## Z zeroes in on petrol-theft drivers

## Chris Keall

You know how it goes when a crime is caught on camera. A still appears on the 6pm news but the image looks as if it was filmed on a potato, then stored on a VHS tape that has been re-used on high-rotate since 1982.

There is a lot of high-tech security kit available now, of course. But people aren't always using it. Or, more to the point, they're not using a solution that ties all the different elements together to provide useful alerts, and actually help catch criminals or prevent them offending in the first place.

This week, Z Energy has begun the national rollout of a new security system for its service stations that looks the business.

In a first for New Zealand, it centres on automated number plate recognition (ANPR) technology.

Z general manager Mark Forsyth says "drive-offs" (those who scoot off without paying for petrol) cost his company \$1.5 million a year.

Mr Forsyth says an 18-month trial has delivered "quality footage" to police and reduced driveoffs as much as 80% in some locations.

A number of companies are behind Z's cutting edge new system, which is part of a wider \$8m security upgrade. It includes high-definition cameras from Axis Communications, crime reporting software from Auror (a startup backed by Sam Morgan that lets customers reconnect directly to police systems) and licence plate recognition software from Image Analytics Pacific.

Pulling it together has been Focus Digital Security Solutions (part of the SLS Security Group of companies), whom Mr Forsyth describes as "New Zealand's leading implementer of ANPR solutions." It was also Focus Digital that first brought ANPR to Z's attention.



SAVING BIG MONEY: Z general manager retail
Mark Forsyth says drive-offs cost his company \$1.5
million a year. The system implemented by Focus
Digital has cut offending at some locations by up to
80% during a trial – leading to the thumbs up for a
nationwide rollout



WIDER USES: Focus Digital director Stuart Gregory sees multiple uses for ANPR beyond preventing drive-offs at petrol stations – from mobility permits to road tolling

So how does it work? The really smart bit is that it's aimed as much at preventing crime as after-the-fact identification.

Focus Digital director Stuart Gregory explains, "The way it works is that if a vehicle enters a Z Energy petrol station and pulls up to the forecourt, the cameras will read that licence plate and check that against a known database of drive-off offenders. And if the licence plate is found on that database, in real time that pump will be turned to pre-pay – therefore eliminating the possibility of stealing more fuel."

If a vehicle comes on-site and steals fuel for the first time, Z staff can create a report on a computer and send it directly to the police. The vehicle's numberplate will also be immediately blocked from services, other than pre-pay, at other Z stations.

Not every drive-off offender owns their own vehicle. Some have helped themselves. What happens then?

"If a known stolen vehicle arrives on a Z Energy site, there will be an email alert sent automatically to the police to advise them that vehicle is on that site that exact moment."

Z has a jump on its rivals with its ANPR solution but it's not an exclusive deal. Mr Gregory sees a time when all service stations share real-time data on drive-offs and anti-social behaviour. particular client's site and they are alerted in real time that assistance is required."

He also sees potential to use the technology for loyalty schemes and alerting staff when a VIP customer arrives.

A second Focus Digital director, David Morrissey, also sees a lot of potential for ANPR and associated optical character recognition technology beyond nailing drive-off offenders.

He ticks off parking management, road tolls and container tracking as potential markets.

"Why is there a guy with a camera and the tripod in the bus lane?" he asks, in reference to Auckland Transport's unloved





Provide contact information to help the customer resolve the issue POP-UP ALERTS: The system put together by Focus Digital for Z includes alerts for a suspicious vehicle – identified by an automated number plate recognition (ANPR) system

ANPR technology is available overseas but Kiwi companies can't just pull an American system off the shelf, the Focus Digital director says.

His company has run more than 60,000 suspicious New Zealand plates through artificial learning software to create a "New Zealand-specific ANPR engine." The direct links to the NZ Police computer systems are also something Kiwis won't get from offshore solutions.

## 'Whitelist' uses

Focus Digital' technology is "not just about stopping the bad guys stealing fuel," Mr Gregory says.

Although it's effective at blacklisting bad plates, it also has what he calls "whitelist" uses.

"There are opportunities, for example, with mobility passes," he says. "You register your mobility permit against a vehicle's licence plate [or plates]; you arrive at a attempt to police bus-only lanes. He makes a good point, even if not all readers will be keen for AT's bus camera push to become more high-tech and efficient.

Mr Morrissey also sees a scenario where a container truck pulls up to a port and ANPR technology is used both to identify the vehicle and the container it's tracking.

It's the point where security technology could merge with workflow and logistics, and is an area where Focus Digital sees a lot of potential for growth.

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