

## OVERVIEW

### Client

The City of Montreal

### Client Profile

- 19 Districts
- 20 Corporate Services
- 25,000 employees

### Problem

The city wanted to streamline its staffing processes and standardize both the assessment instruments used and the processing of results obtained by candidates.

### Solution

“Online Testing” is based on the uVox platform, which already offered most of the features required and has been adapted to the business processes of the City according to the final specifications.

### Benefits

The City is now able to assess candidates using a standardized, secure, fair and just process. The City is now well positioned to enjoy benefits recurring year after year.

## The City of Montreal optimizes its evaluation and staffing processes with an online test delivery system based on uVox technology.

One of the oldest cities in North America, Montreal is also among the largest with a population approaching 2 million people and an area of 365.13 km<sup>2</sup>.

Montreal is a major leaguer with its various offers of Industry, Tourism and Sports and its strategic multimodal location on the St. Lawrence River.

The city administration has over 25,000 employees spread among 19 districts and 20 corporate services. In 2013, 20,000 internal and external candidates were evaluated online to fill job positions.

*“Implementation of a computerized online testing system has helped the City of Montreal greatly improve its candidate assessment process.”*

— Joanne Provost, Project Manager and Senior Advisor to the Human Resources Department for the City of Montreal.



## The Problem To Solve

Historically, each administrative unit was responsible for its own staffing and acted as an independent and autonomous staffing center. As a result, the City of Montreal experienced disparities and redundant costs associated with the evaluation of candidates.

Also, as a public entity, the City has to be prepared to defend itself before organisms to which candidates can appeal. It therefore has to ensure the validity of its candidate testing and evaluation methods, provide a secure testing environment and protect the confidentiality of candidates' results.

**The city wanted to streamline its staffing processes and standardize both the assessment instruments used and the processing of results obtained by candidates.**

Joanne Provost says...

*“The proposed solution had many key advantages.”*



## The Solution

The City had already taken steps to standardize some elements of the recruitment and promotion process. For example, it used the Oracle iRecruitment solution for managing job applications.

In 2009, the Human Resources Department of the City prepared a call for tenders for a turnkey system to manage online testing. The system needed to be able to manage all the candidate evaluations for job positions across all departments and boroughs.

## Supplier Selection

After a rigorous process of calling for tenders and evaluating suppliers, the City contracted with Ullix Information Systems Inc. of Montreal. Ullix offered its uVox solution, which closely matched the main criteria:

- Model tests and create an assessment environment that:
  - Respects the principles of psychometric assessment.
  - Satisfies the requirements of validity and fairness.
- Integrate business rules for candidate registration, and determination of exemptions based on candidates' historical data.
- Integrate with *iRecruitment*.
- All candidate registration data originates in the existing applicant management system (*iRecruitment*) and is automatically interfaced to the the online testing system.
- Forward candidates' results to the applicant management system once their evaluation is completed.
- Provide an environment secure enough to:
  - Ensure the confidentiality of the test material.
  - Ensure the confidentiality of test results and personal data of candidates.
- Meet the requirements of various stakeholders such as:
  - The Union of Montreal Civil Servants.
  - The Public Service Commission of Montreal.
  - The staffing and computer services of various internal clients of the system.

*“ This is a large-scale project with a high level of technical and administrative complexity. So we needed a solution that has the functional depth and robustness to meet our current and future needs. This includes the ability to support a centralized or decentralized operation according to the City administrative policy in effect. ”* — Joanne Provost

## Implementation of the “Online Testing” Solution

The project was named “**Tests en ligne**” or “**Online Testing**” and its implementation began in 2010.

To direct and coordinate the implementation, the Human Resources Department had assigned a multidisciplinary team including organizational psychologists and experts in psychometrics.

### **This team had, among other tasks:**

- To develop and validate assessment instruments to implement.
- To ensure that the specifications of each test were met when put online.
- To develop norms for each test.
- To ensure compliance with the specifications that were set out in the call for tenders.

As a first step of the implementation, Ullix and the Human Resources Department conducted a thorough needs analysis to prepare detailed final specifications for developing the system.

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The project was organized into implementation phases. The first phase included the integration of all assessment contents, a pilot project and the system launch.

**The main achievements of Phase I were:**

- Computerization of 50 tests for language, clerical, numerical and analytical aptitudes.
- Integration of multiple parallel forms per test.
- Configuring business rules for registrations.
- Management of test retaking and exemptions.
- Configuration of assessment protocols for each position for which the system was to be used.
- Interfacing with the Oracle iRecruitment solution.
- Ability to serve 200 client users.
- Ability to handle 20,000 candidates per year.

One of the specifications in the call for tenders was that the system should be hosted within the IT infrastructure of the City and that data should be stored in the Oracle corporate database. Ullix worked with the Department of Information Technology (STI) of the City to design a secure environment able to meet the expected demand.

In spring 2012, the city built a testing facility dedicated to the administration of tests by the “Online Testing” system. The new space has a capacity of 100 candidates allowing it to evaluate more than 200 candidates daily in one place.

**Ullix completed Phase II of the project in 2013. This phase aimed to extend the capabilities of “Online Testing” to support the evaluation of candidates for other job categories. In this phase, a new feature was developed for manual correction of writing skills tests.**

**In all, 20 new tests were computerized:**

- In-baskets.
- Tests for cognitive, analytical and customer service skills.
- Tests for health and work safety and teamwork.
- Writing skill tests corrected manually by qualified personnel.



## Operation of the “Online Testing” Solution

“Online Testing” has been in production since January 2012. With the system, applicants are automatically enrolled in a battery of tests corresponding to the job applied for. According to the history of the applicant and the business rules in place, the system determines if an applicant should be exempted from certain tests or be entitled to retake a test in the case of a past test failure.

“Online Testing” allows the management of test sessions. Once candidates are assigned to a session, they are notified by e-mail directly from the system. The invitation informs the applicant of the date and place of the session, as well as tests to complete, time to plan and required preparation.

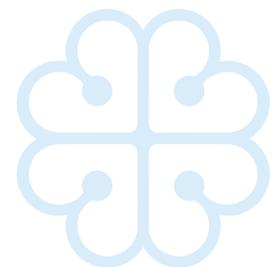
Tests are completed under the supervision of administrators in a secure and controlled web environment. The system allows administrators to monitor the progress of each candidate in real time. Because each computerized test has multiple parallel forms, the system ensures that the same candidate will not complete the same test form twice.

If a candidate has several tests to complete, these are presented as an integrated test battery, which on the one hand, greatly simplifies the management by test administrators, and on the other hand, enhances the candidate’s experience.

Once the candidate’s session is complete, the system scores the tests and generates a participation report. This report contains the results for each test and a letter notifying the applicant of the success or failure of his/her participation, according to the position requirements. These results are automatically transferred to the iRecruitment application management system so that internal requestors can process each application.



*“ It is hard to quantify the savings, but the improvements to date indicate that we made the right decision to proceed with this project. ”* — Joanne Provost



## Benefits of the “Online Testing” Solution

The City gains tangible benefits that are both immediate and ongoing as the system evolves:

- Shorter candidate evaluation cycle (City administrative units are served more efficiently).
- Streamlining the management of applications:
  - Assessment exemptions valid for the entire City.
  - Elimination of duplicate evaluations.
  - Reduced duplication of common skills assessments.
- Simplified administrative process. It costs less to evaluate a candidate because of:
  - Automation of the assessment process.
  - Reduction of the effort by internal professional resources throughout the City.

There are also other significant advantages:

- Fairness for candidates: the same tests administered for the same job.
- Candidates who are better qualified for the positions for which they are applying (This is a very important but difficult-to-quantify benefit).
- Improved candidate experience.
- Improved services to citizens/taxpayers/candidates.
- Ability to use assessment data for employee development and for the management of career path programs.
- Better control of candidate and test data.
- Better protection against legal actions.
- Brand strengthening of the City by positioning it as an employer of choice through the use of technology.

As a result, the City is now able to assess candidates using a standardized, secure, fair and just process. In addition, the system is flexible enough to evolve with the needs of the City, such as the introduction of other assessment methods or the use in a centralized or decentralized way. The City is now well positioned to enjoy benefits recurring year after year.

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