



**Tracking**

**the**

**Tricksters**

**Do**

**BY RITA  
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**As financial criminals become craftier, forensic accountants and law enforcement, bolstered by new legislation, find new ways to crack down. But is it enough?**

**F**inancial criminals no longer operate out of dark alleyways; they often hide in plain sight in home offices and corporate boardrooms. And, while these criminals have become more innovative, so have those standing in the way of their illegal pursuits. As the federal government and Canadian financial institutions work to form a united front against lawbreakers, they must also ensure that their tactics and defence strategies evolve alongside new tech and slippery criminal methods.

One major helping hand is text analytics, which sifts through text-based information like emails, memos, or text messages. "It can take regular word searches to a new level," says Jack Martin, director of Forensic Data Analytics at KPMG in Canada. The technology mines for keywords in a trove of documents, suggests similar words, and also provides statistical determination about when a match is unlikely "because with so much data, it's sometimes hard to know when it's time to stop searching," notes Martin.

Analytics can also determine the emotional tone of text-based information and classify it as positive, neutral, or negative. Martin applied the tool as part of a forensic investigation project on the Enron financial scandal while working with McGill University's Master of Management in Analytics program. The team analyzed a portion of emails and were able to uncover the most pertinent email exchanges to further examine. "Instead of investigators having to cast a wide net, it helps them decide where to take a deeper dive," says Martin.

A network analysis is another integral resource that visually maps out relationships based on text-based communication. It can also uncover anomalies in social networks that are different from the official corporate hierarchy, as was the case with Enron's CEO Kenneth Lay and Tim Belden, a company trader. The more than a dozen common communications between the two indicated a strong connection, which is revealing since Belden's energy trades—a major win for Lay and the company—were a major loss for California and played a key role in the state's energy crisis.

Text and data analytics software, which do much of the legwork for these investigations, are regarded as some of the more well-known tactics. Rob Fowlie, a forensic accountant and partner at MNP, an accounting, consulting, tax, and risk services firm in Toronto, advocates for the use of more cutting-edge technology, like machine learning. Fowlie calls it a "critical resource that not only reduces the risk of fraud losses but also leads to more efficient and thorough investigations."

"Machine learning is one of the most practical and important applications for fraud detection as it allows companies to analyze data and to classify it in order to find trends and patterns and to predict future outcomes," Fowlie says. "Algorithms can be applied in an employee or expense reimbursement system, for example, to detect PDF documents from vendors that have been modified. Typically, vendor invoices in this format are originals, and modifications are predictive of a fraudulent expense claim."

Sue Ling Yip, a partner in KPMG Canada's risk consulting and financial crimes practice, says that "machine learning helps forensic accountants look in the right places." In a human trafficking ring, for example, patterns associated with past human trafficking are inputted so that the machine "learns" from this information and thereby can make predictions or provide red flags. Yip says examples of red flags in a human trafficking ring include frequent



## Fraud risk assessment identifies a business's vulnerabilities to fraud exposure

purchases and ATM withdrawals at night, extensive e-transfers, and multiple hotel bookings. Machine learning also collects relevant data from open-source information, such as news articles. "It then packages all of this information," she says. "And forensic accountants group the alerts that are more likely to result in good intelligence for law enforcement."

Zain Raheel, EY Canada forensics and integrity leader, agrees that machine learning is an essential aid and adds that EY Canada has developed its own proprietary technology solution "that is adept at not only analyzing numbers but also what we refer to as unstructured data (based on our own proprietary library of words that has been developed). It helps us mine for issues in order to alert us that we could have a problem here."

Sometimes these reactionary methods aren't enough, which is why establishing preventative measures is key, according to Fowlie. He argues that this will go a long way in lessening risks of financial crimes down the road. He adds, "Fraud risk assessment is a powerful strategy that forensic accountants can utilize to protect companies from internal and external forces." A fraud risk assessment is tailored to a business's operations and identifies vulnerabilities to fraud exposure that might occur from client onboarding, for instance.

"By working with management, a forensic accountant can identify potential fraud risks in business operations and ascertain whether existing controls can prevent or detect specific fraud scenarios," explains Fowlie. And businesses are getting the message, he says. "I'm noticing a number of provincial entities undertaking fraud-risk assessments to reduce the risk of fraud losses."

Forensic accountants aren't alone in this battle as the nation's top cops are also preparing for this brave new world. Karen Manarin from the RCMP's IMETs (Integrated Market Enforcement Teams) says the RCMP is intent on hiring investigators with accounting expertise to assist in the battle against fraud and money laundering. According to Manarin, "This will bring additional multi-disciplined expertise that will be embedded in the RCMP."

The RCMP has recently taken steps to get tough on money laundering with its Integrated Money Laundering Investigative Team (IMLIT), created in late 2020 and with units in British Columbia, Alberta, Quebec, and Ontario. The goal of the IMLIT is to build partnerships with other law enforcement agencies, as well as the Canada Revenue Agency and the Forensic Accounting Management Group.

"The IMLIT allows the RCMP to be intelligence-led, and to identify, seize, restrain, and forfeit

illicit and unreported wealth accumulated by organized crime groups," says Manarin. "The creation of the IMLIT teams in key geographical areas in Canada allows the RCMP to focus its efforts on this serious problem."

This development comes at an opportune time—as of 2023, Canada is not on the Financial Action Task Force list of countries identified as having strategic anti-money laundering defences, making it an attractive target for criminals eager to take advantage of the country's lax prosecutorial and enforcement laws. According to the Criminal Intelligence Service of Canada, it's estimated that money laundering nationwide was worth up to \$113 billion annually.

One of the easiest exploits is due to Canada not having a comprehensive national registry to identify who owns or controls private companies, leading to money launderers being able to easily hide their identities and transactions through shell companies.

Strengthening beneficial ownership information has long been advocated by CPA Canada, and some progress has been made. In its 2022 budget, the federal government announced it will implement a publicly accessible beneficial ownership registry of federally regulated companies before the end of 2023.



**Rob Fowlie**  
CPA, CA, CFE

"Fraud risk assessment is a powerful strategy that [can] protect companies"



**Sue Ling Yip**  
CFE

"Machine learning helps forensic accountants look in the right places"



# Financial crime is as far-reaching as it is impartial when it comes to whom it targets

But a major concern involves provinces and territories having their own guidelines, acts, and requirements for incorporating companies. “That’s inefficacious,” says Sanaa Ahmed, assistant law professor at the University of Calgary, who notes that “the federal government registry won’t reveal too much about beneficial owners because the majority of companies in the country are provincially or territorially regulated.” The federal registry is intended to be scalable to plan for provinces who may wish to join the registry later.

Still, other experts say the government’s upcoming beneficial ownership registry could actually remove significant hurdles for law enforcement when conducting investigations. Raheel notes “it has the potential to [both] provide a significant increase in transparency and to aid the investigative process.”

“I think it’s an important first step,” says Fowlie. “And I’m hopeful that the provinces will follow shortly.”

With finance companies and the federal government reinforcing their defences, all that’s left is having more boots on the ground in the country’s financial crime-fighting efforts. Luckily, there has been an increase in academic interest in forensic accounting. The University of Toronto Mississauga’s Master of Forensic Accounting program (MFAcc), which consists of 10 courses delivered part-time

over a two-year period, launched in 2016 and continues to gain interest and students.

“Enrollment has doubled since the program first started,” says Debby Keown, program officer. She says part of its success is due to courses that offer “case-based scenarios that consider how to combat financial crime before it starts.” Courses touch on numerous topics, including fraud prevention, cybercrime, and asset tracing. Some graduates have gone on to work at the World Bank and the United Nations.

“Forensic accountants are definitely in demand,” says Esther Young, an adjunct professor at the Smith School of Business at Queen’s University, Kingston. “The need for investigations has increased as schemes have become more complex, and businesses are also looking for trusted advisers.”

The courses in the MFAcc program are facilitated by practitioners, such as forensic accountants and lawyers.

“Direct transfer of knowledge from practitioners in the field” is one of the fundamental aspects of the Fraud Examination and Forensic Accounting program at Seneca College, according to Cameron McCaw, program coordinator. The eight-month graduate certificate program has evolved over the more than 15 years of its existence, says McCaw, and a course on cybercrimes is forthcoming.

The impact of financial crime is as far-reaching as it is impartial when it comes to whom it targets. According to the 2023 Annual CPA Canada Fraud Survey, 63 per cent of 18- to 34- years olds report being a victim of financial fraud in their lifetime, 39 per cent higher than those ages 35 to 54. But the diversity in tactics and tech that will help the front lines stay in step with their targets. ♦



**Zain Raheel**  
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“[Beneficial ownership registry] has the potential to aid in investigations”