Catching a
Rogue Trader

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Intelligence for Risk & Control
Professionals

The following is a conversation between Tom Hardin, aka Tipper X, and Tim Estes, founder of Digital Reasoning. It occurred in New York, April 17 2018. In it, Tom talked of his modus operandi when he was illegally insider trading, and Tim identified how his company's software would now attempt to forestall such conduct....

Tom: When I was in the market, I communicated with everyone on AOL instant messaging (IM). That's how I initially communicated with Roomy Khan. (Khan was twice convicted for insider trading and imprisoned for 12 months in 2013. Her evidence helped convict hedge fund owner Raj Rajaratnam). One day she sent me the IM message 'I need to talk on the phone'. That was a change in her behaviour. She had got a pre-paid burner phone because she was getting paranoid. I spoke on my office land line, which wasn't recorded.

Tim: I think now phone calls would be recorded, and modern engines as we have could transcribe a large volume of calls without issue. The models look for red flags, such as change of venue. For example if you're discussing a deal in Bloomberg chat and then a party says 'WhatsApp' or 'coffee shop', that's a red flag.

The legacy systems were based around key words but we've used thousands of examples of behaviour. Our models can run against 500,000 sentences in a second so you can dump literally hundreds of thousands of emails into it. It can identify behaviour that's worrying but

also that which is confusing. Models are very effective at flagging behaviour and you use these indicators to figure out if someone is heading for the red line before they cross it. A supervisor could then say, "Did you really mean to have that conversation?" How would that have been for you Tom?

Tom: When we spoke, we used acronyms like TYOP – Talk to You On the Phone. She called me with a tip six days before the deal happened. I do wonder that if in those six days this had been flagged, then perhaps my boss might have had fired me and the crime wouldn't have happened. But at the time we didn't use anything like that.

Tim: What might have happened if your boss had made an intervention of some kind?

Tom: I probably would have tried to think on my feet in some way and come up with some excuse. But it's likely I would have been caught in a lie. It would have been tough to come up with a good excuse as I talked on IM about every stock.

To be honest, I never considered the idea of being caught. If I had known my phone calls were being recorded I probably still would have taken the calls. What do you do about conversations on burner phones?

Tim: Well, if the computer never sees the data, it can't make a judgement. But it can make a judgement if time ranges are missing from a conversation. This is what I call dark matter detection. People going dark at regular intervals would trip it too. They operate at that intersection between HR issues and compliance.

Tom: I got caught because the FBI were studying Raj Rajaratnam. *(Rajaratnam, the founder of hedge fund Galleon, was found guilty of 14 charges of conspiracy and securities fraud in 2011. He was sentenced to 11 years imprisonment and fined $150m).* They were in his offices under the auspices of a regular examination and they found an IM from Roomy Khan. They recognised her name.

Tim: My hunch is that models would have identified key language not just on the inbound tip to you but also when you relayed it to others and then in the subsequent feedback. People say things like 'Oh I get really excited about this' after the trade. When people make money they boast about after it when they think they have got away with it so now we have models that pick up boasting! But only after a certain set of incidents.

Tom: Yes! When the deal hit the tape the guy I tipped IM-ed me with several exclamation marks and 'Thanks so much!'

Tim: We would have been, like, where did that come from? It also picks up expressions like "Thanks for doing me a solid." Now all this could have a perfectly innocent explanation, which is why the models are rarely in themselves a condition to take action. It's the combination of key indicators that elevate a potential risk, and what we're try to do is help people to know where to focus their attention in a sea of events, almost all of which are irrelevant to control functions.

Tom: By the third trade Roomy asked for a cash payoff so I called the friend I'd tipped off at this prop trading firm and said 'Can you get the money together?' That was when it escalated to explicit criminal conduct. The prop trading firm passed the hat around for me.

Tim: This is collusion. If the guys at the prop firm were talking about it, we'd have picked it up of course. But the days may have passed when people are as blatant as that, and it's more complicated now.

Tom: When the deal hit the tape I got an endorphin rush. I did one more trade after the payoff. I'd like to say it stopped because I had some moral epiphany but it wasn't like that. The information stopped coming.

Tim: It would be remiss not to stress that if intentions show up in communications before people act, we provide an opportunity for someone to say 'What are you doing here?' at an early stage. We would obviously like to catch them when they do something wrong, but also pick up the earliest signs of potential misconduct because maybe they're not lost yet. Tom's story could have been different with a cautionary intervention. ■

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