

EXAMINING THE USE OF COMPETITIVE INTELLIGENCE IN STAFFING MUNICIPAL POLICE DEPARTMENTS: AN EXPLORATORY STUDY

Queen E. Booker, Minnesota State University, Mankato, queen.booker@mnsu.edu

Fred L. Kitchens, Ball State University, fkitchens@bsu.edu

Carl M. Rebman, University of San Diego, carlr@sandiego.edu

ABSTRACT

The criminal justice system is a complex, knowledge intensive industry where competitive advantage is achieved by effective management and deployment of human resources. It is an industry in which formal competitive intelligence (CI) human resource management processes can make a significant impact in terms of keeping communities safe and livable by selecting police officers who are committed to the agency and the agency's mission. The industry as a whole has made significant gains in integrating information across agencies although this has not been fully exploited in respect of CI information on labor markets. This paper explores the ways in which employees and managers can share information to create knowledge to better manage the criminal justice system for competitive intelligence for human resource purposes.

Key Terms CRIMINAL JUSTICE, COMPETITIVE INTELLIGENCE, HUMAN RESOURCE MANAGEMENT

INTRODUCTION

Government systems in the United States differ substantially from other competitive environments in that their revenues are controlled by tax revenue. Information about competitor practices and performance outcomes are tied to how well the agencies respond to and address the larger public need. Police departments, in particular, are critical to how outside stakeholders, e.g., potential business owners, future residents and tourist, view a community; as crime is one of the areas in which communities are ranked annually, leaving cities determined as more or less desirable to live, visit or conduct business. Such a ranking can affect migration to the city, tourism, and a business decision to locate to the area. The professional nature of the industry's internal labor markets makes movement from one organization to another relatively seamless for police officers.

Information plays a critical role in the daily lives of employees. The justice system is affected by societal forces in the way it is expected to process

information and respond to a new age of criminals and crimes. To meet citizens' demands today, justice agencies system must apply intelligence to the justice process itself to as much as possible to stop crime before it happens, manage crime when it happens, and minimize the re-occurrence of crime by an individual once the person has "gone through the system." This challenge is often described as "integrated justice:" the ability to apply technology to improve information management and sharing between justice system agencies at all levels of government. Typically, the agencies involved with justice include the County Attorney's office (prosecuting attorney), an indigent defense office (defense attorney), a Court system, and a juvenile services agency which may include the local school districts as well as the arresting agency (Anonymous, 2003). Thanks to generous funding from the federal government and tools development by private and academic institutions, many counties and municipalities have excellent integrated police information systems. However, without the necessary human resources, the impact received from the benefits of these systems is minimized.

Given these conditions, it is imperative for human managers of police departments to develop ways to access reliable information about the competitive environment to inform both strategic and tactical decision making. The field of competitive intelligence (CI) has experienced tremendous growth over the past 25 years [14]. The criminal justice system has made significant progress in sharing data, even electronically but it has yet to fully exploit the value contribution associated with the development and use of formal competitive intelligence processes for human resource management.

The purpose of this paper is to examine some specific manners in which human resource related intelligence can be used by strategic planners in the field to enrich their decision making. This paper is based on prior work of Cynthia E. Miree et al [10] on creating value in the health care industry.

THE CRIMINAL JUSTICE INDUSTRY AND SHARED INFORMATION

The criminal justice industry, thanks to generous grants from the Office of Justice and the Department

of Homeland security, is one of the more technologically enhanced government systems in the country. Most major areas operate today much like the description of the Santa Clara County system on IBM's case section (<http://www-306.ibm.com/software/ebusiness/jstart/casestudies/cjic.shtml>). The Santa Clara County's criminal justice system is a case history management system called the Criminal Justice Control System (CJIC) and tracking system. It supports the day-to-day operational needs of all criminal justice agencies operating in Santa Clara County, including Law Enforcement Agencies, District Attorney, Santa Clara Superior Court, Department of Correction, Pretrial Services, Probation Department and a variety of local, state and federal agencies. The purpose of the Criminal Justice Information Data Access Web services project is to provide an easy to use, secure, industry standard way for CJIC's "customers" to access CJIC data. The system is a typical integrated system that enables employees to share information for reporting purposes.

CJIC allows authorized users to track and obtain data on defendants and cases throughout the local criminal justice process. At a high level this includes information about arrest and bookings, custody (jail) time awaiting court appearances, both limited jurisdiction and general jurisdiction court appearances and outcomes, local custody time for sentences, and probation. Single case information is aggregated by defendant to create a local criminal history, which provides a comprehensive report of an individual's interaction with the criminal justice system.

As described in the case, a typical use of the system can be described in the following real world scenario:

1. A San Jose police officer radios into the 9-1-1 dispatch center and requests information on an individual, most likely as a result of an in-process traffic stop.
2. The dispatch center types in the name of the individual in question into their CAD system that queries several databases, including CJIC, to get detailed information about the individual that has been stopped.
3. The dispatch center communicates this information to the officer by radio. The office can now make an informed decision about how to best proceed.

This description illustrates how effective a truly integrated system can be. The consolidation and sharing of information across agencies has created opportunities to improve public safety nation-wide.

As the example illustrates, managers of information at all levels can use the intelligence in the system to make high quality decisions. Not only does this work for police officers, but also for attorneys, judges, and others in the system whose role is to ensure the safety of the community while attempting to rehabilitate offenders. The ease or difficulty in having the right information could impair a decision maker's mental model or exacerbate the cognitive biases that often plague the decision making process [15, 3].

The value of competitive intelligence (CI) in the criminal justice industry goes far beyond the traditional SWOT (strength, weaknesses, opportunities and threats) analysis. The value is tied specifically to the ability of the agencies to use information expediently to manage costs without sacrificing safety and public goodwill. Criminal justice agencies are faced with a number of internal issues such as labor and confinement costs that constitute the largest costs of the system. For example, if an attorney can only effectively handle ten felony charges per year, and the system is expecting 20 more felonies than last year, then the prosecutor's office must now hire two more employees or suffer deficiencies in office performance due to an overloaded attorney. Likewise, when a private firm enters the area and pays a higher wage for prison guards, the public system has to meet or exceed the private firm's wages to retain the best human resources to reduce the likelihood an offender will return. Thus, the cost drivers can have a significant impact on the decision making process. The public typically only sees the criminal justice system as a consumer of tax dollars and not an investment in future earnings like education, for example. Thus for each dollar saved in the criminal justice system, the better the public relations for the entire industry if crime rates are lowered. These concepts create what Miree and Prescott term 'within-firm' issues. These are issues that produce internally-focused intelligence needs that can be addressed through the proper allocation of CI resources [11]. In addition, the supportive nature of a formal CI process within a firm [13] can provide managers with continuous time-sensitive actionable intelligence and help them to understand the ever evolving context within which the intelligence must be leveraged, thereby increasing the speed and quality of the decision making process [1]. A well designed CI process will produce actionable intelligence that can be used to tackle both internal and external issues [1]. Thus, the development and use of formal CI processes can help criminal justice firms to overcome some of the structural inefficiencies associated with the criminal justice industry [12, 10].

RELATED LITERATURE RELEVANT TO COMPETITIVE INTELLIGENCE

Although the advantages of employing a CI process are many, there have been, to date, relatively few articles examining how the competitive intelligence process is used to support decision making in the criminal justice industry. Booker, Kitchens and Rebman [2], argue the need for better intelligent systems for assigning attorneys as a method for reducing the costs of defense attorneys. They illustrate how an expert CI process could be used to assist in assigning new cases to attorneys to minimize the likelihood of case conflicts. This study points to specific aspects of the use of intelligence. There are other areas that should also be considered when contemplating CI's potential contribution to a criminal justice agency's value creation process. From an external perspective, criminal justice agencies need to continuously collect data on various conditions in the macro environment that have the potential to impact increased costs. For example, a system's growth may be influenced by new federal or state laws determining the carrying of a particular type of gun, or a certain type of attack a felony rather than a misdemeanor. For example, what happens with immigration law could change law enforcement policies and place higher demand on human resource needs. Further, a change in immigration policy could require more attorneys fluent in a second language as well as more attorneys to handle immigration cases.

For the criminal justice system, criminal justice human resources are difficult to recruit and retain. In a service industry like criminal justice, the effective management of human resources is critical to success. The urgency of developing and disseminating labor-related intelligence becomes especially pronounced when viewed in light of the labor issues plaguing the criminal justice industry. In 2006, the Christian Science Monitor reported that most communities are having a difficult time recruiting and retaining quality police officers (<http://www.csmonitor.com/2006/0123/p03s02-ussc.html> accessed 1.3.08). They found that most communities have vacancy rates over 10%. The National Association of Defense Lawyers reported in 2006 that public defender offices have a similar problem with recruitment and retention (www.nacdl.org/public.nsf/defenseupdates/ accessed 1.3.08). These labor shortages apparently have not abated and, coupled with competition for workers, lead to rising compensation costs. In fact, labor costs (regular, overtime, and agency) can account for more than 70% of the costs for a public defenders budget and more than 50% of a police agency's budget (legaldefensefund.com, accessed 1.7.08). Further,

labor problems can have a considerable impact an agency's ability to perform day-to-day operations. These statistics highlight the importance of sound human resource management to criminal justice agencies. As a result, deploying intelligence resources toward the recruitment, development, and retention of a high-quality workforce may be one of the most valuable contributions of any CI effort to these agencies. We will now focus closely on how CI can add value to the human resource management function.

HUMAN RESOURCES IN CRIMINAL JUSTICE

An organization's individual employees are perhaps the greatest resource that it can access and leverage in the pursuit of competitive activity. In many knowledge-intensive or service industries, such as criminal justice, competitive advantage is primarily achieved based on "people-embodied know-how" [10]. McLean [9] states: "In most industries, it is now possible to buy on the international marketplace machinery and equipment that is comparable to that in place by the leading global firms. Access to machinery and equipment is not the differentiating factor. Ability to use it is. A company that lost all of its equipment but kept the skills and know-how of its workforce could be back in business relatively quickly. A company that lost its workforce, while keeping its equipment, would never recover."

Increasingly, attracting and retaining top-quality employees is challenging, and may be getting more difficult. The Bureau of Labor Statistics projects an average growth in criminal justice-related jobs because of people's concerns about crime and willingness to become employed in the industries (BLS.gov, accessed 1.3.08). These trends place a burden on the US criminal justice labor force where projected growth or demand for jobs often outstrips college graduation rates across multiple criminal justice-related jobs. Shortages can have significant strategic implications for agencies as they struggle to maintain a certain presence in communities or attorney-client ratios while continuing to pay attention to key specialty areas such as illegal immigration and labor laws.

Beyond vacancies, voluntary and involuntary turnover costs are high in this area. Police officers must attend the police academy and become certified, requiring the state or city to offer on-going classes rather than classes at specific times to minimize costs. Other turnover costs can include the direct cost of recruitment as well as the downtime needed for the new employee to gain proficiency in the job. When a criminal justice employee is lost, the

training and development investments are lost as well. Given the financial and operational implications of these labor force issues, prudent criminal justice administrators should approach the recruiting, selection, and retention of talent in key areas with the same diligence that they approach other broader strategic decisions and initiatives such as office or prison expansions. Because all criminal justice agencies are labor-intensive, collecting, analyzing and disseminating human resource intelligence is critical to maintaining an efficiently functioning organization. Traditionally, the job of human resource management has primarily fallen into the hands of a firm's HR specialists with little to no cross fertilization between human resource professionals and CI professionals [5].

HR Intelligence as a Critical Criminal Justice Resource

Human resource intelligence refers to analyzed information about HR decision areas such as compensation, employee relations, selection, recruitment and conditions in the competitive environment (7, 16, 5, 10). The importance of HR intelligence has been investigated in the literature. Craft, Fleisher, and Schoenfield [4] outlined the positive consequence of gathering human resources competitor intelligence to formulating firm strategy and effective organizational performance. According to Craft et al, focusing on one's competitors enables an organization to understand how competitors develop and leverage culture, talent base, leadership depth, skill mix, personnel programs, and personnel changes to maintain effective organizational functioning. They also identify labor market competitors as one of the key areas within which intelligence should be gathered and used in strategic HR decisions. Labor market competitors are described as organizations that compete with each other for the same or similar personnel [10]. For police offices, this would be probation officers and active police/security officers with competitors from the attorneys' offices for investigators, private security firms, and the prison systems as well as higher echelon safety units such as at the state and county levels.

Within the type of intelligence, Craft, Fleisher, and Schoenfield [4] suggest that information relating to core recruiting, selection, and reward policies would be of primary interest. Fleisher and Schoenfield [5] describe in great detail, the relationship between HR intelligence and business strategy. They also identify a number of potential sources of human resource competitive intelligence.

Understanding a police organization's HR issues and needs enables managers to assess, manage, and respond to three key areas within the organization: operating expenses, staffing requirements, and service delivery. In an industry where labor costs can be a large percentage of total operating costs effective gathering of HR intelligence can be critical for organizational success [6].

STUDY METHODOLOGY

As a part of this research, the authors conducted interviews with twelve top HR administrators in municipal police departments in southern Nevada, southern Mississippi and southern Arizona. All of the interview data was collected using the protocol in Appendix A. Using the information from the interviews meaning condensation was performed to find key themes among the data which was the methodology used by Miree et al [10]. Meaning condensation allows for analysis of qualitative data without having to first transform the data into a quantitative context. It has four steps that include reviewing the transcripts of the interview, condensing the data, reviewing it again, and then identifying key themes. The key themes are then examined within the context of the study's purpose and underlying questions. Finally, all non-redundant themes are summarized [8].

RESULTS AND DISCUSSION

The organizations used in this study included twelve municipal police departments. The number of observations compared to the number of questions does not allow for a valid statistical study so the results reported are for the creation of a larger Likert-style survey to be sent to more agencies. The interest in the exploratory study is to identify opportunities for HR departments in the push for larger and better systems in the criminal justice industry. The expectation was that there would be some formal CI processes in the larger institutions but smaller institutions did not have and did not see the value in CI processes for HR intelligence. This expectation is related to the heavy emphasis on data integration at the client level for the police force in all communities to assist with "catching and keeping the criminal off the street". It is expected that the culture change due to the push for data integration at the police level would at a minimum encourage competitive intelligence at other levels, particularly the HR department.

Of the twelve participating agencies, the lowest number of full time equivalent employees was five and the highest was 1,500. Five of the agencies

defined themselves as operating in small, rural towns and three defined theirs as suburban, and four defined their agencies as operating in urban communities. The first step in the interview process was to identify the number and type of automated systems used within the organization and for what purposes.

Not surprisingly, all of the agencies have some type of HR automated process which for most is the payroll. The larger forces have an automated application system that selects potential employees based on an assessment of college education, military experience, and an automated credit check. All of the medium and larger agencies have web pages or use some type of national, Internet-based recruitment site.

Their responses to the questions varied depending on the size but there were some emergent themes that were consistent across all the interviews.

1. Key Competitors

Each HR administrator ranked state trooper police departments as the number one key competitors for human resources, followed by private security firms, private prison systems, the state and federal prison systems, sheriff departments and then other local jurisdictions. None of the administrators considered the federal justice agencies as key competitors.

2. Most Significant Competitive Threats

Each administrator stated compensation, job safety, and lack of upward mobility as the three most significant competitive threats. At the local level, police officers deal with problems that the state level troopers, private security, or prison staff do not have to address such as evictions, domestic violence and murder investigations. The work at the local level is apparently more personal as well as more dangerous but the pay comparison is lower than that of their counterparts at the state level, in private security firms, and in some instances, the prison systems. Further, the top position in most of the agencies turnover on average every ten years and depending on the size of the agency, there are not enough upper level positions to attract employees for the long run.

3. Information Need to Competitively Hire and Retain New Employees

Each HR person admitted that hiring new employees in the police force has become more complicated. Most of the agencies routinely recruited people with military experience because there are so few college graduates with criminal justice degrees. But those with military backgrounds are becoming less reliable and are having increased incidences of police brutality accusations. People with criminal justice degrees tend to be hired by and go work for

the state level police force. What most want to know and don't know how to find is the compensation differential that would retain a local police officer. Is it pay? Is it incentives? No community had an answer to what would be considered competitive. In fact, some of the HR administrators admitted that meeting the state level pay or the private security firms pay was not enough, and slightly more pay was not considered enough. So there is some human need that none of the twelve interviewed has yet uncovered.

4. Where to Search for Answers to HR Recruitment and Retention Needs

Most of the HR administrators had at least an Associates degree in an HR related field (unsolicited answer to questions). Most of the smaller communities rely on word of mouth, conversations with other police officers or similarly employed persons, etc to find out what competitors are paying and the types of benefits offered. Others rely on the data published on the Internet for wages paid elsewhere, and even check employment boards such as Monster or Careerboard.com. In the larger communities, HR administrators have subscriptions to HR Magazine and attend at least one criminal justice conference per year to network with other HR personnel from around the country.

5. How Often Engage in Competitive Information Gathering

Smaller communities – on an as-needed basis, generally when someone quits or the town receives approval to hire a new officer. Larger communities engage in some form of competitive information gathering more frequently. Both the medium and larger agencies reported engaging in competitive information gathering on at least a monthly daily basis to try to keep the number of people who quit as low as possible.

6. HR-related Information Valued Most

All of the administrators ranked mental health as the number one internal HR related information most valued given the increase in police brutality incidents. Ranked second was officer preparation and background, followed by previous work history and salary history. Externally, the most valued information was the upcoming budgets for competitors and the increase in funding to police departments for salaries. These pieces of information were followed by changes in demographics in the community, changes in demand for services (e.g, increases in domestic violence arrests versus drug related charges, for example). Knowing what the changes in the communities were, they say, are

critical to knowing the kinds of police officers needed to be hired.

7. Importance of regularly gathering information on a scale of 1 to 5 where 5 is the highest

The average of the rankings was 3.7. The smaller communities ranked on average 3; meaning that it is important to have information but not so regularly. The medium communities averaged 4.2 and the larger communities ranked it as 5.

8. Information Search Behavior

As previously discussed, most of the larger agencies perform information searches on a continuous basis where as the smaller communities are more decision specific. Constraints on search activities is primarily the lack of information in one easily identified place. Most agencies did not have a system that would allow them a complete view of local, state and national changes that may affect hiring and retention decisions. These constraints constitute a need to spend more time than desired to ensure they were creating the best job descriptions and hiring the best people for the positions. Those administrators who are able to attend the annual HR conferences felt that they are limited in learning what others are doing because of the annual networking opportunity. Although it is possible to share information via email or the phone, corporate security systems detract from using these mediums to share and discuss any information for fear how the information sharing would be construed.

9. Information sharing behavior

Larger agencies HR administrators routinely (varied by weekly or monthly) prepare reports on turnover, demographics, incident reporting against police officers by demographic data including age, length of employment, ethnicity, and gender. They also report which employees attended training (again by demographics of age, gender, length of employment, ethnicity) as well as the type of training but this information is an upward flow. It was discussed in most interviews that perhaps if the information did flow to subordinates perhaps subordinates could coordinate professional development programs for the police officers before certain issues became problems, especially if there were signs that could be identified by employees, indicating certain types of trainings that mitigate certain behaviors.

Not surprising, many of the HR administrators interviewed used formal CI processes to collect HR-related intelligence. The larger the organization, the more likely the use of formal CI processes to collect HR-related intelligence was used.

Surprising was the lack of formal automated processes to assist with intelligence gathering, and that most of the intelligence gathering was limited to upper level management staff. Formal discussions are rarely held to be more collective in the decision making at the organizations of any size.

Based on what was learned from the twelve interviews, recommendations are listed below.

HR staff should clearly identify what intelligence is needed to improve HR hiring, retention and public safety and advocate for formalized automated processes. Information systems are costly and time consuming to build but not all automated processes require a specific system to be built. In many cases it is simply access to certain secure systems that would be helpful. For example, no one reports that they are suffering from Post Traumatic Stress Syndrome. But knowing this information can help staff manage training and development for such individuals, focus their jobs on areas that are less likely to cause negative behavior, and mitigate problems that may jeopardize public safety. However, these concerns and needs may conflict with personal privacy issues so staff should be able to use data to illustrate the need for the information and show how it can be useful for the agency in the long run. Other areas the administrators would prefer better intelligence included information about competition including where their employees go when leaving the agency. There is some anecdotal data but nothing that specifies that ten people went to the Armored Car group or the State Troopers. Other information people thought would be useful included compensation and benefits, earlier access to legislation that is in the works rather than after it has been passed at all government levels, community demographics on an annual basis rather than the current annual census, and employee satisfaction and motivation.

Involve human resource professionals and the police officers in the intelligence gathering process. Most of the agencies admitted their information flow was upward not linearly or downward. Having the police officers routinely engage in information gathering can be a critical component to retention and commitment to the organization. Part of the information gathering for example, could include learning from each other about best practices for performing jobs or trainings to attend, certain methods of dealing with changes in the community, and more importantly, reporting the changes in their respective work communities.

Directly tie the firm's competitive intelligence process to the firm's strategic planning process. This step was perceived as particularly critical to the larger agencies. There is an on-going

need to engage the agencies in continual strategic planning and implementation. One administrator said "One day I woke up and realized that one whole community, overnight, had gone from being predominantly black to predominantly Hispanic. But if you look at our census data it says it is black so we spend so much of our time trying to recruit Spanish speaking police officers or training police officers to speak Spanish. It looks like we are wasting tax payer dollars because our actions do not support the census." This sentiment was echoed from other administrators who essentially felt that the information used for HR planning was not as accurate as it could be and that lack of information affects the entire strategic planning process!

CONCLUSIONS

The administrators in this study were able to articulate the need for, and the advantages of, an effective competitive intelligence process, especially CI related to human resources management. There is an accepted expectation that many HR systems are not planned for improvements in the short run due to the more pressing demands for improving intelligence for the officer on the street. But as these preliminary interviews show that without the proper intelligence to hire the right officer, the current implementations may not have the desired impact of the systems.

A paper on the limitations of the use of competitive intelligence in HR related systems is not by itself going to create the resources needed to generate the systems needed to develop the intelligence. That will be accomplished, perhaps, through training HR professionals to better develop the intelligence without a heavy reliance on the development of a centralized system. In fact, one the aspects learned from the interviews was perhaps the academic training programs promise too much of what to expect in the working agencies as opposed to what they actually see. This is an area for further research.

LIMITATIONS AND NEXT STEPS

The current study represents one qualitative exploration into the role of HR-related CI in one type of government agency and was limited to twelve agencies. None of the agencies in the study had formalized systems per se but that was the purpose of the study – to find the issues for the creation of a larger survey instrument. There are some formalized systems for competitive intelligence in HR. For example, the Clark County department started developing a system primarily to assist with

intelligence management in 2004. The progress of that system is unknown but it is likely there are others as well. The next step in this study is to formalize and test the survey instrument and then collect data from a larger number and a more diverse number of agencies charged with public safety.

Criminal justice is one industry wherein formal competitive intelligence processes can make a significant impact. Moreover, in an industry where labor costs are a large percentage of total operating costs, such as criminal justice, focusing a significant portion of competitive intelligence resources on human resource-related intelligence is critical for organizational success. Further empirical studies (both qualitative and quantitative) are needed to broaden our understanding how CI is currently being leveraged in this industry. Ultimately, the authors hope to discover the "best practices" for collecting, disseminating, and using HR-related competitive intelligence for agencies charged with protecting the public.

REFERENCES

1. Bernhardt, D. (1994). 'I want it fast, factual, actionable' - Tailoring competitive intelligence needs to executive needs. *Long Range Planning*, 27(1), 12-24.
2. Booker, Q. E., Kitchens, F. L., & Rebman, C. (2004) A rule based decision support system prototype for assigning felony court appointed counsel, *Proceedings of the 2004 Decision Sciences Conference*, Boston, MA.
3. Bourgeois, L., Duhaime, I., & Stimpert, J. (1999). *Strategic management: Concepts for managers*. Orlando, FL: The Dryden Press.
4. Craft, J., Fleisher, C., & Schoenfield, G. (1990). Human resources competitor intelligence: concept, focus and issues. *HR. Human Resource Planning*, 13(4), 265-280.
5. Fleisher, C.S. & Schoenfield, G. (1993). Achieving functional-level global advantage through CI: The human resource management example. In Prescott, J. & Gibbons, P. (Eds.), *Global Perspectives on Competitive Intelligence*. (pp. 261-280). Alexandria, VA: Society of Competitive Intelligence Professionals.
6. Gao, J. & Campbell, J. (2002). Administrative climate and staffing levels in criminal justice systems. *International Journal of Criminal Justice Technology and Management* 4(5), 350-362.
7. Hannon, J. (1997a). Leveraging HRM to enrich competitive intelligence. *Human Resource Management*, 36(4), 409-422.

8. Kvale, S. (1996) Interviews: An introduction to qualitative research interviewing. Sage: London
 9. McLean, R. I. G. (1995, March). Performance measures in the new economy. Toronto, Ontario, Canada: The Premier's Council. Retrieved on May 1, 2005 from <http://cpri.matrixlinks.ca/archive/PMNE/PerfMeasNE.html>
 10. Miree, C., York, K., Lombardo, S. (2007) Using competitive intelligence processes to create value in the healthcare industry. *Journal of Competitive Intelligence and Management*. 4 (1), p 112-131.
 11. Miree, C. & Prescott, J. (2000). TAP-IN to strategic and tactical intelligence in the sales and marketing functions. *Competitive Intelligence Review*, 11(1), 4-16.
 12. Porter, M. & Tiesberg, E. (2004). Redefining competition in health care. *Harvard Business Review* 82(6), 65-78.
 13. Prescott, J. (Ed.). (1989). *Advances in competitive intelligence*. Alexandria, VA: Society of Competitor Intelligence Professionals.
 14. Prescott, J. & Miller, S. (2001). *Proven strategies in competitive intelligence*. New York, NY: John Wiley & Sons.
 15. Senge, P. (1990). *The fifth discipline: The art and practice of learning organization*. New York, NY: Doubleday/Currency.
 16. Smith, M. & Marinakis, S. (1997). Measuring HR value-added from the outside in. *Employment Relations Today*, 24(3), 59-73.
5. Where do you search for answers to your human resources recruitment and retention needs?
 6. How often do you engage in competitive information gathering?
What kinds of human resource-related information do you value most?
 7. Within the criminal justice industry, how would you rank the importance of regularly gathering information on a scale of 1 to 5 where 5 is the highest?
 8. Would you describe your information search behavior as continuous or issue/decision-specific? That is, does your search method depend on your specific needs?
 9. What constraints affect your search activities?
 10. How do constraints affect your search activities?
 11. Does the agency maintain information on:
 - a. Regular performance evaluations
 - b. Training requests and approvals
 - c. What other agencies are doing
 12. How often and by what formal means is HR aggregate information shared with subordinates, superiors and peers? For example, how often does staff review training and development needs, compensation issues, recruitment strategies, succession planning, etc? How often do you draw on the information sharing process to inform your own decision-making?
 13. How does the design of the process increase the speed at which you are able to make decisions?
 14. What aspects of the information sharing design work particularly well? Which aspects do not work as well?
 15. Demographic questions:
 - a. Size of the police force
 - b. Turnover rate of key employment groups

APPENDIX A: SURVEY QUESTIONS FOR MUNICIPAL POLICE DEPARTMENTS

1. One of the aspects of competitive intelligence involves the management of intelligence about current and future employees (in this case lawyers, paralegals, investigators, police officers, and key administrators). Which organizations do you consider your key competitors for human resources?
2. What do you consider to be some of the most significant competitive threats in your environment?
3. What are some of the opportunities that exist in your environment?
What type of information do you need to competitively hire new employees?
4. What type of information do you need to retain new employees?