutes</td>
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<tr>
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<tr>
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<td>I-T</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-U</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
<td></td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-V</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
<td></td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-W</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-X</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
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<tr>
<td>suitable for above (may be repeated later for some audiences)</td>
<td>I-Y</td>
<td>I</td>
<td>45 minutes</td>
<td>See I-A</td>
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<tr>
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## Computers

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## Conclusion

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* A special tour might be arranged for the judges, just before system implementation.
## SPECIFIC AUTOMATED APPLICATION MODULE

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## SKILLS DEVELOPMENT MODULE

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<tr>
<th>Audience</th>
<th>Project Phase</th>
<th>Estimated Time Required</th>
<th>Subject &amp; Degree of Coverage</th>
<th>Educational Techniques</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>Court and Related-Agency Administrative and Clerical Personnel</td>
<td>10 days prior to installation</td>
<td>2 hours and travel time</td>
<td>Basic Familiarization with Automated Systems, Hardware</td>
<td>Demonstration on local systems NOT VENDOR (Gov't, Agency, Bank, Industry)</td>
<td>G.P. manager and lead systems analyst</td>
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<td>Installation week</td>
<td>2 hours/day 5 days</td>
<td>Introduction to on-site hardware with stress on input/output devices (On Comfort)</td>
<td>Lecture, Audiovisual-supported Demonstrations and Hands On Equipment Manuals</td>
<td>Supervisory &amp; vendor reps., technical personnel</td>
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<td>Systems Analysts and other Technical Personnel</td>
<td>Prior to beginning systems analysis</td>
<td>Whatever time is required to develop necessary skills</td>
<td>Orientation to Courts, Enhancement of Technical Skills, Enhancement of Interpersonal Skills, Introduction to Operations/Procedures &amp; Software (Input &amp; Retrieval)</td>
<td>Lecture and discussion, possible small-group profiles checking</td>
<td>Court personnel, technical schools, managing systems analyst, possibly outside tech. personnel</td>
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<tr>
<td>Equipment Operators</td>
<td>Week following installation</td>
<td>4 hours/day 5 days</td>
<td>Introduction to Operations/Procedures &amp; Software (Input &amp; Retrieval)</td>
<td>Hands On</td>
<td>Supervisory &amp; vendor reps., senior analyst &amp; middle management supervisor</td>
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### Following Sequence Recommended:
1. A) Operations Overview: Role of individual in system & its impact
2. B) Applications Orientation
3. C) Consequence of Error: Importance of Input Accuracy
4. D) Entry Procedures
5. E) Inquiry Procedures
6. F) Restrictions Imposed by Local Court Policies and Statute
7. G) Cross-indexing of Data
8. H) Data Entry
9. I) Data Retrieval
10. J) Updating Procedures
**Automated Information Systems**

**Bibliography**

* Solomon, Maurice S., Guidelines for Development of Computer Training Curricula for Court Personnel (Denver: National Center for State Courts, 1976)


*These titles can be purchased from: Publications Coordinator, National Center for State Courts 300 Newport Avenue Williamsburg, VA 23185 A complete listing of all National Center publications is available free of charge through the Publications Coordinator.

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