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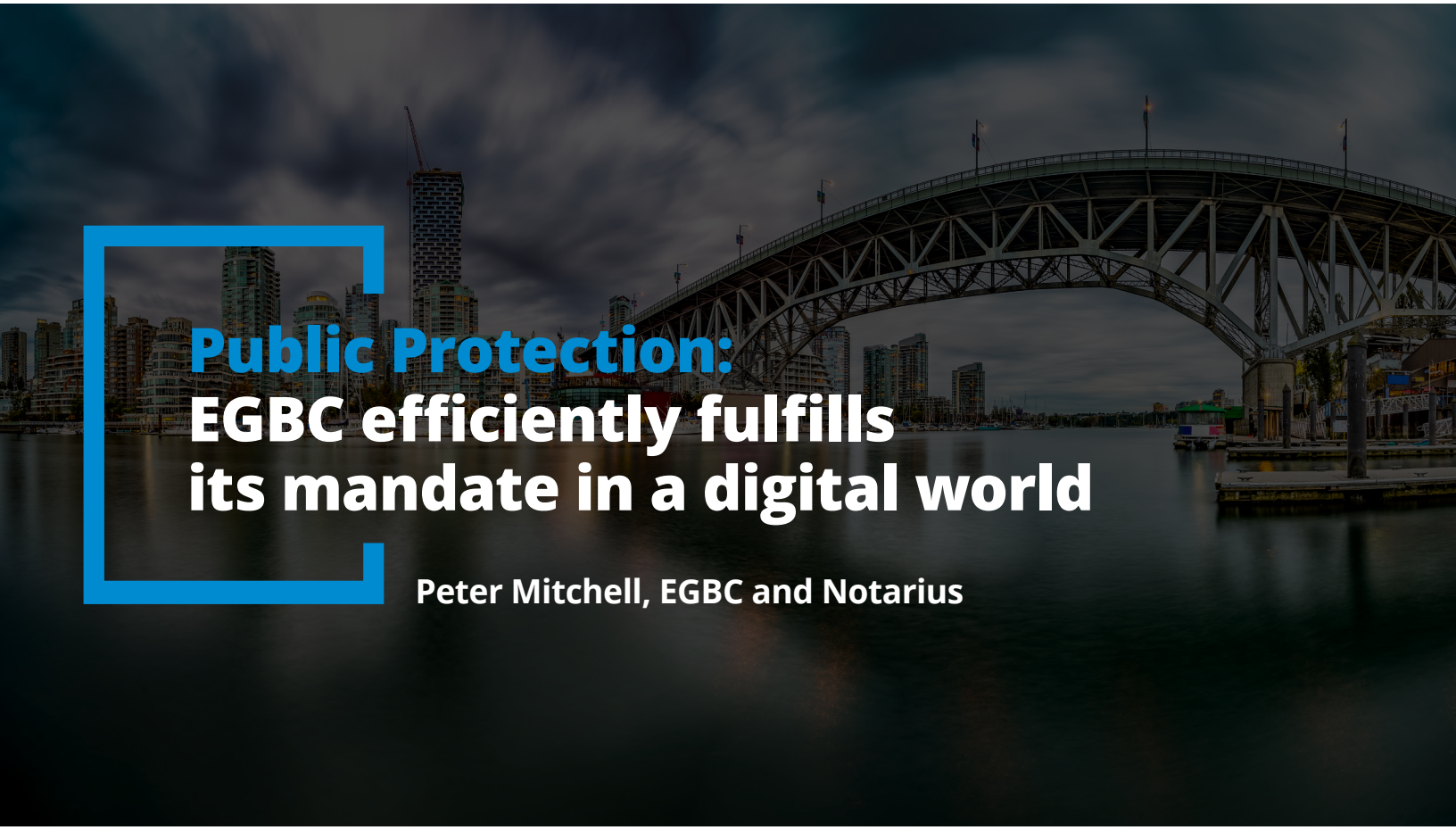


Public Protection: EGBC efficiently fulfills its mandate in a digital world

Peter Mitchell, EGBC and Notarius

By offering digital signatures to its members since 2007, EGBC has:

- Issued new guidelines requiring software-based simulations
- Delivered digital transformation tools to more than 4,000 companies
- Facilitated the work of licensing authorities
- Protected its members from fraud and counterfeiting
- Made remote work possible for engineers and geoscientists

Approximately 53% of Canada's labour force is between the ages of 19 and 44.[1] While Generation Y has learned its way around digital environments, for Generation Z, digital technology is fundamental when it comes to choosing a job.

91% of Generation Z believe that the technologies offered in their work-place would influence where they decide to apply for a job.[2]

For professional associations that train engineers, geoscientists, and architects, it is a daily challenge. How do you reconcile legal obligations while continuing to adopt to fast-changing technology? How do you ensure that new digital practices protect the public while maximizing the work of professionals?

[1] Statista, *"Total number of employed persons in Canada in 2020, by age group"* on the website statista.com, 2021 [online], https://www.statista.com/statistics/437700/employment-in-canada-by-age-group/ (Page consulted on April 27, 2022)
[2] Dell, *"Research : The Gen Z Effect"* on the website dell.com, [online], https://www.dell.com/en-us/dt/perspectives/gen-z.htm (Page consulted on April 27, 2022)

Engineers and Geoscientists British Columbia (EGBC) took the bull by the horns several years ago. Peter Mitchell, Director of Professional Practice, Standards and Development, tells us how his professional association has reached out to the new generation and adopted innovative technology practices.

EGBC: Restoring confidence

Cumbersome. Resistant to change. Professional associations are often thought of as being "stodgy old regulators."

Fortunately, things have changed. Peter asserted that EGBC would be an association that serves its members.

"We want to make their lives easier and to be an ally who can help them facilitate their business model. We are very much focused on value-added solutions and being a trusted partner."

EGBC's mandate is to provide guidance to British Columbia's engineers and geoscientists. It ensures that they fulfil their obligations with respect to codes and requirements, that they adhere to their code of ethics, and complete mandatory continuing education. EGBC has also challenged itself to fulfilling its mission through the optimization of the workflow of its registrants. It does this by establishing cutting-edge guidelines and providing innovative tools.

"We have the opportunity to support our registrants in identifying what good professional practice looks like and how they progress throughout their career. We want to support them to carry out engineering and geoscience in a wide range of activities."

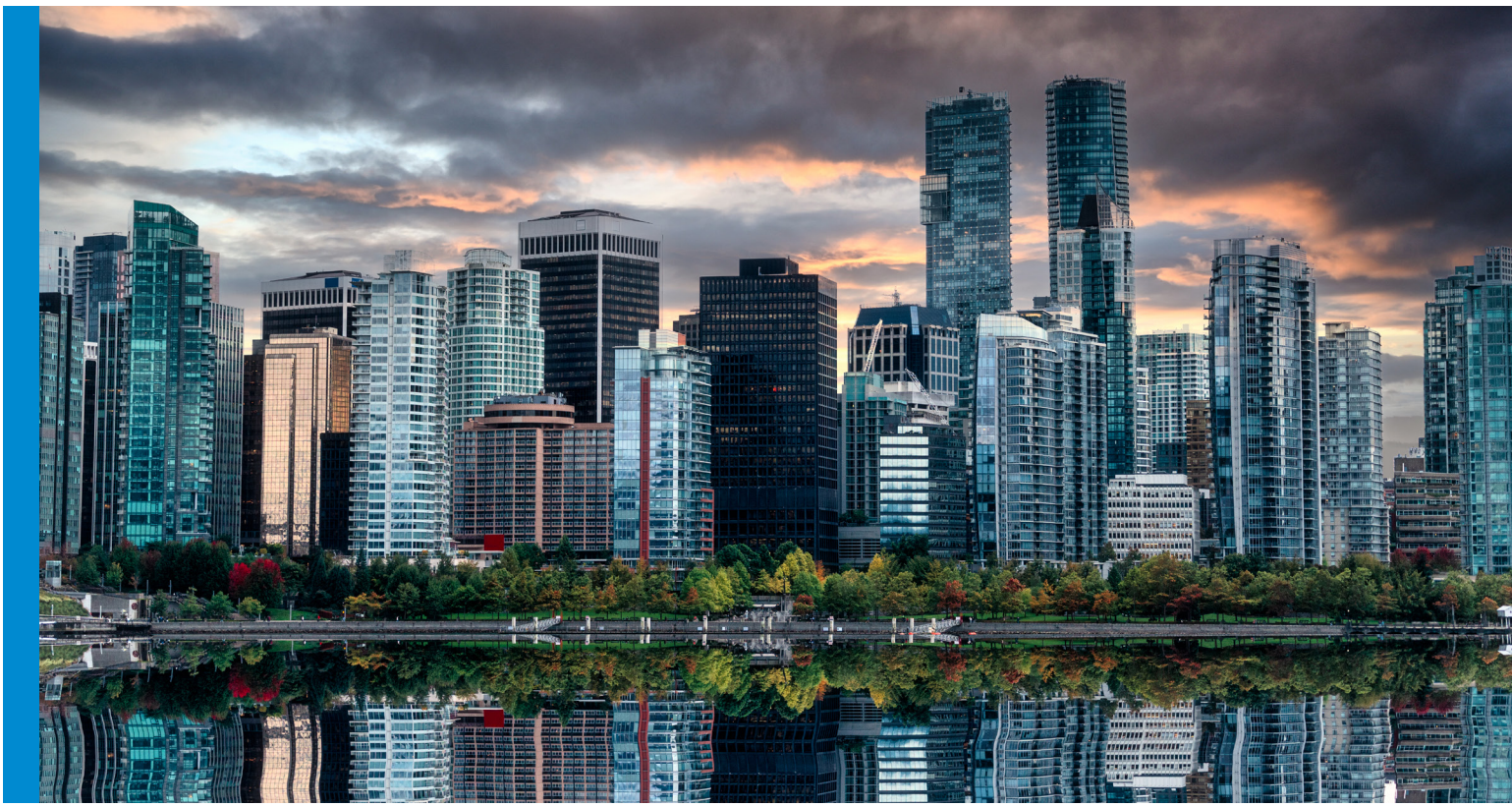
With 40 years of engineering experience, Peter admits that he thrives on providing value-added regulatory tools that support registrants in their professional practice.

He is impressed by the rapid evolution of engineering and geoscience technology. For him, this is an opportunity to promote the adoption of new technology so that it is used in the best interests of our communities.

"Technology is impacting all aspects of society in both the private and public sectors. And the application of engineering and applied sciences is impacting everything that we do. As a regulator, we must manage this impact with value-added solutions that protect public interest."

Peter explains that one of EGBC's greatest successes is that it found a solution for authenticating electronic documents before it became trendy.

Fifteen years ago, Peter and EGBC quickly saw where the



practice was going. At that time, computer-aided design was becoming increasingly popular.

Today, it is virtually omnipresent.

Digital signatures that add value

"Technology can be straining and trying to keep up with it is a real challenge."

Indeed, the massive adoption of design software and simulations that leverage metadata has drastically changed practices. It also makes paper processes increasingly outdated.

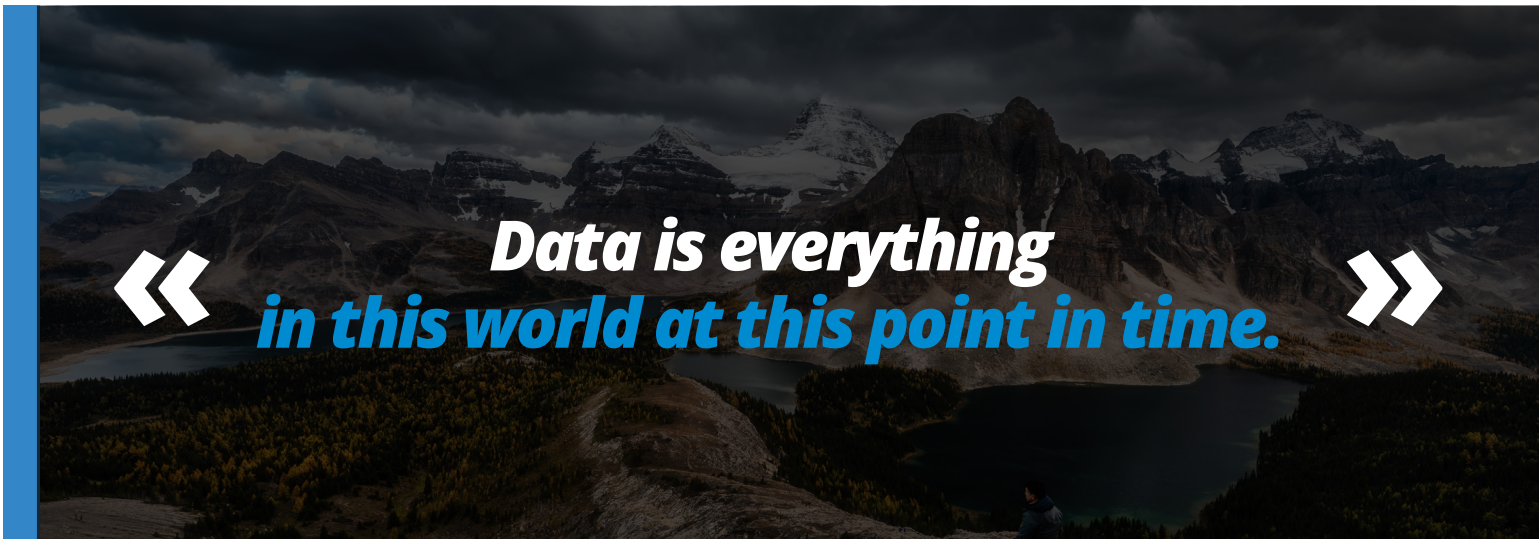
"Engineers and geoscientists produce large drawings and a huge number of them. How are these kept? How do you archive them without taking up eight 20-story buildings? Electronically? Yes! But you also need to ensure that the archives are reliable."

So, how can we ensure the legal reliability of electronic documents? If a design error causes an accident, how can the public be protected if you can no longer trace a document back to its author?

When Peter and his team turned to Notarius, they found an unexpected ally. Not only does the digital signature provided by Notarius ensure the integrity of their documents, but it also protects EGBC's registrants from fraud.

Now, more than 6,000 EGBC registrants use the association's digital signature.

"Only our engineers and geoscientists can apply their digital signature with their password. Therefore, a digital signature is more secure that the old-fashioned seal because no one can steal it. Otherwise, you could just photocopy an image of somebody's seal and put it on the paper."



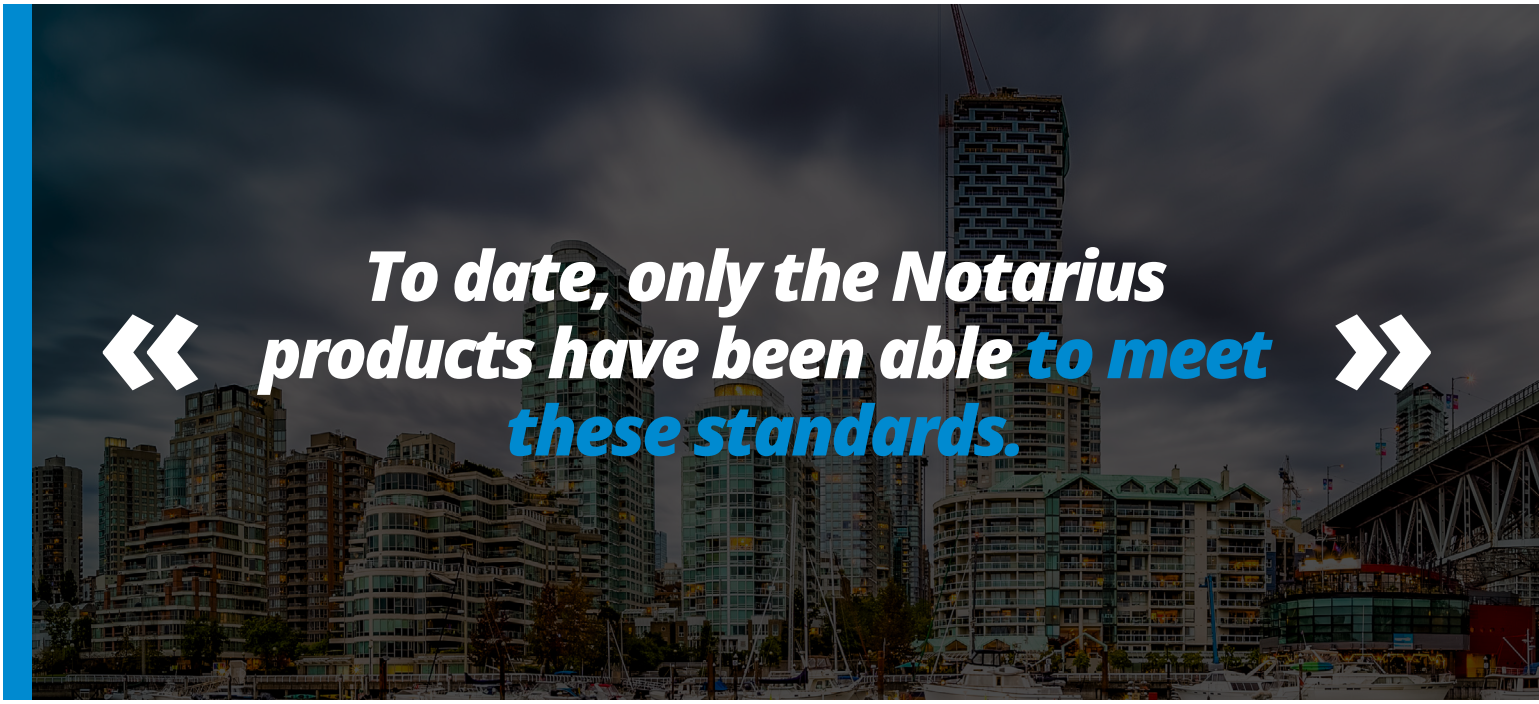
Thanks to EGBC's digital signatures, registrants are able to protect themselves, protect their electronic documentation, archive it, and share it quickly and securely.

But it doesn't stop there. Peter points out that, beyond security, EGBC digital signature subscribers greatly increase their efficiency by using ConsignO Desktop, the free signature software offered by Notarius' digital signature.

"ConsignO Desktop makes a huge difference. With the software, our registrants can affix their digital signature to multiple engineering drawings in seconds. (...) This ability to sign multiple professional documents instantaneously, with your signature and date in a secure way, was seen by the industry as a huge step forward in efficiency!"

This technological shift in authentication has provided EGBC with the means to fulfil its mandate as a regulatory authority in digital environments.

Peter also commented that the adoption of Notarius' solutions has had a much broader impact than expected on engineering and geoscience.



“Data is everything in this world at this point in time. So, managing data, interpreting that data, and then authenticating it in a manner which is efficient and secure is very relevant.”

In addition, because EGBC influences the public infrastructure ecosystem, it has also ensured that projects submitted for permitting using a digital platform can be verified by inspectors and licensing authorities.

This is where the EGBC digital signature still plays a major role.

“For example, when a registrant submits their documents to a municipality for a building permit, any building official can go into the documents, click on them, and confirm that the registrant was in good standing at the point in time that they made their submission. (...) They can proceed with the submission in a safer way.”

As a result, not only do members’ projects meet much more stringent requirements, but municipal governments can issue permits faster while ensuring greater public protection.

“The digital signature speeds up the preparation and submission of official documents. The result is a rapid acceleration of the permitting process which allows for a quicker application of engineering and geoscience solutions which address important societal issues, such as climate change.”

Notarius and EGBC, a history of solidarity

In the beginning, Notarius and EGBC were not able to hit the ground running.

As Peter says, at the outset, there was a great deal of reluctance within the organization. Several stakeholders proposed creating their own infrastructure or doing business with a start-up.

“So, we adopted international standards needed to provide a digital signature and required a third- party verification. To date, only the Notarius products have been able to meet these standards.”

Due to stringent standards, Notarius became the obvious choice for EGBC. And due to the trusting relationship that they have built over time, the partnership is highly valued by registrants.

“To have a partner like Notarius where we can develop a standardized approach for authenticating professional documents securely has contributed significantly in our ability to protect the public interest.”

Peter praises how Notarius' team helped the association when the pandemic began.

"When COVID started, we said to Notarius, 'Our registrants are struggling, they can't go to the office anymore.' Their response was amazing. They said, 'We hear you. How can we support you?' "

Notarius was very sensitive to the financial challenges brought on by the pandemic, but also to the challenges of deploying the solution. In fact, the long-standing partnership made it possible for British Columbia's engineers and geoscientists to smoothly transition to remote work, despite the urgency of the situation.

"It was really neat to see their support and we got a lot of recognition for that by our registrants."

Digital efficiency: supporting an evolving legal framework and industry

By demonstrating the efficiency of the technology and its added value in protecting the public, EGBC was able to incorporate digital authentication of professional documents under the Professional Governance Act.

The 4,000 public and private firms that it regulates are appreciative of EGBC's support in standardizing this process across the industry.

The EGBC digital signature is also highly valued.

"Firms find that the digital signature allows their engineering and geoscientist workforce to be more efficient and effective, and to deliver a better product. It's more secure and comfortable, plus they can now store their documentation digitally which saves a lot of money, time, and space."

By saving paper and space, companies and organizations can better meet their carbon-neutral commitments.

"This is a very green technology and the amount of paper that's wasted in preparing and submitting engineering documents and geoscience documents for review is significant. The EGBC digital signature is eliminating all that waste."

By allowing leaders to embrace digital ecosystems, EGBC has boosted its workforce appeal. Peter says:

"When they see the EGBC digital signature, young engineers and geoscientists are impressed by our work as a regulator. They feel that we are moving forward into the 21st century in a progressive way."