

A review of the academic and practitioner literature identified four key categories of barriers to information integration. Experience and research shows that any single initiative is faced with a myriad of highly interdependent barriers, and as a result integration teams must employ multiple strategies to overcome these barriers. The cases illustrate a number of examples where integration teams adopted strategies to mitigate the impact of each barrier as well as the cumulative effect of multiple barriers. The following section presents the four integration barrier categories followed by a set of strategies found in the case studies used to overcome these barriers.

Table 2. Integration barrier categories

<ul style="list-style-type: none">• Turf and resistance to change
<ul style="list-style-type: none">• IT and data incompatibility
<ul style="list-style-type: none">• Organizational Diversity and Multiple Goals
<ul style="list-style-type: none">• Environmental and institutional complexity

Turf and resistance to change

Among the barriers to information sharing at the organizational level are turf as a form of resistance to change, integration experience, and technology acceptance (Best, 1997; Kolekofski and Heminger, 2002). Most of these barriers are recognizable at the organizational level and in many cases represent either decision-makers interests or characteristics of the organizational culture and structure.

As a form of resistance, turf seems to be a strong barrier to information integration initiatives. According to Cresswell and Connelly (1999), the concept of **turf** seems to include at least three major reasons organizations act defensively: (1) to avoid the costs of change, (2) to reduce or control risk, and (3) to preserve autonomy or protect the organization's position in a competitive or adversarial environment. Turf can be conceived as a personal or organizational problem, and it refers to the defense of status, power, or other resources that may be at stake for individuals in any particular integration initiative.

IT and data incompatibility

Known as technical, technological, or information-system barriers, these barriers are mainly related to incompatibility or specific complexity of hardware, software, and telecommunications systems (Caffrey, 1998; Chengalur-Smith and Duchessi, 1999; Dawes and Pardo, 2002). Other sources of problems in information integration initiatives are mismatched data structures and incompatible database designs (Ambite et al., 2002). Information technology and data incompatibility are challenges that can diminish the potential positive effects of information integration. Minimal uniformity and consensus on data, infrastructure, and procedures, as well as shared decision making, are necessary to achieve most integration objectives (Cresswell and Connelly, 1999). However, as Dawes (1996) suggests, even when the organizations involved use of the same kind of data, sharing often remains problematic due to conflicting data definitions. Reliability and compatibility of the data are necessary to foster an environment in which organizations are willing and able to integrate.

Organizational diversity and multiple goals

Organizational diversity and multiple goals can be considered primary organizational barriers. Dawes (1996)

establishes that "given the diverse costs of information sharing, it is probably unreasonable to expect an organization to share its information resources without an expectation that it will gain internal benefits, improve its public image, or expand its influence over others" (380). Conflicting organizational goals and priorities are also significant barriers for any collaborative IT project (Dawes and Pardo, 2002). Meyer and Gardner (1992), as well as Chengalur-Smith and Duchessi (1999) have identified other organizational characteristics as important factors of success such as: centralization, organizational culture, strategy, and size.

Building trust and collaboration across agencies with very diverse and, in some cases, competing goals, is a challenge many integration initiatives face. On one hand, the Justice community is formed by not only multiple agencies, but also by multiple levels of government, and by complex interactions between the different branches of government. This particular situation increases the difficulty of integration projects. On the other hand, professionals from different organizations might see the same problem in different ways. If these different perspectives are sought after, they can be used to inform integration decision making. Organizational culture shapes the way people deal with problems and how they make certain decisions. In general, each of the states and counties has developed its own strategy to overcome organizational diversity and differences among the organizations participating in the integration initiative.

Environmental and institutional complexity

These barriers relate to the political complexities of every governmental system. Some examples of these barriers are given by Dawes (1996): (1) external influences over the decision-making process, such as legislative committees, interest groups, civil servants, and other governmental jurisdictions like local governments; (2) the power of agency discretion, which refers to the capacity of high level bureaucrats to influence the programs and policies; and (3) the primacy of programs, which reinforces vertical connections and serves as a disincentive collaboration among agencies.

These barriers result from the structure of the American political system. Our government is based on independent branches of government with shared powers. Organizational and regulatory frameworks are established for supervision and control between branches and not for cooperation among them (Derthick, 1990; Fountain, 2001). Thus, the criminal justice system involves organizations from at least two government branches (executive and judicial). Successful projects must find ways to avoid institutional impediments and work collaboratively towards a common or shared objective.
