PACTS^{ECM}

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ON APRIL 1, 2001 the federal judiciary began implementing the Probation and Pretrial Services Automated Case Tracking-Electronic Case Management System (PACTS^{ECM}). The result of years of planning, requirements definition, design, development, and testing, this implementation will position the federal probation and pretrial services system to utilize the technological tools of an advanced case management system on a daily basis. This article looks at the many implications and issues arising from a task of this magnitude and explores what the future can hold once this technological base is established. Areas of discussion include the application itself, design and development issues, implementation issues, potential benefits, business process change issues, and an exploration of future potential.

The PACTS^{ECM} Application

The PACTS^{ECM} system is both a case tracking and a case management tool. The case tracking component (PACTS) allows officers to electronically collect pertinent case-related information to produce statistical and workload reports. The case management portion (ECM) helps officers collect, manipulate, and recall case-management-specific information. This promotes more efficient and effective defendant/offender supervision and investigations for the district. Overall, the PACTS^{ECM} makes information more easily accessible to an expanded number of users and allows those users to manipulate the information in a manner more consistent with the professional activities they perform.

PACTS^{ECM} is a "total" information system. It includes functionality for: 1) electronic generation, storage, and retrieval of all investigation and supervision case information; 2) electronic retrieval for judiciary personnel of vital case information, including the presentence report, pretrial services report, and chronological records; 3) integrated access to the criminal component of the Case Management-Electronic Case Files (CM-ECF) project; and 4) electronic imaging of defendants/offenders—their tattoos, homes, vehicles, or other appropriate images.

The project team has worked closely with automation staff, data quality analysts, officers, supervisors, and administrative support staff from many districts to ensure that users' needs are addressed and that operational requirements are reflected in the data structure and user interface of the new Informix-based system. The intended audience for the PACTS^{ECM} application is the entire staff of probation and pretrial services offices. Probation and pretrial services operations involve approximately 7800 authorized positions in 509 locations. There are 93 district headquarters probation offices, 56 of which are combined probation and pretrial services offices and 37 of which have separate pretrial services offices.

PACTS^{ECM} is a browser-enabled application that is accessed through the federal judiciary's Intranet. It replaces its predecessor, PACTS Unify. However, it has been enhanced in two significant ways. The first is by expanding and redesigning the data structures in the database and the second is by using contemporary software tools and web technology. The enhanced database structures allow multiple IDs to be stored for each client. It also permits maintenance and search of historical sentence and historical address information. The software tools make it possible for PACTS^{ECM} to have graphical navigational tools such as drop-down lists and tabbed dialog boxes, display digital images, and link to resources outside the database. For example, the application links directly to Mapquest.com to provide officers with point-and-click access to directions to the defendant/offender's home.

The major features included as part of the first version of the software are a utility to make data conversion easier for data managers, a defendant/offender module, a treatment module, a pretrial services module, and a probation module. A number of standard reports and forms are available and the application provides for the required statistical extractions. Functionality will be added with Versions 2–4 of the software in generally the following order:

1. Automated Chronological records (Chronos);

2. Drug detection event tracking;

3. Completion of all forms and other "canned" reports;

4. Probation/Pretrial Services Case Plans and Reviews;

5. Fine and restitution tracking;

6. On-Line Case Assignment;

7. PS-2 Pretrial Services Interview Worksheet;

8. Electronic Monitoring;

9. Presentence Report Disclosure Tracking;

and

10. Interfaces to other databases including the FBI's National Crime Information Center (NCIC) 2000.

Design and Development

In-house development had been the normal mode for software development projects in the judiciary virtually throughout its history. At the time PACTS[ECM] was ready for development, the judiciary had recently been using off-the-shelf (COTS) software, with modifications for accounting and personnel applications, but all case-related systems had been produced internally, including PACTS-Unix, used in most probation and pretrial services offices. The proposal for development of the PACTS[ECM] application combined the strengths of both the in-house and outsourced development strategies previously used. The approach provided the necessary resources to complete the project in a timely manner and reduce the impact of other judiciary automation efforts on the timely completion of PACTS[ECM]. The judiciary was able to take advantage of substantial short- and long-term cost-saving opportunities, and the AO could effectively respond to requests from court users for enhanced automated functionality to manage the judiciary's vital information resources.

By using both in-house and outsourced talent, the PACTS[ECM] project team combined institutional and technical knowledge unique to the judiciary with a body of expert technical skills and knowledge in Informix and other state-of-the-market programming tools using the judiciary's Informix contract and other government agency contracts as needed. Combining resources in this manner allowed managers to reliably and more flexibly schedule highly skilled technical staff on the project—i.e., place the right people with the right skills on the right tasks at the right times.

This development approach was attractive because it made use of the considerable expertise and experience in the AO and in court units, including a cadre of in-house development personnel who are well-trained and productive, using fourth-generation languages (4GLs). In addition, federal pretrial services and probation offices (as distinct from state and local jurisdictions) offered considerable institutional knowledge and experience that no contractor could approximate, let alone duplicate. Finally, hourly labor costs of in-house personnel were lower than the most in-

expensive contractor resources. Therefore, we used the contractor labor (which was considerably more expensive than the in-house labor) sparingly and only when necessary.

PACTS[ECM] Implementation

The PACTS[ECM] system is being deployed in a test wave of 14 courts, beginning on April 1, 2001. Recurring waves of 6 to 8 courts are scheduled to start at two-month intervals beginning February 1, 2002. Each wave will cover a nine-month implementation period. Prior to the start of the first wave in February 2002, changes in implementation will be made as appropriate based on the experiences of the test wave.

PACTS[ECM] implementation occurs when 1) applicable district staff are trained to use the PACTS[ECM] application; 2) technical tasks concerned with hardware and software installation and operations are successfully completed; and 3) the legacy database is converted to PACTS[ECM]. *The PACTS[ECM] Implementation Kit a*ssists the district by providing guidance, checklists, activities, suggested actions, and examples of documents, and provides the district with references to resource materials available through the J-Net.

The kit is divided into three sections: "getting started," "operations," and "systems," based on the nature of the activities covered and the intended audience. The "getting started" section is of interest to all participants. It lays the foundation for implementation. The "operations" section focuses on activities leading up to district staff being able to use the system. The target audience for this section includes chief probation and pretrial services officers, deputies, supervisors, data quality analysts (DQA), training specialists, and any officers assigned to assist in implementation. The "systems" section, which provides guidance on hardware, software, and database issues, is of most interest to the district's systems manager and systems staff. However, the "operations" and "systems" areas overlap. Decisions made by operations personnel will affect the work systems personnel must do to set up and support the system. Similarly, the systems staff expertise with supporting automated systems will be useful to the operations staff as they make key decisions or perform implementation activities. The district PACTS[ECM] project manager and the systems manager work closely together to ensure the successful implementation of the system.

Implementation Tasks

Perhaps the most useful tool within *The PACTS[ECM] Implementation Kit* is the PACTS[ECM] Implementation Project Plan. The project plan is a Microsoft Project file that can be used by district management as a quick reference to the tasks that must be accomplished in order to successfully implement PACTS[ECM]. Tasks can be checked off as they are completed, thus showing what has been accomplished and what is left to be done. The chief probation and pretrial services officers should meet with their district PACTS[ECM] project manager on a weekly basis to review the status of the project plan. The project plan also contains recommended start and end dates for each task, the anticipated duration of each task, and a time-line for the tasks. At the beginning of the implementation period, the district's PACTS[ECM] project manager will have received a copy of the project plan customized with dates appropriate to that district's start date. Each district has a PACTS[ECM] Implementation Coordinator from the Systems Deployment and Support Division (SDSD) within the Administrative Office assigned to support it in the implementation effort. The PACTS[ECM] Implementation Coordinator works with the project manager to track progress according to the customized plan. The district's PACTS[ECM] project manager may also wish to use the customized plan to manage the project using the Microsoft Project software.

Data Conversion— A Critical Cross-Functional Activity

Before a district can begin using the new PACTS[ECM] as its tracking and case management system, the data stored on the old PACTS-Unify system must be transferred, or "converted," to the new PACTS[ECM] system. The physical transfer of the data is a largely technical task performed by the district's systems staff as the last step before beginning live operations on the new system. However, a great deal of preparation needs to be accomplished early in implementation to ensure a smooth conversion of data. The most time-consuming task for most districts will be "cleaning" the data stored in PACTS. This task can begin as early as possible in implementation and is a collaborative effort between operations and systems personnel. Data-conversion software necessary for performing this task is supplied to the districts.

Training

Training for PACTS^{ECM} is comprised of two primary components: application training for end users and technical training for technical staff who must support the application. The end-user training includes a train-the-trainer segment, as the majority of end-user training will be conducted in each district by district personnel who participated in the application training course defined here.

The PACTS^{ECM} Application training course is designed to provide the necessary understanding and skills for the end user to successfully apply the newly-developed PACTS^{ECM} software. Informational and introductory sessions will explain the enhanced functionality. Participants will be guided through the browser-based menu and on-line help links and develop an understanding of how the application applies to probation and pretrial services. Participants will also be prepared to deliver training to in-court personnel. The target audience includes data entry clerks, data quality analysts (DQA), and training specialists who will be responsible for training the remainder of the office staff. The course teaches participants to:

- Identify differences between PACTS^{ECM} and the former PACTS Unify system;

- Confidently docket events on Pretrial and Probation cases;

- Create and modify client records and related events for both pretrial services and probation;

- Learn to generate reports and utilize on-line forms; and

- Incorporate PACTS^{ECM} training materials into the court's training plan.

The class is delivered in two distinct components designed to accommodate both separate and combined pretrial services and probation.

The technical training is comprised of several classes: 1) Database Administration, 2) Systems Administration, and 3) Informix SQL. All technical training classes are provided in San Antonio, Texas at the judiciary's information technology training center.

This Database Administration course is designed to provide probation and pretrial systems staff with the technical information required for implementing and operating PACTS^{ECM}. The course includes overviews of the application (modules, contents, navigation, enter data, query data, etc.), physical hardware/software architecture, and logical application architecture of DB schema. It identifies tables that will require local population and maintenance and review procedures for managing these tables. It discusses linking to resources outside the DB, implementation of login security algorithm, and maintenance of the NT and report servers and software. Finally, it presents security issues and the relationship of WordPerfect templates and Crystal Reports templates to report server software.

The systems administration course is intended for Informix Dynamic Server and Informix Dynamic Server system administrators. Participants learn the skills necessary to successfully administer one or more database servers: configure and initialize a database server instance, configure and test client connectivity, configure and manage memory and disk usage, plan and implement system maintenance tasks, and configure the server for optimal OLTP or decision support.

Finally, Informix Structured Query Language (SQL) course covers the Data Manipulation Language (DML) portion of SQL. Participants learn to create SELECT, INSERT, UPDATE, DELETE, LOAD, and UNLOAD statements, simple and complex joins, and subqueries. In addition, the course covers the basic configuration of an Informix instance, logical and physical log maintenance, archiving and restoring, and troubleshooting of basic configuration problems.

Benefits of The PACTS^{ECM} System

The PACTS^{ECM} system offers both intangible and quantifiable benefits to the end user or to the public at large. Intangible benefits are those benefits that are real, but difficult or impossible to quantify accurately or precisely. The quantifiable benefits have been assigned cash values.

First, as probation officers and pretrial services officers use PACTS^{ECM} as a tool in their daily duties, paper waste should be reduced. The intention is to move to an environment in which the workstation becomes the usual medium for disseminating information, with a paper copy printed only on demand. However, it is difficult to predict human behavior: one manager may demand a paper copy of virtually everything, while another will be content with electronic dissemination of documents. Thus, we make no attempt to project savings in paper.

Second, and probably more important, but even more difficult to quantify, the accuracy and effectiveness of services should be increased by a benefit that, for lack of a better name, can be called data quality. PACTS^{ECM} will increase data quality in two ways:

1. *Elimination of data redundancy.* This has two aspects:

   - The PACTS^{ECM} database, using a fully relational database management system, will eliminate to as large an extent as possible redundancies of data.

   - The forms producing capability of PACTS^{ECM} will integrate discrete data elements with form templates, thus eliminating the need to re-key data into multiple sources.

2. *Increased validation of data.* This will mainly be accomplished through use of standard tables for the various codes, and through cross-validation of user inputs based on the business rules (e.g., detention hearing date cannot be earlier than initial hearing date).

Third, increased efficiencies in productivity of probation and pretrial services officers will free them from their paper-intensive world to dedicate their energies to conducting more thorough and complete investigations, implementing better supervision practices, insuring community safety, and improving enforcement of pretrial release and sentence conditions imposed by judicial officers.

Fourth, the PACTS^{ECM} information system will place the judiciary in a better position to respond to the grievances of victims, and to coordinate and share information with other law enforcement agencies. Although neither of these uses is part of the charter of the PACTS^{ECM} project, both are benefits to the public at large that will accrue. They are not quantifiable, but they are real. The presence of a coordinated, validated, up-to-date information system from which details about federal probation and pretrial services defendants/offenders and their offenses can be quickly and accurately retrieved will increase efficiency, accuracy, and timeliness over the current manual methods.

Quantifiable benefits of the PACTS^{ECM} system fall into two general categories: increases in efficiency specifically related to forms production; and increases in general efficiency. Tables 1 and 2 illustrate how even very modest cost avoidance associated with forms production and increases in general productivity can produce dramatic results

when multiplied across the entire user community. To demonstrate the possible efficiencies that could be achieved with PACTS[ECM], the project team traveled to the Western District of Texas probation and pretrial services offices to conduct testing comparing current methodologies of document production and PACTS[ECM] methodologies of electronic forms development. Participating in the testing were staff from the AO's Systems Deployment and Support Division, Applications Maintenance and Development Division, and Federal Corrections and Supervision Division, and the probation and pretrial services offices from the Western District of Texas. Separate testing was conducted in each office.

The group agreed to test five forms for purposes of this analysis. Those forms are the initial case supervision plan (ICSP), travel permit, Form 14-A Request for Arrest Record, Flash Notice Request, and Form 7A Conditions of Supervision. These forms were selected by the group because of their frequency of use and because they ranged in complexity from a simple one-page form to the more elaborate multi-page case plan. The goal of the testing was to develop a base of knowledge to generalize to all forms without performing testing on all forms.

That testing demonstrated a wide range of average efficiencies achieved through the electronic forms development methodologies of PACTS[ECM]. For example, the mean time for completion of the case plan was 36 minutes using the older methodologies. The mean time using the electronic forms development methodologies of PACTS[ECM] was 6 minutes, a per-plan savings of 30 minutes. Simpler forms like the travel permit and Form 7A achieved smaller savings of 5 minutes and 10 minutes respectively.

The group agreed to test five pretrial services forms for this analysis. Those forms are the initial case supervision plan (ICSP), field sheet, Form 14-A Request for Arrest Record, initial chronological record, and PS 7 Reporting Requirements. These forms were selected by the group because of their frequency of use and because they ranged in complexity from a simple one-page form to the more elaborate multi-page case plan.

That testing demonstrated a wide range of average efficiencies achieved through the electronic forms development methodologies of PACTS[ECM]. For example, the mean time for completion of the ICSP was 38 minutes using the older methodologies. The mean time using the electronic forms development methodologies of PACTS[ECM] was 9 minutes, a per-plan savings of 29 minutes. Simpler forms like the field sheet and initial chronological record achieved smaller savings of 9 minutes and 7 minutes respectively.

The testing described above demonstrates the potential savings that can be achieved in probation and pretrial services offices when applying PACTS[ECM] methodologies. Because we could not test every form used by officers, we generalized from the testing done in the Western District of Texas. The following table contains efficiency improvement estimates based on the number of cases handled in the system annually multiplied by the average number of forms per case multiplied by a conservative estimate based on our testing of 3 minutes saved per form. Those efficiencies are then given a dollar amount by multiplying the hourly rate of staff, in an effort to demonstrate the potential real efficiencies that can be achieved.

Table 1 presents a *very conservative* estimate of the savings that can be realized through the implementation of PACTS[ECM].

The testing we conducted, which showed substantially more savings than we present, was artificially optimistic in favor of the current methodologies. In real life, staff time would be spent assembling the pieces of information necessary to complete the various forms. In PACTS[ECM] all that basic information will be assembled instantaneously by the system.

Our analysis investigated the effects of three levels of hypothetical improvement in general efficiency.

- *Low improvement* is defined as a 1 percent improvement in overall efficiency of probation and pretrial services officers, and a 2 percent improvement in overall efficiency of support staff.

- *Medium improvement* is defined as a 2 percent improvement in overall efficiency of probation and pretrial services officers, and a 5 percent improvement in overall efficiency of support staff.

- *High improvement* is defined as a 5 percent improvement in overall efficiency of probation and pretrial services officers; and a 10 percent improvement in overall efficiency of support staff.

For example, a 1 percent increase in general efficiency among all officers, and exclusive of any efficiencies gained among support personnel, would yield a net savings (cost avoidance) of $3.12 million. For clerical staff a 2 percent increase in general efficiency would yield an annual cost avoidance of $1.56 million. The combined cost avoidance of officers and support staff would yield an annual cost avoidance of $4.68 million.

This analysis used the most conservative parameters; we have included the more optimistic figures here for the purposes of illustra-

TABLE 1
Increased Efficiency Through Electronic Forms Development

	PRETRIAL SERVICES							
	Number of Cases	Average Number of Forms	Total Forms per Year	Savings per Form	Minutes Saved per Form	Hours Saved	Hourly Rate of PSO	Costs Avoided
Investigation Cases	63,497	5.10	323,835	3	971,504	16,192	$30	$485,752
Supervision Cases	30,502	10.04	306,240	3	918,720	15,312	$30	$459,360
TOTAL		15.14	630,075		1,890,224	31,504	$30	$945,112
	PROBATION							
PSI/PSIG	49,826	10.80	538,121	3	1,614,362	26,906	$30	$807,181
Supervision Cases	88,966	13.16	1,170,348	3	3,511,043	58,517	$30	$1,755,522

tion, and because we believe the assumptions of 1 percent for officers and 2 percent for support personnel to be quite conservative.

Note that _cost avoidance_ is not equivalent to _cost savings._ The cost avoidance due to increased officer and clerical efficiency will free those resources to perform other mission-critical aspects of their job. Thus, because the personnel will remain on staff, the benefits described in this document attributable to PACTS^ECM are not actual savings to the judiciary. Rather, they demonstrate the costs avoided in freeing the probation and pretrial services community from their heavily paper-based environment. The benefit—quantified herein as cost avoidance—accrues not to the bottom line on a budgeting statement, but to the community that the federal judiciary serves. That community avoids the costs of inefficient and cumbersome manual procedures, and increases the effectiveness and perhaps also the range and scope of services provided by probation and pretrial services: ensuring the public safety, monitoring and supervising defendants and offenders, ensuring that conditions are met, and that violations are dealt with speedily.

Business Process Changes

Achieving the benefits of PACTS^ECM requires more than just installing software and conducting training. It requires a commitment from the chief probation and/or pretrial services officer to change local processes to take advantage of the functionality provided. The introduction of a new computer system into a work environment generally causes some disruption to day-to-day operations. Staff must learn new screens and commands, workflow may need to be changed, conversion of data and customized features from the old system is usually time consuming. All of this must happen while the office continues to accomplish its primary mission. In order to mitigate some of this disruption, tasks designed to ease the transition for data quality staff have been included in the PACTS^ECM Project Plan. Most of these tasks are covered in two sections of the project plan, Business Processes and Training and Support.

Although PACTS^ECM will replace the legacy case management systems in each of the federal courts' probation and pretrial services offices, each probation/pretrial services office has the flexibility to decide how the system will be integrated into the office's work processes. Three basic options are available, with unlimited local variance among them

TABLE 2
Savings Due to Increases in General Efficiency

OFFICER EFFICIENCY				
Hours Saved per Year	Average Hourly Rate	Savings per Officer per Year	Number of Officers	Total Savings per Year
20.8	$30	$624	5,000	$3,120,000
41.6	$30	$1,248	5,000	$6,240,000
104.0	$30	$3,120	5,000	$15,600,000
SUPPORT STAFF EFFICIENCY				
Hours Saved per Year	Average Hourly Rate	Savings per Clerical per Year	Number of Clerks	Total Savings per Year
41.6	$15	$624	2,500	$1,560,000
104.0	$15	$1,560	2,500	$3,900,000
208.0	$15	$3,120	2,500	$7,800,000
TOTAL EFFICIENCY IMPROVEMENT				
Rate	Officer	Clerical	Total	
Low	$3,120,000	$1,560,000	$4,680,000	
Medium	$6,240,000	$3,900,000	$10,140,000	
High	$15,600,000	$7,800,000	$23,400,000	

possible: 1) traditional data entry model; 2) officer-centric model; or 3) hybrid model combining both approaches, as shown in the table below.

The choice of the implementation strategy is a management decision that will directly affect the business processes and workflow within the office. To assist management in making this decision, a Business Process Workgroup could be formed to document current business processes in a manner that is easy for managers to review, understand, and modify. Once current processes have been documented and reviewed and the business process model has been chosen, the Business Process Workgroup can prepare the office to begin day-to-day operations using PACTS^ECM with the process model chosen for that district.

Depending on the model chosen and the degree of change from the current model, the district will have to re-engineer business processes to insure a smooth transition. For example, having officers enter data will introduce more error into the data entry process. Therefore, management needs to create or modify the district's data quality assurance plan and procedures to reflect the new workflow. That quality assurance program would need to compare entered data to source documents, look for common errors, and report back to staff who make errors on those errors so that staff can become aware of them and avoid similar errors in the future.

The simple fact that the current process is changed could cause the district to establish procedures that are not now necessary. For example, opening up the data entry function could introduce the possibility that cases get lost before they get entered. This has obvious negative implications for workload credit for the office. Therefore, it may be necessary to validate and make any necessary adjustments to new work processes after the PACTS^ECM system has been implemented to insure against this type of problem.

One final obvious area that will clearly need to be reviewed _encompasses several areas including all local forms, reports, and applications. For example, it may be necessary to modify data collection forms to reflect the new screens and to accommodate the new workflow. The district should also work with the systems staff to determine the need for existing locally developed reports and applications. This analysis should look carefully for any duplication of effort between PACTS^ECM and the local system which preceded it._

The Future

The probation and pretrial services user community has long desired and sought support for the development of automated functionality that empowers officers in the community. That desire first manifested itself in the Mobile Computing project, which tested the idea of using laptops to provide that functionality. That project demonstrated the value of

TABLE 3

Range of PACTS^ECM Business Process Model Options

Traditional Data Entry Model		Hybrid		Officer-Centric
• New system replaces current case management system using Traditional Data Entry Model	Some Officers	• Most client records created and maintained by administrative staff	All Officers	• Officers create client records
• Administrative Staff enter data		• Test group of officers selected to create and maintain client case record information		• Data entered and maintained by officers
• Data quality analysts maintain data integrity		• Data quality analysts and test group of officers share data maintenance responsibilities		• Data quality analysts and officers share data maintenance responsibilities

technology when the officer was away from the office. However, it also demonstrated the limitations of bulky laptop computers in providing that functionality. The expanded use and functionality of personal digital assistants or handheld computers has raised the probation and pretrial service community's interest in meeting their needs through these devices. As PACTS^ECM begins implementation, the District Court Technology Panel and Chiefs Advisory Group believe strongly that the Community Technology initiative is the most important need of officers on the street. The objective of this project is to provide probation and pretrial services officers with the automated functionality they need to more

efficiently perform the duties required of them by law in the community. The project will focus on using this technology in five critical areas: pretrial services supervision of defendants; post-conviction supervision of offenders; presentence investigations; pretrial services investigations; and safety of officers in the community. Federal probation and pretrial services officers are required to investigate and supervise defendants/offenders as ordered by the court. Those functions require officers to leave the courthouse and go into the community. Therefore those officers are "remote knowledge workers" requiring electronic access to case-specific data from a variety of remote locations. Moreover, the

primary concern of the judiciary and officers in the community is the personal safety of officers in the field. Those two needs combined create the need for officers in the community to have handheld computers.

Another potential source of integration is with kiosk technology. The kiosk could collect a live biometric measurement of offenders' hand geometry or fingerprints or one of several other options to verify that the offender is the one interacting with the kiosk. Then, the screen would prompt the probationer to answer a series of questions (in English or Spanish) previously determined by the probation officer, including current address, phone number and other information. The kiosks could also collect fine and restitution payments. Once the electronic reporting session is complete, the system issues a receipt to the probationer. Over time, a detailed history of the degree of compliance is collected on each offender. The system identifies those who are non-compliant, and for whom the probation officer may need to take some direct action.

The future of technology in the field of community corrections is only limited by one's ability to conceive effective uses for the ever-growing waves of technology to the field of community corrections. Harnessing that potential while eliminating those technologies that are more toy than useful tool is the secret to success in these initiatives. However, having a "state of the market" case management system is the first and most essential step in implementing these various technologies in a community corrections system. With the implementation of PACTS^ECM the federal probation and pretrial services system is poised to move forward on a solid foundation.