City of Brampton simplifies IT operations with ibi Cloud
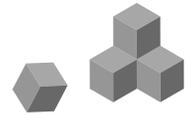
Challenge

For many years, the thriving suburban city of Brampton, Ontario, has relied on integration and data integrity from Information Builders, Inc. (ibi) technologies to establish a comprehensive data management platform.

They were looking to develop analytics assets to improve the programs and services that citizens depend on, from transportation to recreation to law enforcement.

Solution

The City acquired WebFOCUS, part of the ibi analytics platform, for business intelligence (BI) and analytics to deliver actionable intelligence to government workers – and has since moved all of its ibi software to Amazon Web Services' (AWS) cloud. This single-sourced solution includes software, cloud managed hosting services, and cloud support services.

"We chose to move to ibi Cloud as soon as it became available since it offers all the functionality and the exceptional support we need to quickly develop and deploy data-driven applications in the cloud," says Katherine Kulson, chief information officer (CIO) for the City of Brampton. "ibi's software-as-a-service model allows the City's small Business Intelligence and Integration team to focus on value-added activities."

Until recently, the City of Brampton hosted its software applications in Microsoft Azure Cloud. However, because it was an infrastructure-as-a-service (IaaS) offering, the Digital Innovation & IT Division had full responsibility for setting up the platform services (operating systems, databases, development tools, etc.) as well as installing and maintaining all the software applications.

Today, ibi maintains its analytics and data management software within the AWS environment. Additionally, ibi Cloud supports many of the services available on AWS, including EC2, S3, Athena, Redshift, and auto-scaling. The result is a comprehensive, on-demand platform for analytics and data management – with less time, cost, and risk – and without the need to engage multiple vendors.

"The advantage to us is simpler administration," says Gustavo Espinosa, a team lead in the City's Digital Innovation and Information Technology Division.These cost savings are appealing, but what's even more important is being relieved of the management responsibility of maintaining both hardware and software systems. "We can leave the maintenance and infrastructure concerns to Amazon and ibi, and allow our staff to focus on activities that are beneficial to our client base," Espinosa adds.

>> "One of our key priorities for the next five years is to build a data-driven organization. ibi is a key service provider and a key player in that strategic plan. Their cloud solution allows us to spend more time helping our clients rather than maintaining technology."

Katherine Kulson, CIO, City of Brampton

City of Brampton

Industry: Government

Brampton, ON is a thriving suburban metropolis of 600,000 citizens and one of the fastest-growing cities in Canada.

> Created an analytics portal that enables each department to measure progress and visualize areas needing improvement, increasing transparency, and keeping tabs on the day-to-day needs of the community. Deployed these software assets in the cloud to minimize capital expenses.

> Today, the Enforcement & Bylaw Services Division is resolving cases faster, the total number of complaints has gone down, and ridership on city buses is increasing – thanks to greater on-time performance and monitoring of service levels.

Brampton is the first Canadian city to move its analytics and data management activities to the cloud, offering a secure, flexible, and highly accessible IT environment. Working with ibi's Professional Services, the Business Intelligence & Integration team has used the ibi analytics platform to deliver analytics functionality to hundreds of employees in many operating divisions such as Enforcement & Bylaw Services, Transit, Recreation, and Fire.

According to Espinosa, the evaluation team selected ibi's platform due to its affordable license model, superior usability, and innovative features such as Analytics Anywhere and Responsive Design, which make it easier to deploy interactive content to mobile devices.

For example, the City created a portal to manage the Enforcement & ByLaw Services Division complaints in four domains: Law, Property Standards, Parking, and Licensing. The dashboard displays Property Standard metrics on open, closed, and overdue cases, with a year-to-date activity snapshot and a dynamic chart for trending over a 12-month period. Authorized users can sort the data by officer, complaint type, and status, as well as depict selected information on a heat map to see cases geographically.

On the enforcement side, bylaw infraction can be viewed in real time across the city, which guides deployment decisions and influences response models. According to Kulson, these insights have influenced how the City deploys resources and conducts public education campaigns. The Transit department created six dashboards, 40 key performance indicators (KPIs), and more than 120 guided analytics displays.

The Transit Portal helps approximately 100 city employees monitor performance and keep city buses on schedule. In addition, HR managers use the portal to track hours lost to injuries, with the data broken down by union and non-union employees. Other Transit dashboards summarize ridership by age, geography, and fare category, which helps with strategic planning. Some of these analyses are made possible by combining employee data from Microsoft Active Directory to create a master set of HR records.

A point-of-sale dashboard for the Recreation department breaks down revenue generated by the City's recreation programs by age, facility, gender, day of the week, and season. These statistics make it easier to track participation in popular programs – from spending time at public swimming pools to enrolling in classes at community wellness centers. Self-service applications allow workers to visualize the data in different ways and break down recreational data into categories such as snack bar, fitness memberships, educational classes, and sporting events like swimming, golf, hockey, soccer, skating, and snowboarding.

The Recreation department can also monitor items and programs sold at each facility. Guided self-service functionality makes it easy to filter the data, so supervisors can compare performance among facilities. These insights help them increase sales and make sure popular programs are available to the public.

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The ibi analytics platform also augments the standard reporting available in the City's PeopleSoft Finance, Purchasing, and HR applications, drawing data from 20 different sources – including SQL server databases. Unlike the static BusinessObjects reports

Technology used

> Omni, WebFOCUS

> App Studio

> InfoAssist

> Analytics Anywhere

> Professional Services

that the City used in the past, ibi's Analytics Anywhere allows users to visualize metrics such as revenue-to-cost ratios, actual expenditures versus budgets, number of complaints per 10,000 rides, and ridership trends, which are revealed through bar charts.

"The user base is very happy," Espinosa says. "They often talk about how much more proactive and productive they are with the ibi analytics platform. This solution is easy to use and can be used anywhere on any device, providing more flexibility and enhancing the overall user experience.

The Business Intelligence and Integration team uses cloud-based versions of the platform's Designer and Portal tools to develop these analytics assets. They are in the process of extending self-service report development capabilities to various business units as well with ibi InfoAssist.

"We like how InfoAssist facilitates interaction between our business users and the IT department," Espinosa explains. "The business community can create analytic components, such as graphs and maps and interactive documents, and the IT team can put them into dashboards and the Business Intelligence and Integration team can put them into dashboards. The Business Intelligence and Integration group also creates reporting objects and metadata to make sure that business users always have accurate information."

This type of co-development is popular with the Recreation department. They are creating their own dashboards and graphics by leveraging these pre-built objects. The Business Intelligence and Integration team makes sure the data is accurate and comes from trusted sources. The business community uses InfoAssist to display, analyze, and manipulate the data.

Benefits

So far, it's been a formula for success as the City continues to extend analytics functionality throughout the organization.

A new HR dashboard, now in the early stages of development, will include more than 50 KPIs. The City also plans to use ibi's predictive analytics technology to forecast upcoming needs, such as anticipating where it can expect to receive the most complaints, and of what types, so the Enforcement & Bylaw Services Division department can deploy specialized officers accordingly. In the Transit department, predictive analytics could help the City determine how many new buses and transportation resources will be needed.

On the data management side, the City of Brampton is mastering property and employee data through Omni, ibi's data platform. The City also integrates dozens of business-critical applications while leveraging ibi's data platform.

"ibi has provided tremendous support, not only assisting with our cloud migration to AWS, but also helping with day-to-day issues as they arise," Espinosa concludes. "We have had no issues with availability or performance, and the response time for dashboards in the cloud is very good."

Like many progressive cities, Brampton is marshaling its technology resources to usher in a digital future. The City's five-year strategic plan, also known as Vision 2040, is driven by several strategic priorities, including delivering exceptional customer experiences, digitizing business processes, and creating a data-driven organization.

According to Kulson, becoming a data-driven organization hinges on the ability to make decisions informed by trusted, accurate data – which yields clear, actionable insights. She says ibi fits into every one of the City's five strategic priorities: exceptional customer experiences, process-digitization, data-driven activities, Connected City initiatives, and a digital workforce and workplace.

"Our goal is to deliver exceptional digital services to reduce daily frictions, empower

The Enforcement & ByLaw Services Portal uses location intelligence to visualize before-and-after comparisons. This allows supervisors to efficiently deploy officers where they are needed, moment-to-moment.

the staff, and optimize productivity by digitizing our processes," Kulson says. "This is accomplished while using data to optimize our use of resources, and build a Connected City that makes the lives of our community better. ibi technology helps users discover new efficiencies, create self-service business processes, and ensure good digital governance."

The City of Brampton is embracing the Internet of Things (IoT) to offer better services to businesses and residents, as well as to manage municipal resources more efficiently. Its Connected City initiative will integrate IoT data from various types of sensors to create a "digital nervous system" that helps the City optimize operations, reduce costs, and connect more directly with its citizens. Initially, the program will enable smart lighting, smart parking, and other smart city services from sensors placed throughout.

The City has also begun work on a data governance project to ensure its data meets the needs of the workforce and the community. ibi's data platform will play a key role in helping to establish a data catalogue and data hub that defines roles, responsibilities, rules, processes, and practices.

"Data collected and maintained by the city staff, by members of the public, and by sensors around the city becomes a critical city asset," Kulson adds. "Like all assets, it must be effectively managed throughout its lifecycle – which is part of our strategic plan."

The City of Brampton is intent on empowering its employees to work better and faster to gain the "digital literacy" needed to serve citizens with the utmost efficiency. Data and analytics underlie all of these initiatives, from enabling a Connected City to creating a digital workplace.

"ibi technology plays a critical role in our strategic priorities as we roll out KPIs and dashboards for all business units," Kulson concludes. "Self-service is one of our guiding principles, and ibi supplies technology to visualize data, improve data quality, and increase the accuracy of the information we depend on."

About ibi

ibi is a data and analytics software company that embeds intelligence into — everything. From the beginning, ibi has known the importance of data and insights to make better decisions. We help organizations get their complex and disconnected data in order, so they can build, embed, and automate intelligence into everything they do. By preparing organizations for the future and turning them into builders – information builders – everyone can use enterprise trusted data at scale to drive their growth. Whether our customers use pre-built applications or build their own solutions for their data and analytics challenges, ibi powers their innovation and reinvention. ibi's open platform and industry-specific building blocks accelerate speed to market, improve operational efficiency, and enhance their customers' experience.

ibi. build a better future.

Request a demo
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