WHAT CAN LAW ENFORCEMENT LEARN FROM FEDERAL EXPRESS?

by

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

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It has been more than ten years since the terrorist attacks of 9/11 and the inability to create a seamless information exchange network between local, state, federal and tribal agencies continue to challenge the public safety profession. It is somewhat ironic that anyone with access to the Internet can type a name on a web browser and, within seconds, obtain a plethora of information related to that query. Granted, some of the information isn’t relevant, but the speed at which searches can be completed and the vast number of databases that can be searched within seconds is incredible. Juxtaposed to the complicated searches used today by many disparate stand-alone law enforcement databases, and one can easily tell we need to improve our systems dramatically.

There is a term used somewhat sarcastically, and somewhat enviously, by law enforcement practitioners called the “CSI effect” which is a reference to the very popular television show CSI (Crime Scene Investigation). On this program, the CSI team members have unrestricted access to almost any information database system - real or fictitious - and are able to obtain results from a search within seconds to help solve their crime. This show has shaped much of the public’s perception that investigators already have immediate and seamless access to almost any law enforcement database. The question for the public safety profession should be, “why can’t we be just like CSI?” Sadly, the reality for the public safety information network is that it is so far behind it’s as if the World Wide Web has yet to be invented.

In an effort to tackle the challenges associated with law enforcement information exchange, Federal commissions, task forces, committees and professional associations at all levels of government are dedicated to define the road map. They are creating and adopting
coding standards, building new secure data networks, and tackling legal challenges. These efforts are geared towards making the public safety information network operate with the speed of a “Google” search.

One of the first steps taken toward building a collective database is the fusion center concept. According to the US Department of Justice, “A fusion center is an effective and efficient mechanism to exchange information and intelligence, maximize resources, streamline operations, and improve the ability to fight crime and terrorism by merging data from a variety of sources. Among the primary focuses of fusion centers are the intelligence and fusion processes, through which information is collected, integrated, evaluated, analyzed, and disseminated.” (U.S. Department of Justice August 2006).

Fusion center information is obtained from thousands of independent databases, including law enforcement and private sector organizations, and transferred to a designated regional fusion center via an electronic feed. As the data passes from a local system to a fusion center, it passes through a normalization process to create a consistent coding language for the database. The normalization process is required because the database systems used by the contributing agencies were not originally designed utilizing any universally agreed upon information coding structure. The variations in the types of information and the coding structure can often be as different as the Greek and Japanese languages and require translation, thus machine interfaces were designed to do just that.

The Global Justice SML Data Model (Global JXDM) was created in March 2001 as a reconciliation of data definitions. It evolved into a broad, two-year effort to develop an XML-based framework that would enable the entire justice and public safety communities to effectively share information at all levels-laying the foundation for local, state, tribal, and
national justice interoperability.” (Programs n.d.) It set the framework for all contributing partners to essentially talk in the same language. Even though the common language issue has been resolved and continues to be refined, the cost of changing out the thousands of legacy information systems still in use by public safety agencies supplying information to the fusion center is a very costly endeavor, especially given the constraints imposed by the current economic downturn. Therefore, most agencies continue to utilize their existing systems and rely on the translation interface.

The fusion center concept is still one of the best approaches to share data; today, there are 72 federally funded fusion centers working hard to compile data from local agencies. There are, though, still many gaps and challenges to overcome before the concept will meet the goal “managing the flow of information across all sectors of government and private industry.” (U.S. Department of Justice August 2006). Some of the gaps are created because not all agencies share their data which can be either by choice, or by constraints. Agencies that opt out are often doing so because of legal issues centered on liability, indemnification and security concerns; whereas, some others simply can’t share data due to a lack of resources. In either case, the gaps need to be addressed if a true data sharing environment is to be created.

In a world where mobile devices, cloud services and digital networks are becoming increasingly common, less costly and able to access data from almost any location, it is only a matter of time before the “CSI effect” could transform from myth to a new reality for law enforcement. Local agencies can help to expedite the process by voluntarily changing the way they collect and share information by adopting some of the logistical concepts utilized by Federal Express. Amongst the most relevant concepts is the hub approach to data collection and distribution. By changing the way local agencies participate in the collection and dissemination
of information, timelier, more accurate and more reliable information can be transferred up the
chain to fusion centers or across to other justice partners.

**The FedEx Approach**

FedEx spent years refining their worldwide network of collection, distribution and supply
chaining processes. These processes could be adopted and incorporated in public safety
information exchange systems. For example, FedEx standardizes and codes every package they
ship at the origination point. If the box will travel by air, it gets a slightly different color box
than if it is shipped by ground. Bar codes used for tracking the box as it passes through different
check points are affixed at the initial shipping location. FedEx also utilizes a fleet of ground
collectors – humans and trucks – traveling within certain geographical areas to collect packages
and deliver them to local collection points (termed as mini hubs by FedEx). The package then
travels to its next destination which is a regional hub, where it is scanned and tagged for the next
distribution point. This process continues until it reaches its final destination. The whole
process relies on basic standardized identification tags, bar codes and a logistical network of both
large and small hub distribution points.

A public safety information collection and distribution process could follow a similar
logistics path. It starts with the officers on the street who collect information. As the
information is recorded, data tags are automatically applied that follow the data to its next stop,
the regional collection point. The regional collection point is not the individual agency, but a
center that serves multiple agencies such as a county, or even a grouping of agencies in
geographic proximity to one another. At the local collection center, data is verified, checked that
it conforms to data standards, is then tagged and redistributed. If there is not a need to pass on
the information, it would be placed into a shared data warehouse. The whole information
collection and distribution process could take place within seconds and involve very little human intervention other than the initial collection by the officer. Certainly, some additional check points should be inserted into the process such as report review by the officer’s supervisor(s), but the process is designed to bypasses the individual agency level, the point at which information exchange is sometimes either slowed down or eliminated.

Information is the single most important tool that all public safety partners utilize on a daily basis. The more efficiently and effectively it can be collected, verified and disseminated, the more valuable the information becomes. With automated processing, information can be made immediately available to all justice partners. A consolidated approach would also dramatically reduce, if not completely eliminate, data processing and reporting tasks at the individual agency level. Additional benefits can be derived at a local level, such as applying crime analysis or crime prediction analytics designed to provide officers with intelligence led data to address specific local crime issues.

A county-wide approach to data management and exchange also takes into consideration there are likely to be a number of joint participation efforts already in effect that could simply be expanded, creating greater opportunities for collective intelligence led activities. Local initiatives can often be advanced faster with fewer complications because they take advantage of existing relationships already formed between public safety or law and justice partners. This model essentially moves the nation-wide fusion center concept to a local level by creating a hub. It creates more opportunities for local benefits and more incentive for local group participation. At the same time, it provides standardized data to be sent to the regional fusion center. The data hub would become a significant first step to maximize the work of officers in the field, and can also serve the more strategic goal of seamless information sharing.
In the May 2012 issue of Government Technology magazine, the editor writes: “As this issue of Government Technology goes to press, we’re in the middle of reinventing ourselves – and you should be too. It’s clear that what we’ve historically defined as ‘Government Technology’ is on the cusp of major transformation, driven by social and collaborative technologies, as well as growing intelligence and connectivity in the world around us. Ever since the bottom fell out of the U.S. economy, state and local IT leaders have relentlessly focused on consolidation and efficiency. Efficiency is important – and state and local consolidation efforts surely rooted out wasteful duplication and poor practices. The future belongs to innovators – those focused on harnessing mobile, collaborative, data-driven technologies to make government programs more effective and communities more successful” (Towns 2012). Local agencies need to begin to drive the innovation efforts. Now that the federal government has laid the groundwork for standards on information exchange, it becomes the responsibility of individual agencies to step up and participate in the effort.

The public safety systems vendor community also holds some portion of responsibility for the slow transition to seamless data exchange since 9/11. Granted, they needed to wait for the government to adopt a uniform data standard, but one would think they would have jumped at the opportunity to design new information exchange systems in response to such an exposed failure. Unfortunately, most of them are still targeting individual agency needs and leaving the integration efforts to processes such as the fusion center concept. One of the ways agencies can promote change is by putting pressure on data system providers to design their products with immediate, automated regional data exchange concepts in mind.

For many who work in the public safety arena, the imperative to share information is a given, but how to move forward is more difficult. Public safety needs to take this reinvention
effort to heart and forge ahead with transformation by eliminating many of the traditional
approaches to information collection and management which are not serving the community as
well as they used to. Some counties, such as San Diego, California, dedicate the resources,
forward-focused technology and shared vision amongst their local law and justice partner
agencies to design their own information exchange system to meet the challenge (known as the
Automated Regional Justice Information System, or ARJIS). For those that do not, they will
have to rely on vendors to design products that meet this need. Collective purchasing and shared
agreements are one way to share the costs of changing out systems. A request for proposal
process written specifically to address the needs of information sharing across multiple agencies
is one method that can be used to identify vendors who are actively working to create cross
jurisdictional information sharing solutions.

Conclusion

Forward progress toward a seamless information exchange system for public safety
partners must continue. The driving forces are the public’s increasing expectation of safety
combined with increased economic pressure to find more efficient and effective ways to deliver
service; both of which are not expected to diminish and might very well increase in the future.
Therefore, it is incumbent upon the leaders of public safety agencies to implement creative
solutions and inspire more proactive efforts to give their staff the modern tools to keep the public
safe. Most of the technology to create a CSI environment is already there, it just requires a joint
vision and joint participation from the ground up to allow it to become a reality.
References

