

#RegHackTO

The learnings from a Canadian first regulatory hackathon organized by the Ontario Securities Commission

by Chami Akmeemana

When Maureen Jensen (Chair and CEO of the OSC) tasked me as the fintech advisor to the newly formed OSC LaunchPad, it was quite the honour. As part of the mandate, I was asked to give some recommendations on how RegTech could help improve existing processes, technology and data analytics.

One of my recommendations was that the OSC organize a Canadian first hackathon, one that would fulfill many things – a) See what solutions a small group of competitors could come up with as a result of a 38 hour pressure test environment b) Educate the market place on regulatory issues c) Give the market the confidence that the regulator is willing to walk the talk and learn from fintech and regtech solutions d) Encourage game changing thinking and behaviour based on the learnings realized.

The hackathon began on the evening of the 25th of November and concluded at 2:30pm on Sunday. The event was significant enough for the Ontario Minister of Finance, the Hon. Charles Sousa and Parliamentary Assistant, Yvan Baker (PA to the Minister Responsible for Digital Government and the Minister of Finance) to attend.

Hackathons typically bring programmers, UX/UI designers, heads of strategy and subject matter experts together in teams that compete to help solve theme-based challenges. The theme for RegHackTO was around Solutions that help streamline the regulatory environment. Twenty nine teams - 125 participants - signed up with a common goal in mind.

THE AGENDA WAS AS FOLLOWS:

OSC Chair and CEO, Maureen Jensen, welcomed everyone and set the scene in her opening address on Friday afternoon. Next the criteria for judging was outlined, and the problem statement was explained in greater detail by OSC staff (RegTech, Know your Client (KYC), financial literacy and capital markets). The official kick off was 7:30pm and the 'hacking' began!

As Sunday arrived, the judging started in earnest. Some teams had been working non-stop since the Friday evening, and most of them deployed blockchain, a trust-based technology that enables asset ownership to be tracked without the need for a central authority.

THE WINNERS

The 1st placed team **Existence Labs** not only beat the competition, but their team leader earned a seat on the OSC's Fintech Advisory Committee. This team focused on proof-of-compliance within KYC, providing a digital trail of unforgeable cryptographic signatures and timestamps that presented irrefutable time-based evidence of compliance.

Team RicLoo came 2nd for their TLS registry on the ethereum blockchain. They identified that SSL certificates are only provided by a highly trusted group of companies which perform non trivial background checks. For example, government issued ID, tax records and notice of incorporations must be provided to get many SSL Certificates. TLSRegistry can be used to verify proof-of-trust for any user, which is censorship-resistant, forgery-proof and resilient (zero downtime).

The 3rd placed team **Extreme Securities 2k16** proposed a solution for monitoring and evaluating Initial Coin offerings (ICOs), the crowdfunding-cryptocurrency version of Initial Public Offerings (IPOs).

OTHER SOLUTIONS

The hackathon also brought together technology and subject matter experts in a unique environment that encouraged the resolution of existing regulatory pain points.

For instance, a leading blockchain technology company formed a team with a prominent reinsurance organization. This collaboration resulted in the development of a new blockchain-based application for consistent data aggregation across multiple insurance providers, enabling more accurate calculations of important industry metrics such as reinsurer surplus values, the numbers upon which the health of insurance markets ultimately depend.

A leading bank team identified that Canadians have an average of \$4,000 in their chequing account and about 48% expressed distrust in financial institutions. They created an app that encourages ordinary people to invest part of their savings through crowd funding to purchase investments. This allows a lower barrier to entry and lower fees. The investor chooses an amount they are comfortable to invest with and those funds are pooled together with other like-minded investors to purchase securities. The fees are also shared by the

group and is significantly lower than what an individual will pay. The app also includes investment advice based on which pool the investor has registered for.

An honourable mention was given to a team of recent high school graduates. This team discovered that each year in Ontario there is an estimated \$1.2B in fraudulent fund management by unverified financial advisors. They built a solution to verify financial advisors by building an algorithm to analyze data from the OSC's database and creating a custom LinkedIn API certification, which is validated through a Twilio API integration.

Another team from a leading software company identified that making CRM2 representation in a machine readable format and provide an open API to it so that any application developer can utilize it to perform analytics and create reports that suits the consumer of the report which will provide a huge positive impact on financial literacy for the consumer. Consumers will no longer be bounded to limited static data presentation given by their financial institution and hard to track long term performance year over year.

Another blockchain-based solution was presented which allows investors to store, maintain and share one or more suitability profiles with dealers. The application transforms suitability information stored by dealers from something that is static, repetitive, potentially inconsistent, and potentially outdated, into a powerful tool for investors and dealers that also reduces dealers' costs.

CLOSING COMMENTS BY FINANCE MINISTER CHARLES SOUSA

"The Ontario Securities Commission is to be commended for having the vision and initiative to become the first regulator in Canada to host a hackathon such as this. I was impressed and inspired by the energetic talent and by the quality of the ideas presented at the OSC's first-ever RegHackTO. I am more convinced than ever that Ontario is well positioned to become a fintech leader

because of our strong financial services and technology sectors as well as our highly trained, highly skilled workforce. Our government is committed to embracing our rapidly growing fintech sector and striking a balance between fostering innovation while ensuring investors and consumers are protected."

CLOSING COMMENTS BY OSC CHAIR AND CEO, MAUREEN JENSEN

"I am humbled that so many very talented coders gave up their weekend and several fintech firms shared their API and resources to help the OSC solve key regulatory issues. I am impressed with the solutions presented and we will use these in our work going forward. It was great a great event!"

CONCLUSION

Last Sunday, RegHackTO was rated #2 on Twitter, next to, wait for it... the Grey Cup! Social media win aside, 130+ participants are now spreading the word, educating people on the OSC. The OSC up until RegHackTO was seen as somewhat less than progressive. The impact of the hackathon could very well prove to be a game changer, providing a new lens for the regulators to view and embrace the changing dynamics of the business world, and start operating in a proactive and forward thinking approach.

Other regulators in Canada could perhaps follow Maureen Jensen's lead to modernize the regulatory environment such that they stay ahead of the times and relevant in their respective markets.

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Chami Akmeemana the Fintech advisor to the OSC led RegHackTO from idea to execution. He is the Director of regulatory solutions at ConsenSys and former Managing Director Global markets at the Global Risk Institute. He has a multi-faceted back-ground that includes engineering, law enforcement, entrepreneurship with successful exits, and big data.