

## Designing a human-centered experience for the field workers of a large Canadian electrical utility

Continuing on its journey to transform for a new era, one of Canada's largest electrical utilities launched an ambitious initiative to help optimize maintenance costs and efficiency while enhancing the employee experience and tool adoption during inspection work in power plants and dams. After several internal initiatives, the utility turned to CGI for help in developing a new version of its mobile application called Asset System-Monitoring Inspection (ASM) that would meet its requirements.

For asset-intensive organizations managing complex infrastructure that serves customers across Canada's vast geography, optimizing maintenance costs and operational performance are critical to success today. The race is on to embrace modern digital technology that will drive down maintenance expenditures, minimize costly equipment failures and down-time, and enhance employee productivity.

### Challenge - Accelerate the digital adoption of its field workers

While digital transformation and mobility strategies are the way forward, organizations often struggle with change-management challenges during the transformation journey. Successfully delivering new capabilities requires organization-wide employee adoption in order to meet business objectives. While a higher level of attention and investment goes into enterprise technology implementations, user experience and user adoption process are often underestimated.

Our client sought to improve the overall experience of employees supported by information technology and digital solutions across its sites. They understood the importance and value of developing an internal application that employees would enjoy using. The scope consisted of co-constructing a mobility vision and wire-frame prototype, thus kick-starting their three-year transformation plan. In addition, the client wanted to provide a modern, convenient, and reliable employee experience to attract new skills and retain talent.

To achieve this objective, we recognized the importance of empowering the workforce operating in the field with digital solutions that they would trust and rely on at all times to solve their challenges and meet their diverse needs. Leveraging design thinking and a user-centric approach was key. Design thinking is essentially a creative, iterative methodology that aims to understand user needs within a specific context and create solutions that are desirable, technically feasible, and sustainable. The methodology identifies alternative strategies and solutions that are not instantly apparent without critical insights from users themselves.



The scope consisted of co-constructing a mobility vision and wire-frame prototype, thus kick-starting their three-year transformation plan.

## How we helped - A user-centric approach

To develop the Asset System-Monitoring Inspection (ASM) application, we proposed a user-centric approach influenced by design thinking—replacing a one-size-fits-all approach with a powerful, intuitive mobile solution that was precisely configured to support specific job roles and tasks.

We followed a six-step methodology including the following activities: Understand, Define, Brainstorm, Prototype, Test, and Measure.

It all started with feet on the ground: CGI's utilities, mobility, and customer/employee experience subject-matter experts conducted extensive field observations and experimentations across the utility's dams and power plants (seven sites), with a multitude of users. Interviews, workshop sessions, and brainstorms were conducted.

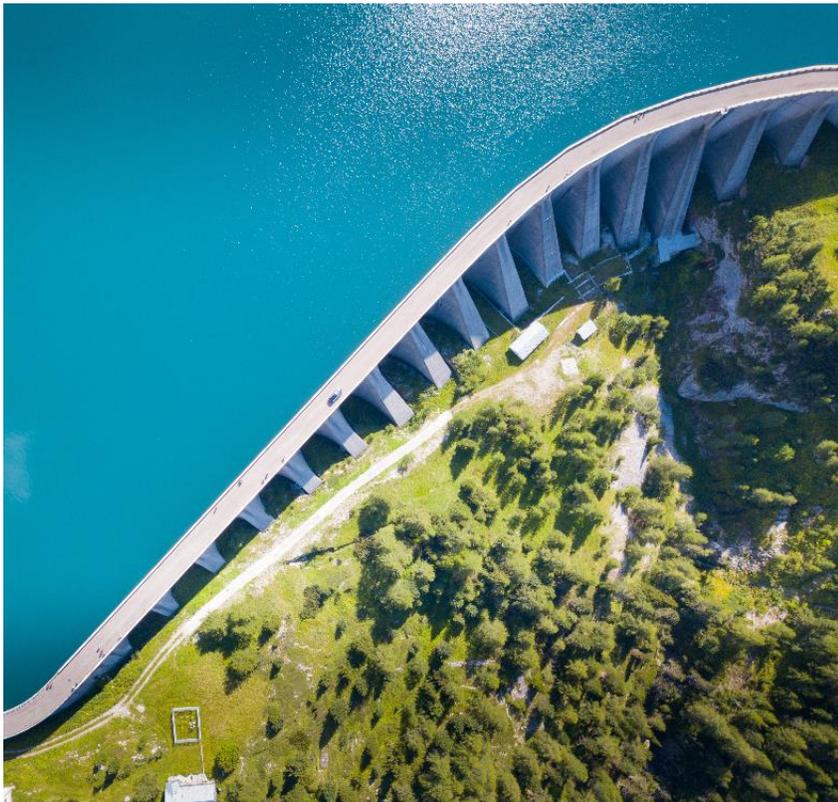
This thorough process and proactive approach enabled our teams to gather staff input that was key to identifying and analyzing their challenges, needs, and expectations, which were essential for building the first prototype.

Ultimately, the first user test on a prototype allowed us to see what was working well and what had to be improved from the get-go and revealed the core components that were relevant to users for the next development.

Key stakeholders got involved at each step to ensure that industry best practices for modern mobile capabilities were in place and aligned with all team requirements.



7 sites (dams and power plants) were visited and surveyed by our experts.



## Value delivered - Boosting employee adoption of digital solutions

CGI's "on-the-ground" approach enabled the production of a prototype for the Asset System-Monitoring Inspection (ASM) application, resulting in utility field workers embracing the application's UI and UX features and their easy adoption on smart mobile devices.

Our collaborative approach with the utility's digital team, business lines, and field workers was essential to success, giving employees a key role in designing a user-centric solution that they would adopt in their daily routine and rely on to enhance productivity and results.

Encouraging and sustaining employee engagement with the utility's new digital capabilities from the start was a key component of the ASM project's success, allowing our client to save on development costs, tools, and training with a solution that ultimately meets users' day-to-day needs.

The project is still ongoing. Following the user tests, models are being developed in order to integrate observations, comments, and new requirements in the future development of the application.

We are proud to note that our use of design-thinking methodology has set a precedent for future client projects, as we showcased that design thinking enables effective change management and reliable employee adoption of modern digital capabilities.

### CGI and the client

Our success on this project is the latest example of CGI's partnership with the client over the past two decades, during which we have developed a clear understanding of the client's culture, operations, capabilities, and requirements for success. As the client's digital journey continues, we are expanding our services across a variety of crucial areas that include business consulting, cybersecurity, and data analytics.



**“The methodology deployed by CGI had a major impact on the engagement and satisfaction of the business users.”**

**Product Owner,**  
Large Canadian electrical utility

### About CGI

#### Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. We are insights-driven and outcomes based to help accelerate returns on your investments. Across hundreds of locations worldwide, we provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

For more information about our Business Consulting services in Canada, visit [cgi.com](https://www.cgi.com).