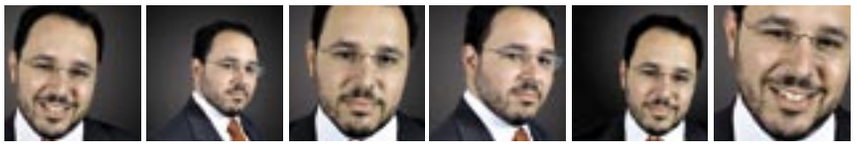

JOSHUA GANS
J.GANS@MBS.EDU

The technical answer

Governments could be doing more to use technology both to increase productivity and solve social problems.

Innovations in public policy and technology go hand in hand. It is not necessary to think of every solution as too hard just because it was that way in the past.

EVERY TIME MY e-TAG beeps (and that is several times a day), I marvel at the wonder of it. Here is a convenient means for me to pay for the roads I use. But consider how under-utilised the whole system is.

What if, instead of me paying a toll just for freeways, I were to pay a toll for every road that I used? What if it were based on the inconvenience my travel caused others – such as when I commute at peak times? And what if I could use my e-TAG on public transport and get credits for using that?

All these possibilities were raised by Stephen King and myself in our book, *Finishing the Job* (Melbourne University Publishing, 2004). It demonstrates that there is potential for technological innovation to solve public policy problems – in this case, traffic congestion and environmental harm.

But there are other policy areas that are yet to be touched by existing technologies.

The Australian Competition and Consumer Commission is conducting an inquiry into petrol prices. One of the main concerns is the persistent cycle in prices. They plummet on Tuesdays with savvy consumers lining up for a deal, then rise again before the weekend. Sure, the cycle rewards the shrewd and penalises the naive. But in many respects, it would be better if the cycle didn't exist; or at the very least, that no one had to worry too much about it.

In the United States, retail petrol data has been linked to Google Maps to allow consumers to check out different prices before setting out from home or by looking it up on mobile phones (for example, at gasbuddy.com). Include this with in-car global positioning systems and the cost of searching for bargains fades away. Retailers will know this and will need to be as price competitive as possible.

The same service could be available in Australia. The price information is already required in Western Australia and could easily be extended throughout the country.

And it is not costly to collect. It is already collected by private companies who sell the information to petrol stations, but not to consumers. By getting information to consumers cheaply, the nature of the market would change. More would become price aware and petrol stations would not find it as worthwhile to cycle prices.

Thinking further afield, consider the problem of gambling. The Productivity Commission estimates that the social costs of gambling are in the billions of dollars and that controlling them would be well worth any cost of revenue and taxes. But how can this be done? It is very difficult to monitor individual gambling habits and choices. But what if information technology can assist here?

Around the world, various solutions are being tested. Smartcards can be used to place pre-set spending limits on gamblers. However, research in Nova Scotia, Canada, has shown that this is only good as long as gamblers cannot just acquire another card.

Alternatively, a simple USB key with a fingerprint sensor can register gamblers and send the information back to a centralised system. They can then monitor behaviour and put in various steps to prevent people from getting carried away.

For example, individuals could set daily or weekly spending limits. Exceed this and the system knows and puts a block on the individual concerned. Such innovations would be well worth testing in the lead-up to the Victorian government's poker-machine tender.

Innovations in public policy and technology go hand in hand. It is not necessary to think of every solution as being too hard just because it was that way in the past. And the governments that get there first will see the productivity and social benefits and can claim the leadership mantle. ●

Joshua Gans is Professor of Management (Information Economics) at the Melbourne Business School. He maintains a blog on these issues at economics.com.au.

There is potential for technological innovations to solve public policy problems – in this case, traffic congestion and environmental harm. But there are other policy areas yet to be touched by existing technologies.