




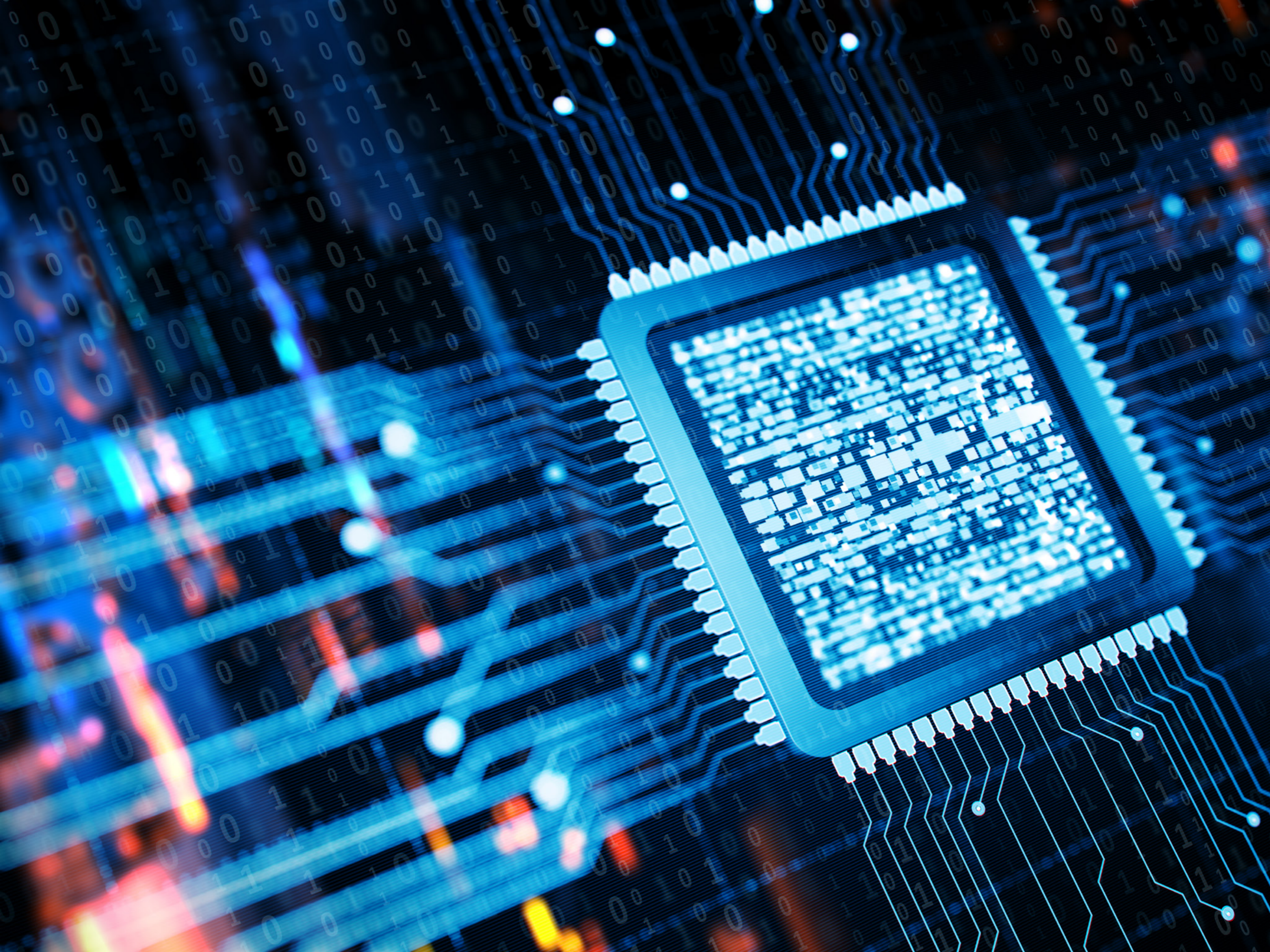
# HOW TECHNOLOGY AND DATA ARE TRANSFORMING ACCOUNTING AND AUDIT



**ROBOTIC PROCESS AUTOMATION (RPA), ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING ARE HARNESSING THE POWER OF DATA TO TRANSFORM ACCOUNTING AND AUDIT.**

**THE TECHNOLOGIES HAVE THE POTENTIAL TO TAKE OVER MUCH OF THE ROUTINE COMPLIANCE WORK PERFORMED BY ACCOUNTANTS AND AUDITORS, SO HOW WILL THAT AFFECT THE PROFESSION?**

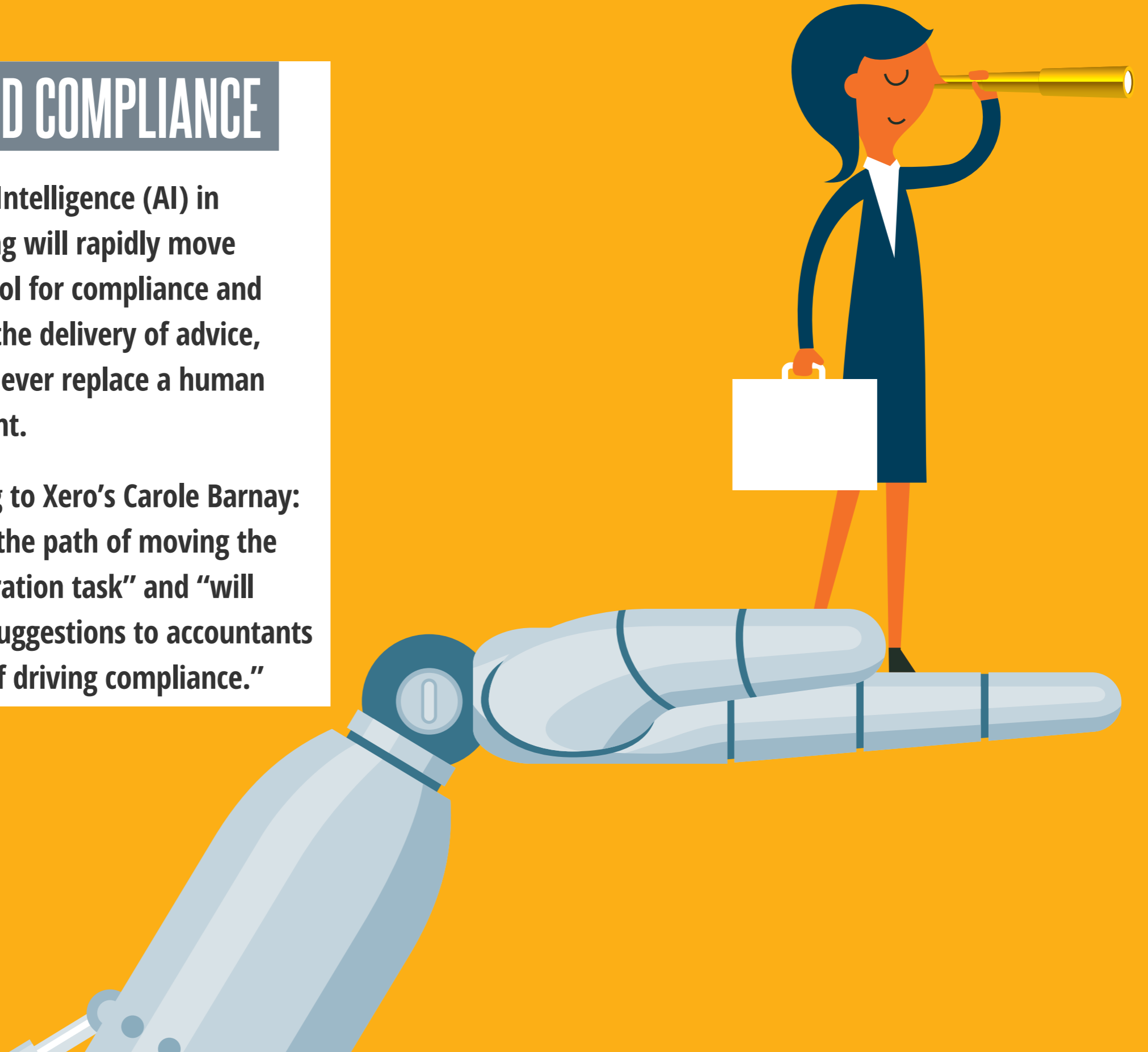
**THE FOLLOWING COLLECTION OF ARTICLES HIGHLIGHTS SOME OF THE CRITICAL ISSUES FOR ACCOUNTANTS AS THEY RESPOND TO THE CHANGES THAT ARE COMING.**



## BEYOND COMPLIANCE

**Artificial Intelligence (AI) in accounting will rapidly move from a tool for compliance and towards the delivery of advice, but will never replace a human accountant.**

**According to Xero's Carole Barnay: AI is "on the path of moving the administration task" and "will provide suggestions to accountants instead of driving compliance."**



## DATA TRANSFORMS AUDIT

The auditor of the future will use data analytics and much larger sets of information from a wide variety of agencies, according to Ben Jiang, director – data analytics in the Victorian Auditor General’s Office.

“The traditional approach of sampling was necessary in its time but now the volume of transactions is so high that analytics technology has to be the way to go,” Jiang says.

Jiang’s team has written a series of algorithms to transform the material into a common format for analysis, with the aim of streamlining manual processes.



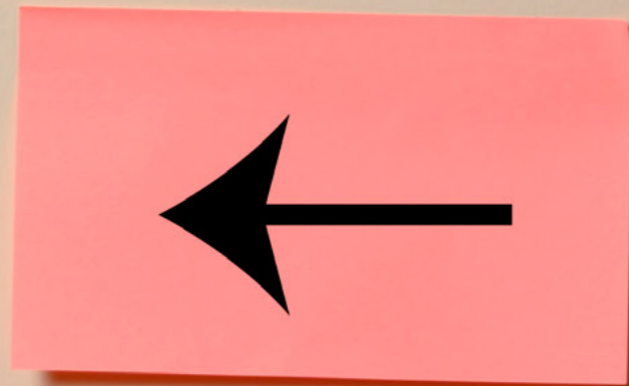
## RESISTANCE TO DATA

**An increased capacity for data analysis is providing new insights for organisations – but don't expect everyone to welcome it, according to former New Zealand Prime Minister Sir Bill English.**

**"Everyone thinks data is a great idea until you start making decisions based on it," English says.**

**"As soon as you start saying: is your money going to the wrong places, you get resistance to the change, not to the data."**

**New Zealand's National Party government pushed through significant welfare reform using actuarial tools and predictive analysis, with the aim of addressing the most persistent disadvantage by putting the focus on the individual.**



## ADAPTING TO THE FUTURE

Digital technologies such as artificial intelligence (AI) and blockchain would “cut out the middleman” in financial services, leaving the accountants of the future to focus on strengthening relationships and delivering insights.

CPA Australia policy adviser – reporting and advocacy, Ram Subramanian, believes accountants have a “challenge to enhance our profession” once new technologies have automated many compliance functions.

James Evangelidis, author of the *What do Clients Really Want?* series of books and podcasts, believes blockchain will have a major impact on the taxation system and help eliminate fraud.



# PROTECTION AGAINST CYBERCRIME

New regulations have put cyber safety in the spotlight, with the European Union's General Data Protection and Australia's mandatory data breach reporting regime making cyberthreats a critical issue for accounting firms.

According to the Privacy Rights Clearing House, the top causes of data loss in 2017 were hacking or malware and unintended disclosure, as well as portable devices and physical loss.

One of the best ways accountants can protect their information, and that of their clients, is with an integrated IT security system as opposed to layers of unintegrated software products.





## DATA CAN BE SWEET

Retail chain The Coffee Club is using data analytics to understand customers better and stay ahead in Australia's highly competitive café sector.

Point-of-sale data has been combined with data from 150,000 VIP customers and cross referenced with data from other sources, such as the Australian Bureau of Statistics, to deliver actionable insights for the business.

Data-related possibilities for the future include facial recognition technologies and having AI robots answering reservation phone calls, or even having a personalised digital menu based on customer preferences.



## GOVERNMENT EXPLORES BLOCKCHAIN

**Australia's public sector agencies are exploring the potential of blockchain technology and a major game-changer will come from the creation of industry standards.**

**These are views of Katrina Donaghy, co-founder and co-CEO of Civic Ledger, which focuses on civic applications of the technology.**

**The federal government is sending positive messages about blockchain technology. Standards Australia is the secretariat for the International Standards Organization's international technical committee for blockchain standards, and is looking at standards, definitions, rules, and other elements of the technology. This will provide a clear decision framework on issues such as governance, jurisdiction and interoperability of the technology.**

## NEW MINDSET FOR DATA

The accounting profession is well-placed to take advantage of the emerging data analytics revolution but it will require a redesign for many firms as well as a change of mindset.

Futurist Dr Emily Verstege says that the problem in harnessing data is not a lack of information, but “an absence of insight”.

“Many Australian businesses are so busy doing what their customers pay them to do that there is simply no time to create meaning from the available data,” she says.

Many accounting firms do not regularly reach out to their clients to get insights that will help deliver greater value. “Getting a nuanced understanding of your clients’ experience of your firm is the one thing almost every business should do more of, starting now.”

