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Policing with Big Data: More Security or Anxiety?

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SYNOPSIS

Increasingly, law enforcement agencies are using big data to fight crime. But outsiders often have no clue how big data is being used in policing. Greater public awareness will help ease anxiety in this case.

COMMENTARY

AS EUROPOL prepares to collect more data on European citizens for law enforcement purposes, the question of how police departments utilise big data to fight crime has again attracted much public interest. If everything goes as planned, the top law enforcement agency of the European Union (EU) will soon be sifting through all kinds of personal data, including social media posts and mobile phone records.

Big data refers to the mining of large datasets for insights. In the law enforcement context, it is used to fight crimes, which in some cases, have yet to happen. By collecting reams of crime-related data and then analysing it with sophisticated computer algorithms, law enforcement agencies can now predict at scale where and when criminals are going to strike next. Big data is supposed to make people feel safer; instead, it has triggered much anxiety.

Fighting Crime with Data

The fact is, Europol will not be the only user of big data; law enforcement agencies in the United States (US) and elsewhere are already using it to combat anything from property thefts to gun violence. Thanks to big data, police officers can now make informed decisions on where to patrol next.

Instead of solving crimes after they had happened, they are able to proactively fight it.

With tighter budgets and manpower cuts the norm these days for many police departments, it is not difficult to see what a valuable tool big data can be.

Even so, anytime a law enforcement agency announces plans to use big data, the general public tend to get pretty nervous about it. To be fair, much of the anxiety can be caused by a poor understanding of how big data is being used in this context.

After all, we have a tendency to fear the unknown and policing with big data does come across as something menacing. In that sense, shedding more light on how law enforcement agencies use big data – as it is being attempted here – will hopefully help to ease public anxiety and apprehension.

Tackling Motor Vehicle Thefts

As more cars get stolen during the COVID-19 pandemic, big data has become a powerful weapon against auto theft. With more people staying home to stop the spread of the deadly virus, the larger number of vehicles left unattended along silent streets and in parking lots also become ready targets for car thieves.

Thankfully though, because auto thefts generally follow a pattern – for example, car thieves tend to target certain vehicles in poorly-lit areas on warmer days – they are perfect for big data analysis.

Reams of relevant data including theft records, arrest histories, public tipoffs, investigative reports and field interviews are fed into computer software like *PredPol*, which then churn out predictions on when and where car thieves are going to strike next.

Armed with that information, police officers can then prioritise hotspots flagged by the software for increased patrol. The idea is not to catch car thieves in the act (though that has happened before) but rather to deter them with a heavier police presence.

Combating Violent Crimes

Outside of auto theft, big data has also been used to fight violent crimes. Gun violence is a case in point. In some parts of the world, firearms are frequently used in robberies, homicides and assaults. In fact, gun violence is so serious that more than 500 people around the globe die from it daily.

Recent high-profile shootings in the US again underline the severity of the problem. While big data has led to faster arrests in gun-related crimes, the aim is really to deter violence before it happens.

Similar to how big data stops auto theft, an assortment of information linked to emergency calls, mobile phones, outstanding warrants, eyewitness accounts and audio detectors are analysed (for clues) when there's a shooting. Not only that, big data is used to assess the risk of someone committing a gun-related crime as well as the likelihood of someone falling victim to one.

In other words, with the help of big data, police officers can become more proactive

either by placing would-be criminals under heavier monitoring or alerting potential victims to the danger of gun violence around them.

More Public Awareness Needed

In the 2002 science fiction movie *Minority Report*, Tom Cruise is a futuristic policeman that goes around stopping violent crimes before they happen. Relying on visions from three psychics, the American actor takes down violent criminals just prior to them going postal.

Set in the year 2054, the Steven Spielberg flick also raises the philosophical question of how far we are prepared to go to trust a system that promises to keep us safe.

For manpower-strapped police departments, big data may be a boon but its mysterious workings have also been a major source of public anxiety and apprehension. One solution is to be more transparent with how it works and perhaps even open up the algorithms for independent review by outside experts.

It has often been said that publicising police methods does nothing but help the crooks. Once criminals figure out how they can get busted, they will surely revise their modus operandi so as not to get caught.

While such operational concerns are definitely justified in many cases, what should not be forgotten is that greater public awareness – even scrutiny – is healthy for society in the long run. Indeed, being more transparent on how big data is being used in policing will not only help the public to see its value but also build trust between law enforcement agencies and the communities that they serve and protect.

It is fair to say that no one wants to live in a state of fear and premier law enforcement agencies like Europol should ensure that no one has to – not inadvertently make it so.

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