# BUSINESS INTELLIGENCE FOR THE PUBLIC SECTOR

DRILLING DOWN





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# **EXECUTIVE SUMMARY**

"We have had tremendous success using Cognos, including improved data accuracy and consistency as well as the ability to create and distribute reports quickly and easily via the Web. The state must comply with strict reporting requirements as mandated by the Office of Fiscal Management — Cognos has allowed us to significantly reduce the manual labor and costs previously associated with that process."

Teresa Hayes, MMRS E-government Team Functional Manager, State of Mississippi

In every area of the public sector, employees must deliver the best value for taxpayers, achieve higher levels of service, and streamline decision-making. All this is being demanded in a climate of shrinking budgets and resources. Cognos business intelligence (BI) has enabled its public sector customers worldwide to increase efficiency by streamlining data integration, improving accountability through managed reporting and scorecards, and enhancing their online initiatives with easy-to-use, Webbased reporting. In How Smart Governments Win with Business Intelligence, the companion piece to this document, we examine how the public sector is using BI to streamline processes associated with:

- Unifying Data Assets
- Accountability and Performance Management
- EGovernment
- Public Safety and Homeland Security
- HR Management

In this paper we will look at how Cognos has made a difference in a myriad of different government departments and public sectors worldwide—each with its own unique challenges.

We will look at how:

- The Naval Undersea Warfare Center uses Cognos to save as much as \$1.5 million per year in paper, staff costs, and redundancies.
- The U.S. Marshals Service uses Cognos to produce centralized information on threats, arrests, prisoners, and outstanding warrants for its 94 district offices.
- The Washington University School of Medicine uses Cognos BI to reduce reporting time from over a week to hours or minutes.

Public and private sector customers have achieved measurable success with Cognos solutions. They have attained fast return on investment by streamlining operational processes and identifying areas for cost recovery. We make bold promises, but we back them up with the right products, the longest track record in government of any BI vendor, and the people to make things happen. Read on to hear from some of our clients who attest to our value as a public sector ally.

# INTRODUCTION:

# **IMPACT WHERE IT MATTERS MOST**

"Managing income support and employment services in a large municipality is very complex, given the many programs which work together in this area. Cognos tools allow us to understand trends – who is using our services, where they are located – and to conduct statistical analysis so that we can best meet client needs by channeling resources to areas where they are required."

Sonia Luberti, Policy, Planning and Evaluation Officer People Services, City of Ottawa

The public sector uses Cognos business intelligence in many different ways to improve the management of their day-to-day work processes. Cognos delivers information from data stores so public sector employees can make better decisions, act more quickly, and have an impact when and where it matters most.

The breadth of our complete BI tools and applications means public sector agencies can apply Cognos business intelligence to address any specific government requirement, and extend the solution as their needs and priorities evolve.

For example, a government agency may have an urgent requirement to bring disparate data sources together. Once that is accomplished, it may want to drive efficiencies through supply chain management, implement e-government, manage HR more effectively, or pursue any one of the myriad of BI capabilities—the choice is theirs.



Cognos software helps organizations such as NASA easily identify key areas and issues in need of attention, gain a better understanding of cost-based activities, and plan more effectively.

This paper addresses a number of key sectors in which Cognos BI tools and applications can have a critical impact on the management of data in meeting the requirements of any level of government or public institution. These sectors include:

- Social Housing
- Social and Environmental Services
- Defence
- Public Safety/Law Enforcement
- Justice
- Education
- Healthcare
- Labor/Human Resources
- Other Key Sectors

# SOCIAL HOUSING

Cognos provides social service agencies with solutions that make them more successful in helping the large number of people that rely on their services for a better quality of life. Social agencies know that business intelligence does not only apply to Fortune 500 companies—it has radically improved efficiencies and saved them significant time and money on a day-to-day basis.

Organizations such as the London Quadrant Housing Trust have implemented Cognos BI for reporting and analysis. With thousands of properties—all in different regions, varying states of repair, and with unique financial schedules and legal agreements attached—the agency needed a solution that let users slice and dice information, easily create reports, and disseminate them over the Web.

With Cognos BI, users from all regions can access stored data in a central format for analysis, thereby guaranteeing better data accuracy, consistency, and integrity. While the department initially employed BI to make a difference in their maintenance and arrears departments, they now look to implement a complete solution that also tracks workflow, streamlines accounting, and enhances their marketing initiatives.

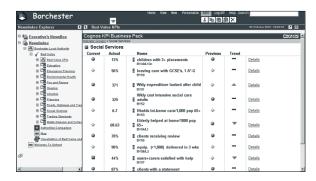
"The Cognos solution brings together data from many different offices across the country and delivers it to the desktops of our employees with the real-time speed of the Web. The solution provides our staff with the vision and insight they need to leverage maximum benefit from our donor information holdings."

Ken Anderson, Chief Information Officer and Vice-President of Information Services, Canadian Blood Services

# SOCIAL AND ENVIRONMENTAL SERVICES

The North Tyneside Council is an agency responsible for meeting the social and environmental needs of its clients, which include social housing and highway repair and maintenance. The Council needed a BI solution that reduced costs and increased responsiveness. They also wanted a solution that delivered the data they collected into the hands of users rather than relying on technical expertise from IT services.

After implementing a solution from Cognos, managers can quickly and easily create reports that access their key relational databases. The section managers now have access to the kind of timely information they want, when they want it, delivered in simple business terms. Even employees with few technical skills are able to achieve impressive business results.



For social service agencies, faster, clearer information means better care. Cognos software gives them a simple, user-friendly interface that provides critical information at a glance.

# DEFENCE

Fast effective information gathering, dissemination, and analysis is more important than ever. Now that agencies have the ability to store vast quantities of information, they must be able to access the information quickly and easily and view that information in a collaborative way. Bringing information to the desktop and allowing the information to be viewed and analyzed in different ways enables an agency to make fast, informed decisions, resulting in better service.

The following June 2000 Federal Computer Week magazine article by Dan Verton, entitled "Navy Reaps Savings with Biz Tool," touches on the bottom line efficiencies the Naval Undersea Warfare Center (NUWC) achieved with Cognos solutions.

The Naval Undersea Warfare Center at Newport, R.I., has saved as much as \$1.5 million a year as a result of a business intelligence program that has helped the agency eliminate unneeded paper and personnel and redundant data entry costs, according to officials at the center.

Sylvia Ronayne, project manager for the NUWC's business intelligence project, said her agency's deployment of Cognos Inc.'s Transformer, Impromptu, PowerCubes, and PowerPlay business tools has enabled the center to build what it calls the Executive Business Information System (EBIS).

EBIS, which employs a data warehouse containing information extracted from various systems and external data sources, provides the ability to immediately access, analyze, graph, and download financial, personnel, and other business information electronically.

"In terms of cost avoidance, [EBIS] has kept [us] from having to hire extra staff," Ronayne said. "The center has 300 registered users of the system and plans to broaden its use."

The Cognos solution can be deployed in about half the time it normally takes to deploy enterprise business intelligence solutions. Other Cognos government customers include the Defense Finance and Accounting Service, Military Sealift Command, Army Reserves, and the Naval Facilities Engineering Command.

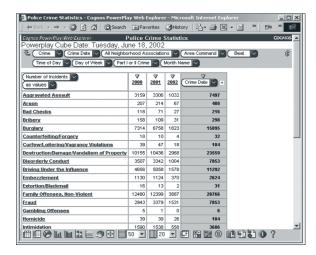
"The Cognos software is very easy to adapt to VIB's specific wishes and situation. Training and support costs are very low, too: it takes only half an hour to train a new user – over the phone! This is extremely important for us because of the high degree of rotation among the VIB researchers, who are often engaged for a specific project."

Tom De Sloovere, ICT Officer, VIB – the Flanders Interuniversity Institute For Biotechnology

# PUBLIC SAFETY/LAW ENFORCEMENT

In law enforcement, the effective use of information isn't just a question of improving operational efficiency; it's a matter of community safety.

The U.S. Marshals Service relies on a Cognos BI solution to produce centralized information on threats, arrests, prisoners, and outstanding warrants for its 94 district offices. Each district formerly searched through its own files and court information by hand. Now they call or e-mail headquarters to request customized reports.



Cognos software helps organizations and municipalities, such as the City of Albuquerque, fight crime by arming them with an arsenal of information.

The new system also has simplified monthly report creation. "It used to take a week to generate a monthly report," said Carlyle Turner, Intelligence Research Specialist for the U.S. Marshals Service Investigative Services Division in Arlington, Virginia. "Now it's done in one day and provides twice the numbers."

# JUSTICE

Cognos BI solutions allow public sector employees involved in Justice to break down communication barriers with easy Web reporting capabilities. With Cognos, they can deliver quality community support at a lower cost with sophisticated data analysis.

In Canada, Cognos plays a key role in Justice Technology Services, which provides infrastructure, application support, and application development to justice-related departments and sectors. Justice Technology Services uses Cognos products, mainly in assessing, monitoring, and planning support requirements. The Ontario Provincial Police and Courts also use Cognos products with support from Justice Technology Services.

With 22,000 people working on different systems and platforms across the country, the departments had difficulty measuring performance and analyzing data. By employing Cognos PowerPlay, Visualizer, and DecisionStream, they can link systems, conduct performance management, analyze financial data, look at the impact of caseload, and track correspondence more effectively than ever before.

Implementation of Cognos BI has also proven a success

in the **State of Utah**. Legislative staff and financial officers in State of Utah courts use Cognos reporting and analysis to measure and track the costs and benefits associated with particular programs or legislation. In this way, staff can effectively evaluate the merits of restoring, cutting, or enhancing funding for those programs, or of strengthening or discontinuing legislation.

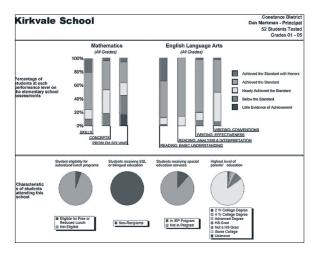
"We've gone from having upwards of 200 reports on stationery and lined paper this time seven years ago, to having no paper anywhere – just reports available on request. This significantly cut down the stationery order for lined and headed paper, which is much appreciated by the finance department."

Robert Roulston, Head of Admin Support,

Queen's University at Belfast

# **EDUCATION**

Schools, universities, and boards of education across North America have chosen Cognos to help them deliver better services to their students, staff, and communities. These organizations use Cognos BI to analyze student test results, upgrade and improve curricula, streamline management processes, and identify and forecast trends in student performance.



Cognos software lets educational institutions interact with multiple measures simultaneously to obtain an immediate grasp of what is driving their departments.

Washington University School of Medicine, one of the world's premiere medical schools, provides another example of how an implementation of Cognos business intelligence dramatically improved efficiency. The school had developed standardized reports for use by its more than 900 physicians, 14 clinical departments, and 10,000 employees. But adapting those reports to specific needs was proving time-consuming, with some departments taking a week or more to complete necessary customizations.

Now, using Cognos BI, the same reports are done in hours or minutes. For example, because Cognos BI makes accounts receivable information easily available, ad hoc queries that once took 15 hours to run now take 15 minutes.

Equally impressive results were obtained by Queen's University at Belfast. They used the Cognos solution to provide administration, faculty instructors, and clerical staff with instant, Web-based access to information. As a result, tasks that once took days now take hours, and the University has realized significant savings in paper costs.

"We've gone from having upwards of 200 reports on stationery and lined paper this time seven years ago, to having no paper anywhere—just reports available on request," says Robert Roulston, Head of Admin Support at the University. "This significantly cut down the stationery order for lined and headed paper, which is much appreciated by the finance department."

"With Cognos, we were able to achieve reliable results almost simultaneously in several fields without wasting any time, We built a solid basis for reporting and analysis in the typical financial-economic environment of a large and highly diversified hospital. We found the Cognos solution to be extremely flexible and adaptable to our specific needs. The unique interface allows us to work with different levels: for clinicians, paramedics, administration, etc."

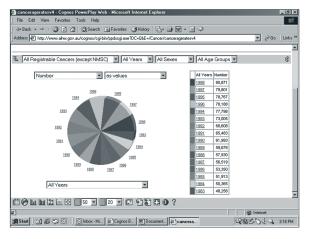
F. Cammaerts, IT Manager, CHU Saint-Pierre

Educational institutions at all levels have selected or deployed Cognos business intelligence solutions, including:

- Centre Hospitalier Universitaire Saint-Pierre
- Écoles de la Psychiatrie Vaudoises
- Erie 1 Board of Cooperative Educational Services (BOCES), New York
- Georgetown University
- Idaho State University
- Ontario College Application Service
- Ryerson Polytechnic University
- Savannah College of Arts and Design
- Toronto District School Board
- University of Glanmorgan
- University of Guelph
- University of Québec
- University of South Carolina
- University of Washington
- University of Technology, Sydney
- University of Texas
- University of Waterloo
- University of Western Ontario

# **HEALTHCARE**

Challenged with limited IT resources and a deluge of reporting and analysis requests, the healthcare industry is quickly becoming a leader in the adoption of information technology and innovative applications of business intelligence.



For healthcare organizations such as the Australian Department of Health and Welfare, Cognos software eases reporting pains and provides a healthy dose of information and insight on patient, supplier, and staffing issues.

"Looking back, we simply couldn't get at that information with the old reporting system – at least not easily. With Cognos PowerPlay you can slice and dice, see what is happening around allocations. It used to take three to four weeks of work to provide financial reports coming out of the legacy system with the associated huge costs. Imagine the time drain on the programmers, and more importantly, on our internal customers. Now with Cognos, it's 'let's have a look right now.'"

Jay Prill, Director of Information Services, BC Ferries

In 1999, waiting list pressures prompted the **Royal** Cornwall Hospitals Trust to push for a business intelligence tool. They wanted a tool with which to examine and analyze trends and waiting lists within their own acute care Trust.

"Thanks to Cognos we can make our information almost instantly available to our commissioners (Primary Care Trusts – PCTs) and other key people in primary care. This kind of data sharing is not something the NHS is traditionally good at," says Richard Johnson. Such access is invaluable to the PCTs because of their pivotal role in setting and steering services. It is equally important for family practitioners to see for themselves, as it happens, the specific impact individual referrals make on the buildup of waiting lists.

This success is backed up by a multitude of other mission-critical implementations. Cognos solutions can be found in healthcare agencies throughout the world, including the National Research and Development Centre for Welfare and Health (Finland), Flanders Interuniversity Institute for Biotechnology, Canadian Blood Services, Amsterdam Academic Medical Centre, Australian Institute of Health and Welfare, and many more.

We follow up our hands-on knowledge of the health care sector with a successful track record of working with some of the world's leaders in the private health-care and pharmaceutical arena. These include Novartis Pharma, Serono International, Siemens Medical Systems, Bayer UK, and a host of other companies.

# LABOR/HUMAN RESOURCES

For Labor and HR departments worldwide, Cognos software offers an effective way to measure, monitor, and manage government budgets and programs.

The City of Ottawa, Canada, for example, needed to seamlessly amalgamate information from 12 municipalities while implementing a cost-effective solution, including a custom-built component, for the city's Human Resources department.

"This process would have taken many months of custom development work to complete," said Greg Geddes, director of IT Services and Chief Information Officer for the City of Ottawa. "With Cognos, we were able to automate many of these processes and saved considerable money and IT resources."



For Labor and HR departments worldwide, Cognos software offers an effective way to measure, monitor, and manage government budgets and programs.

In a number of HR implementations by Cognos around the globe, automated processes have saved time, money, and resources while customized reporting provides individual views of data, all of which leads to better decision-making opportunities. Employees are more efficient because they can gain access to accurate data quickly and can more readily understand program data and segment client needs and behaviors—all of which are used to build more targeted and customized programs for the public.

The end result is a much more efficient and productive workforce because users have essential and relevant data at their fingertips.

# OTHER KEY SECTORS

Over the years, Cognos has worked with almost every aspect of the government and public sector. Simply put, we are the company that makes data make sense. Whether your government department or public agency is one that deals in agriculture, environment, international development, transportation, education, labor, health, or any other facet of the public sector, Cognos has achieved a track record of success.

# SUMMARY

Cognos software creates a collaborative, informationsharing environment. It allows end users inside and outside the organization to access, analyze, and report high-impact information via a secure Web browser. The end result is faster, better decision-making that lowers costs and improves productivity and operating efficiency. Ultimately, governments and public agencies are able to offer a better level of service to private citizens.

Cognos software helps the public sector worldwide get the answers it needs. Governments and the entire public sector are discovering how Cognos software has proven itself in all areas of the economy by:

- Increasing operational efficiencies.
- Managing services more effectively.
- Increasing accountability to citizens.

As the world's leading vendor of enterprise business intelligence solutions, Cognos delivers decision-making software that allows for greater coordination across the entire organization, and leads to better overall performance management. Public and private sector customers have achieved measurable success with Cognos solutions.

Business intelligence systems give government customers a way to immediately improve the way they do business by taking full advantage of intranets and extranets, as well as the Internet. Cognos BI systems run seamlessly in defense departments, universities, social services agencies, public safety groups, and other government departments worldwide, serving a variety of e-business functions from online logistics to the analysis of standardized test scores.

For more information on how Cognos can make a difference in your sector, or to download How Smart Governments Win with BI, visit the public sector area of our Web site at

www.cognos.com/solutions/industry/publicsector

