The Chief as a Technology Manager

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THE PROBATION OR PRETRIAL services chief who wishes to fulfill the mission of federal probation and pretrial services—"to exemplify the highest ideals and standards in community corrections"—will find in technology a powerful, but sometimes mysterious, ally. Though the benefits of using technology in the probation/pretrial services field are compelling, the difficulty of making it work is still troubling and, for some, seemingly insurmountable.

The first challenge for chiefs, then, is a *mental* one—to believe in technology, not as a panacea for all the challenges in the system, but as a helpful tool to accomplish their daunting responsibilities and to manage their complex operations. Chiefs should strive to be, or to become, "believers" in technology, thereby rejecting the alternative postures that include "waverers," "atheists," "agnostics," "zealots," "hypocrites," and "monarchs" (Earl and Feeny, 2000: 11-16).

What will make chiefs believers? First, understanding the extent to which information technologies are changing our patterns of commerce, organizational design, social interaction, and work. Chiefs should consider the following facts:

- Over the past decade, the portion of new capital investment devoted to information technologies has risen from under 10 percent to over 50 percent, making it the largest category of capital investment in the U.S. economy by far.

- Banking transactions over the Internet cost only about 3 percent of those at traditional walk-in counters, suggesting the huge productivity gains possible from delivering services over computer networks. (Harvard Policy Group, 2000: 1)

- When Bill Clinton first entered office in 1993, there were only 50 web sites in the entire world. Near the end of his administration, however, he reported that there were nearly 20 million sites on the Internet (Clinton, 2000).

- Through the efforts of the recent project on Reinventing Government, federal executive agencies have used technology to achieve significant progress in their performance. For example, passport applications are now available on the Internet, and the 1-800 service of the Social Security Administration outperformed L. L. Bean and Disney in 1995 (*Blair House Papers*, 1997: 5).

- In the judiciary's own time line (developed at the request of Congressman Harold Rogers), before 1972 there was virtually no automation to support the federal judiciary's core functions except electric typewriters. By 1998, the judiciary had a national communications network linking 30,000 employees at 700 sites. It also had installed the Federal Judiciary Television Network, which, by 2000, had some 250 downlink sites across the nation, making it the second largest government satellite network in the U.S.

- According to this same report, the benefits of technology for the judiciary's probation and pretrial services officers include technological tools and capabilities such as mobile computing, immediate access to criminal databases, ankle monitors and remote electronic monitoring, and on-site urinalysis—all to enhance the investigation and supervision of offenders and increase public safety. (AO and FJC, 2000: 32).

The logical conclusion of this mountain of evidence on the importance of technology in our personal and professional lives is that "a posture of disengagement is now outdated" (Harvard Policy Group, 2000: 2). Assuming that a chief will choose to be a believer in technology, what is the next hurdle to overcome? The second challenge is a *strategic* one, as chiefs consider how to fully exploit the benefits of technology, instead of simply using it to automate high-volume bureaucratic routines. The goal of automation is to use networks to enhance productivity and improve services. In short, chiefs must learn how information technology can be used for strategic innovation and not simply for tactical automation.

Consider, for instance, the potential power of mobile computing. Probation and pretrial services officers spend two to three days a week in the field performing investigative work or client supervision. Mobile communication, including cellular telephones, pagers, laptop computers, tablet computers, or personal digital assistants, can increase officer productivity—and safety—considerably (AO and FJC, 2000: 32).

Most districts have developed report-generating assistance for officers assigned to conduct presentence investigations. Numerous versions of macro-generated reports assist officers in developing a well-organized and thorough report with limited assistance from support staff. The Southern District of Florida

uses an offender telephone call-in system as a means of monitoring their administrative caseload. The information is automatically entered into a searchable database, which highlights changes in an offender's reported circumstances for follow-up by an officer or assistant.

Chiefs should also consider the potential power of a handheld computer instrument. As viewed by Chief Terenzi:

> Handheld computing instruments, such as the Palm Pilot, offer a whole new dimension to portability solutions. Just within the past few months this new tool has become the one item I can't manage without! It is loaded with a searchable database containing identification information, address, and case management information for all 3500 offenders under the supervision of our offices (downloaded from PACTS and automatically updated with each "HotSync"); all active investigations in the district, to whom they're assigned and when they are due; the Administrative Office and Federal Judicial Center directories; and an emergency contact list for all our staff including home, office, cell, and emergency contact numbers. I now carry a library of reference materials in my wallet. It includes our district manual, our local rules, Title 21 and Rule 46 of the U.S. code, the DSM-IV, a drug identification reference manual, the 2000 U.S. Sentencing Guidelines, and the Guideline and Criminal History Calculator. I can use it to track my travel expenditures, check my calendar, and have it remind me of important meetings. All this, and I have used less than half of its available memory! A Global Positioning System (GPS) can be added to help find your way in the field; bar code scanners can be added to quickly process inventory, file systems or U/A samples. The tool seems only limited by our imaginations.

Having developed a strategy to take advantage of technological aids, the chief faces the challenge of *implementation*—making things work. Perhaps the most important dimensions of this challenge are the development of excellent relationships with systems staff and the evolution of effective management strategies to manage and develop automation staff. Like other executives, chiefs are sometimes frustrated in their work relationships with automation professionals. Part of the frustration stems from the fact that automation professionals see the world quite differently from probation/pretrial services chiefs,

and yet the contributions of the automation professionals to the work of probation and pretrial are vital, as indicated above.

The MOHR Company conducted research on the working preferences and characteristics of technical professionals during the 1980s and 1990s. MOHR interviewed thousands of automation professionals in high-technology companies, such as Hewlett-Packard, IBM, and Apple Computers. They concluded that technical professionals exhibit the following kinds of characteristics:

A Desire for Autonomy

Technical professionals prefer to select the conditions, pace, and content of their work. They are a highly credentialed group of employees, with notable marketable skills, and they bristle at the idea of being micro-managed. Indeed, technical professionals may harbor suspicions of management, or remain confused about what managers actually do. When asked to describe a perfect working world, they frequently mention a work environment devoid of managers entirely.

A Need for Achievement

Technical professionals enjoy solving difficult problems. They are delighted when they have an opportunity to apply their specialized skills to solve complex problems or develop innovative solutions. They tend to become energized by figuring things out; in fact, sometimes they become excessively involved in a project, losing their ability to focus on any competing priorities. Technical professionals welcome uninterrupted blocks of time when they can concentrate on solving problems and developing or enhancing programs. Unfortunately, this need for achievement does not always translate into providing outstanding customer service.

Professional Identification First, Organizational Identification Second

Like university faculty, technical professionals identify strongly with their "discipline" and only secondarily with their organization. One of the authors vividly remembers attending faculty cocktail receptions (which he does not recommend) where he would discover the disciplinary identifications of several new acquaintances (economist, sociologist, etc.) and only later in the conversation understand their organizational affiliation (The University of Maryland, The University of Chicago,

etc.). Similarly, in the courts, automation professionals are more likely to identify with the computer community and less so with the court community, or in the case of probation pretrial, with the criminal justice or community corrections communities.

Participation in Organizational Mission and Goals

While technical professionals may not immediately identify with probation and pretrial work, they will be more highly motivated to do so through explanations of the "business" and its goals than through incomplete political statements like, "The boss just wants it done!" Technical professionals resist internalization and commitment to mandated organizational goals, preferring to rely on logical and goal-oriented justifications. Moreover, research conducted even more recently than the MOHR studies indicates that technical professionals want to feel that they make a difference in organizations; they want to feel part of a larger purpose. As expressed by Wall Street Journal reporter Kemba Dunham:

> Today scores of managers and professionals are fleeing their jobs in the for-profit dot-com economy for more personally rewarding—but usually less financially remunerative spots in the non-profit world. (2000)

Collegial Support and Professional Development

Technical professionals, as mentioned, are interested in making positive contributions to their organizations. They want to be perceived as part of the organization, not as standing apart from it. They want positive feedback when they have done good work. In this regard, they are like all other employees. Moreover, technical professionals are in a profession where obsolescence is common; they, more than most others, are in desperate need for continuing education and even certification opportunities. (MOHR Development Co.: 5)

There are things chiefs should and should not do in order to bring out the best in their systems staff. If we could imagine a systems manager describing what she would like to have from her chief (and what she would not want from her chief), the ideas would read something like this:

> I know you cannot give me a full grant of autonomy, because we are both responsible to the court and to the citizens of this

nation. Consequently, I will have to learn more about the schedules, deadlines, and process of probation and pretrial. I will have to familiarize myself with key events and with the issues of volume of caseload, types of caseload, supervision needs, and all the rest. That way I will know how I can contribute more in the first place.

I do not, however, work well in environments where I feel that people are constantly looking over my shoulder, second-guessing me, and, ultimately, not trusting me to do the right thing. I look forward to receiving projects and work assignments from you, but I would like a chance to discuss them with you in order to gain a better understanding of what you're really trying to accomplish. I want to know which of the projects are urgent, and which can be done at a more relaxed pace. I also would like to have input into these matters when possible.

I am driven by a sense of achievement, and although I don't always show it, I would like to contribute meaningfully to this agency. In this regard, I am interested in sitting in on management meetings, even though the scope of those meetings extends beyond automation issues. After all, if you're calling me a "systems manager," I ought to identify with the management of the district or office.

Conversely, systems managers need to understand the responsibilities of the chiefs. When we look at the organizational and cultural perspectives of chiefs, we can quickly identify a potential for "disconnects" with technical professionals. Chiefs desiring to create an autonomous work environment for systems staff might be prevented by the deadlines and the rhythm of the judicial process. When there is a large-scale arrest besetting a pretrial services office, a chief cannot endure delays caused by her systems staff being unavailable to help due to its involvement in rewriting code. In terms of the justifications for change and project development, it is not always as rational a world as the systems staff would like. Politics intercedes, and the chiefs must mollify judges who are not generally known for their patience.

In order to manage successfully the many tasks for which the chief is responsible, the systems manager can be a powerful ally. The following might be a chief's perspective on what she hopes from the systems manager:

I have a wide span of responsibility and accountability, and I have different time constraints than you. I have to interact, not only with those within our office, but with other agencies and organizations. I need information to be summarized. At the same time, I am not as technically literate as you, and need to have some things explained in more detail.

It will help both of us if you understand the nature of the work that my other staff do and the pressures under which we operate. For instance, a defining aspect of offender supervision in the federal system is the practice of using individualized supervision plans for each offender to achieve the multiple goals of enforcing court orders, enhancing community protection, and successfully reintegrating offenders into the community. Managing individual plans for 50 to 70 offenders while conducting pre-release investigations, responding to collateral assistance requests from other districts, and managing a variety of legislative requirements for special offenders is a tremendous organizational challenge. To juggle all of this while spending most of his time in the community can make an officer feel as if he is on a treadmill broken in the "on" position. The interrelated aspect of each segment of supervision may seem confusing to you. However, by looking at the whole picture, you might be able to understand that solutions that make sense when looking at a single issue or challenge become impractical in the fast-paced, fluid world of supervision services.

Moreover, the supervision officer cannot be tied to a desk. To be effective, the officer must be in the community where the offenders live, work, and oftentimes violate the conditions of their release. These officers struggle to find the time to learn a new computer system or program. They are reluctant to type their own work. Their lack of interest in these desktop tools can be frustrating to the technical professional designing them.

In terms of our presentence officers, whom I also supervise, their investigation assignments are quite high. The deadlines come faster with even more investigations behind the ones they are currently working on. They are like Lucille Ball wrapping and placing chocolates on a constantly moving conveyor belt, on that famous TV sitcom episode. When a presentence officer needs assistance, it often comes with a proverbial scream and not much patience: "I NEED IT NOW!" If taken personally, this could damage the relationship with you, the technical professional (who feels unappreciated); thus, the request could be misinterpreted as an unreasonable demand (presentence officers are spoiled and impatient).

I also need your help in understanding some of the challenges I face in maintaining a sense of fairness for all of my employees. For instance, as the salaries of the technical professional increase, and in some cases surpass, those of the hazardous duty staff they serve, animosity can get in the way of partnerships. From an officer's perspective, technical staff do not perform the core work of the probation service and should not be compensated at a level higher than an officer. From their view, the disparity in formal higher education between the two professions only adds salt to the wound. Officers are required to have a bachelor's degree at a minimum and many have master's degrees. Technical staff, on the other hand, often pursue certifications rather than degrees and may not be as adept at communication in writing or around a conference table as an officer.

Also, officers, especially presentence writers, are acutely aware that they work for the court and embrace the tradition of the court as an important part of their culture. Their dress is conservative and their manner professional. Technical staff, on the other hand, consider themselves to be part of the probation office. They are not "sworn in" before a judge as an officer of the court. But you need to contribute to a professional working environment, especially by way of your appearance. Therefore, I have to be fair in expecting everyone to dress in a conservative, professional manner, in a way that reflects the nature of our work.

In order to bridge this gap of understanding, the chief must be creative. To help systems staff become acquainted with the officers' work, she can have the staff open a case, dictate a chrono, conduct a case review, and prepare a court packet. Arranging for an automation professional to ride along with a probation officer for a day would help the automation professional appreciate the complexity of the job and also the benefits of mobile computing to officers' success (and safety). In this way, they will see the strategic uses of technology in addition to its bells and whistles.

The chief can also be an advocate for the technical staff—taking the opportunity to champion their attributes to the officers, publicly recognize their creativity, and explain the highly obsolescent nature of their profession. For example, by posting the number and frequency of support calls to which technical staff must respond, the chief can point out that, like probation and pretrial services of-

ficers, automation staff must be adept at multitasking.

Furthermore, the chief needs to develop a certain level of trust in her automation staff to gain the full benefit of their productivity. To realize the benefits of technology in a strategic way, as discussed earlier, the chief has to relinquish whatever tendency he has to micro-manage automation staff. This grant of autonomy to automation staff may seem threatening to chiefs, who usually are in close control of office operations; however, in the realm of technology, chiefs usually do not have sufficient expertise to maintain close control. And, again, technical professionals will work more productively when trusted by their managers.

In sum, to maximize the benefits of probation and pretrial services, chiefs and systems managers must bring their special talents and strengths to the collective enterprise of management. As Peter Drucker once said, "Management is about human beings. Its task is to make people capable of joint performance; to maximize their strengths and render their weaknesses irrelevant" (1988: 75).

Conclusion

In a March 1997 interview with *Government Technology*, Kathleen O'Toole, then Massachusetts Secretary of Public Safety, described the progress made in her state to integrate the various components of the criminal justice system (1, 42, 44). With the state's "single inquiry system," police, probation, correc-

tions, and parole officers can access a large database of information from a variety of state agencies. A single inquiry on a subject at a traffic stop, for instance, could turn up outstanding warrants, restraining orders, probation and parole status, court records, DUI arrests, sexual offender records, and firearms registration. She noted that "many of the agencies that we needed to interact with to accomplish this totally integrated system fell within different branches of government" (1997: 42). Nonetheless, the agencies cooperated to overcome "turf wars," because they were united in the vision of a fully integrated criminal justice system to help reduce or respond to crime in Massachusetts.

Technology makes this kind of seamless system a real possibility for the federal probation and pretrial system as well. To benefit from its use, probation and pretrial chiefs need to believe in technology, develop a plan to use it in a strategic fashion, and implement the plan through collaborative relationships with all staff members.

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