



Member Success Case Study | Written By: Audrey Woods

Canadian Imperial Bank of Commerce (CIBC)

In the banking industry, consumer trust is of paramount importance. The relationship between a bank and their clients depends on the confidence customers have when they entrust an institution with their money. Everyone wants to feel secure with their finances and know that their chosen bank is doing everything possible to protect their data and assets.

ABOUT CIBC

Founded in Toronto in 1867, the Canadian Imperial Bank of Commerce (CIBC) has grown into one of the Big Five banks of Canada, with 45,000 employees in over 1,000 branches servicing 13 million clients. They currently have over \$800 billion in total assets and a reported net income of \$6.4 billion.

As a “modern, relationship-oriented bank,” CIBC is [focused](#) on “delivering superior client experiences” with a heavy emphasis on technology. Their app got the highest overall score for mobile banking functionality from Forrester and they’re actively trying to attract young talent with “new ways of analyzing [problems] and proposing solutions,” says Senior Consultant Liliana De Sa. In the pursuit of making the client experience better, CIBC is seeking out both ideas and technology that will help the Canadian public reach their financial goals.

Which is why they’re glad to be interacting with academic institutions like MIT CSAIL

CONNECTING WITH ALLIANCES: FINTECH@CSAIL & SCRAM

CIBC’s relationship with CSAIL began in 2018 when they joined CSAIL Alliances research initiative [FinTech@CSAIL](#). Following successful engagements with other MIT organizations, they were keen to explore further opportunities on campus, which is why they jumped on the opportunity to join the initiative. Executive Director of the Alternate Solutions Group Andrew Brown explains how CIBC appreciated the ability to submit problem statements to the researchers involved in [FinTech@CSAIL](#) and be a part of the decision-making process about which proposals were funded.

Their involvement in the research initiative led CIBC to connect specifically with Technology Policy Director Taylor Reynolds and an Internet Policy Research Initiative ([IPRI](#)) project called SCRAM. Short for Secure Cyber Risk Aggregation Management, SCRAM was designed, according to their [website](#), to “aggregate sensitive cybersecurity defense and loss data and improve our security without requiring organizations to disclose their own sensitive data.” As Sr. Cryptography Consultant Ken Giuliani explains, SCRAM is based on a new kind of technology called Fully Homomorphic Encryption which “allows data from different sources with a similar structure to be aggregated together without revealing the individual data of any source.” In short, SCRAM allows scientists to study private information without compromising the security of their sources in any way. Such research was promising for a bank like CIBC, who could benefit from understanding the failure points of competitor institutions but would be unlikely to get that knowledge anywhere else.

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CONNECTING WITH ALLIANCES: FINTECH@CSAIL & SCRAM *(continued)*

Collaborating on the SCRAM project was mutually beneficial for CIBC and IPRI and was an experience that Giuliani describes as “really neat.” In fact, Giuliani was able to visit the Stata Center in 2019 to run exercises in person, which allowed him to meet not only CSAIL faculty but also other initiative members and researchers. The initial SCRAM results were compiled into a [paper](#) about the platform, which helped CIBC learn how well they were implementing various safety features and how they compared to other industry participants. Giuliani presented these results to stakeholders and said that the research “showed a lot of promise” for CIBC.

Beyond SCRAM, CIBC has also been able to fund other sponsored research projects and interact with CSAIL staff in ways that have helped advance the bank’s technological focus. For example, Brown describes collaborating with CSAIL Research Scientist Amar Gupta on document processing and understanding. According to Brown, Dr. Gupta’s team developed key software that CIBC is beginning to trial internally with the intention of creating a smoother client experience.

In Brown’s view, the advantage to being part of a CSAIL Alliances initiative is “**having exposure to these various strains of research [and a] range of researchers who are working in different fields.**” Without the connections forged through FinTech@CSAIL, they would “not have known about [that research] or been able to participate in it.”

GOING FORWARD

After renewing their relationship with CSAIL Alliances, CIBC is eager to continue engaging with everything the lab offers. De Sa particularly highlights how she hopes to encourage professional development at CIBC by taking advantage of the courses, training, and sessions included in their membership. The resources provided by the Alliances team have already helped many CIBC employees “move on into a different role in their career,” and she anticipates that there will be more such success stories in the future.

In terms of research, De Sa, Brown, and Giuliani all brought up different subjects at CSAIL that they’d like to pursue further. For Giuliani, it was quantum computing and finding a “better way of doing” traditional things. Brown is interested in responsible and trustworthy machine learning, and curious about how CSAIL’s research on Natural Language Processing could be applied to CIBC’s chatbot technology. And, in addition to recruiting and helping existing employees enhance their skills, De Sa is excited to learn more about the potential of cloud transformation. In this way, CIBC plans to utilize the full range of Alliances benefits, exploring their access to scientists and research topics that can support the specific goals across CIBC teams.

De Sa says of their relationship with CSAIL that she’s “**one hundred percent excited**” for what comes next.

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