

## GOVIS 2023 Conference – Digital Resilience Presentations

### **Building cyber resilience: 5 things you can do today (keynote)**

Michael Jagusch, Manager Mission Enablement, National Cyber Security Centre  
9:40 am - 10:15 am, Oceania (in-person & online)

Building cyber resilience can be complex - we are operating within an increasingly competitive geopolitical environment and technology is continuously evolving. To help you break down this complexity, come and hear about how the NCSC thinks, talks about and organises cyber-security efforts.

**Mike Jagusch** is Manager Mission Enablement at the National Cyber Security Centre. Mike has had several roles within NCSC and a broad experience within cyber-security. Mike has worked in customer engagement, providing organisations security advice and guidance at both a practitioner and governance level. Previously, Mike has been involved in the more 'hands-on' aspects of cyber-security in his role managing the Systems Engineering team who design, build, maintain and evolve NCSC's cyber-security capabilities. In his current role, Mike is focussed on delivering strategic outcomes by leveraging the expertise of the entire NCSC. Mike's teams provide communications, policy, stakeholder engagement and business support.

### **Security and sovereignty in the cloud (panel)**

10:45 am - 11:25 am, Oceania (in-person & online)

**Chair:** Phil Pennington, RNZ

#### **Panellists:**

- Dr Te Taka Keegan, The University of Waikato
- Louisa Joblin, Duncan Cotterill Lawyers
- Don Christie, Catalyst IT

**Te Taka Keegan** is from Waikato-Maniapoto, Ngāti Porou, and Ngāti Whakaeu. He received a Diploma in Computer Engineering from CIT (Wellington), a BA (Te Tohu Paetahi stream), MA and PhD from Waikato University. Te Taka has worked on a number of projects involving the Māori language and technology. These include the Māori Niupepa Collection, Te Kete Ipurangi, the Microsoft keyboard, Microsoft Windows and Microsoft Office in Māori, Moodle in Māori, Google Web Search in Māori, the Māori macroniser and SwiftKey for Māori. He holds a number of positions in local, regional and national authorities that seek to empower Māori in technology.

**Louisa Joblin** is a Senior Associate in the Commercial team at Duncan Cotterill, working in the Wellington office. Louisa advises commercial, corporate, and public sector clients on anything and everything to do with privacy protection and compliance including data governance and protection, privacy documentation and processes, staff training, notification requirements, and dealing with access and correction requests. She also advises clients experiencing privacy breaches, including providing guidance when assessing whether privacy breaches are notifiable, liaising with the Office of the Privacy Commissioner, and working as part of incident response teams alongside other advisors such as insurers and IT professionals.

**Don Christie** is one of the founders of and Managing Director of Catalyst IT, a New Zealand owned open source software company headquartered in Wellington. Catalyst has existed for 25 years and now has 100s of staff and subsidiaries across the globe. Don is a former President of the New Zealand Open Source Society and was on the Council of Internet New Zealand for two years. He recently resigned as co-chair of the Kiwi tech organisation, NZRise, after 12 years in that role. A passionate believer in the capability of his fellow Kiwis, Don has long supported and advocated for the digital sector of Aotearoa. Building national and local infrastructure, capability

and cyber resilience is at the heart of Catalyst's vision and enabled by the company's strong support for and use of open source software.

### **Institutional resilience - From customer service to crisis recovery (keynote)**

Damon Rees, Managing Principal and CEO, Better As Usual Pty Ltd

11:25 am - 12:00 pm, Oceania (in-person & online)

**Sponsored by AWS**

10 years ago, Service NSW was created to transform the customer experience of Government transactional services. Today it is a critical part of the Government's ability to respond to crisis. Hear how the creation of a customer centric, culturally powered, digitally enabled, and highly adaptable public sector agency enabled NSW Government to support communities through an unprecedented period of bushfires, floods, draught, and COVID.

**Damon Rees**, is a business leader focused on customer centricity, culture, digital enablement, and innovation, with more than twenty years of experience driving transformational change, organisational performance, and better customer outcomes.

He is currently the Managing Principal and CEO of Better As Usual Pty Ltd, a practitioner-led professional services organisation committed to better customer outcomes, building organisational capability, and positive social impact.

Damon's experience spans the private, public, and not-for-profit sectors including as the CEO of Service NSW, the inaugural Government Chief Information and Digital Officer for NSW Government, the Chief Digital Officer for Macquarie Group, the Chief Technology and Interim Chief Information Officer for Woolworths, and the Head of Integrated Delivery for Westpac. He has served as an independent Director of GP Synergy for the last eight years including three years as Chair of the Finance, Audit and Risk committee, and six years as Chair of the Digital and ICT committee.

Damon was awarded the Sir James Wolfhenson scholarship to study at the Harvard Kennedy School in 2018, completed a Global Executive MBA with the University of Sydney in 2011, and holds a Bachelor of Information Technology from the University of Technology, Sydney.

### **Lightning talks - resilience in information management**

12:40 pm - 1:10 pm, Oceania (in-person & online)

#### **1. Evolution or Extinction?: The Choice Facing IM - A Manifesto For Change**

Stephen Clarke, Virtual CDO

Can the Information Management profession undergo a complete rethink of its practice in the 21st Century to overcome the existential threat it faces? As we face with increased customer expectations and technological change, AI/ML, data lakes, DNA storage, quantum computing, etc. The resilience of the profession is at a low point, but is more important than ever as we rely on data to drive innovation. Is it too late to recover, I say no and I'll set out a manifesto for change, with the key behaviours and a clarion call for change, a Manifesto for a 21st Century professional evolution!

**Stephen Clarke** is currently a Virtual CDO and Information/Data Management Consultant. Originally from the UK, Stephen has worked in senior Information & Data Management roles across the NZ public sector for the last 15 years. His most recent role was as Chief Archivist, after moving on from his role as Chief Data Officer at the NZ Transport Agency. Stephen has undertaken similar roles in IRD, DIA, Office of the Auditor General, the Office of the Ombudsman and Transpower amongst others.

Internationally, Stephen is known as a standards expert, having developed standards for information management for Australia and New Zealand and internationally for ISO. As an anthropologist Stephen understands human systems, and as a technical expert he understands information systems. Using technology to connect these two systems to get the right information, to the right people at the right time, ethically is his professional goal.

## **2. How can we apply digital preservation principles to help organisations be digitally resilient?**

Joshua Ng and Carly Lenz, Archives New Zealand

The presentation will focus on how government public offices can improve their digital resilience by incorporating digital preservation principles. It will highlight the importance of digital preservation in maintaining the integrity, accessibility, and usability of digital records over time, even in the face of challenges like cyber attacks, natural disasters, and geopolitical tensions.

As digital preservation analysts at Archives New Zealand, **Joshua Ng and Carly Lenz** are also the administrators of the New Zealand Government Digital Archive. They are responsible for the development of digital preservation policies and processes, file format technical analysis, digital preservation system management, providing advice to government agencies regarding digital records management and born-digital record transfer to Archives New Zealand.

### **Building resilience in Wellington with an underground asset map**

Sean Audain and Viv Winch, Wellington City Council

12:40 pm - 1:10 pm, Rangimarie Room 1

Wellington is embarking on a New Zealand-leading initiative to build an updateable digital map, recording the location of underground assets beneath the city's streets.

It could be the start of a long journey towards a subsurface digital twin.

With billions of dollars of infrastructure construction planned across the city over the coming decade, we need to better understand our subsurface environment. The aim is to move away from legacy records and outdated paper processes held across many locations, to a federated online map-based library. There are real benefits to establishing a platform that everyone working in the sector can access 24/7, 365 days a year. We want to build a system and supporting compliance policies in conjunction with the sector that could be scaled up for the whole of New Zealand.

### **ĀHAU - distributed, replicating tribal archives**

Mix Irving, Ahau

12:40 pm - 1:10 pm, Rangimarie Room 2

Āhau is a whakapapa project which is Māori-led. We've built software on a distributed, replicating database, which offers some novel affordances:

- resilient infrastructure - no special computers/servers to maintain, no single points of failure
- offline first - each member of a whānau carries their data, meaning they can read it wherever they are, independent of current connectivity
- data sovereignty - knowledge is held only between those it belongs to
- emergent truth(s) - with no single source of truth (one database), we build truth together, supporting pluralism

Lessons for government:

- shared data sovereignty is possible!
- we can do resilience without without multi-nationals <3

**Mix Irving** has a background in Maths, Radical Education, Social Enterprise, Coops, Software, and Community Gardening (tending to, and cultivating community).

Āhau has been his main focus for the past 4+ years, but works on a lot of projects:

- Commons Garden - governance systems for healthier social networks in the p2p/fedi space (where there are no bosses)
- Scuttlebutt - working on a European grant: Moderation in P2P Encrypted Groups
- SMAT - building visualisation tools to help fight fascism in social media
- Planetary - technical advising, community bridge
- Parenting - I have two gorgeous kids

Other interests include: Sci-fi, Magic the Gathering, Peer support networks, Reforming education, Open banking APIs (it's \*our\* data)

### **Digital resilience in Papua New Guinea: a judiciary case study**

Grace Tamu, Cedric Robert and Mathew Ogai, Papua New Guinea Judiciary

1:15 pm - 1:45 pm, Oceania (in-person & online)

Grace, Cedric and Mathew will be presenting on the theme of digital resilience in Papua New Guinea and providing a case study to describe the significance of digital resilience to the Judiciary.

Grace will commence the presentation by covering systems resilience and describing the selection of high availability infrastructure to support the delivery of Judiciary services and applications. Cedric will continue by presenting on the resilience of the various Judiciary systems and applications from an end user perspective. Finally, Mathew will present on the challenges of keeping the network infrastructure operational, and the practices, processes and devices that have been put in place to make this possible.

**Grace Tamu** is from Wabag District, Enga Province, Papua New Guinea. She has been working in the Public Service and the IT sector for the last seventeen years. She is a Cisco Certified Network Administrator (CCNA). After fourteen years with the Department of Finance, Grace is now working with the Papua New Guinea Judiciary, National Judicial Staff Services in the role of Systems Manager. She presented at GOVIS last year and is delighted to be back again with her team!

**Mathew Ogai** is from Popondetta, Oro Province, Papua New Guinea. He graduated with a degree in Information Systems and worked in the private sector for four years before joining the PNG Judiciary IT Department in 2020. He is now working as Assistant Network Officer, specialising in voice, data and switching across the Judiciary network.

**Cedric Robert** is from Alotau, Milne Bay Province, Papua New Guinea. He has been working in the IT sector for 3 years, since completing a Diploma in Information Communication Technology. He started off his career with the telecommunications provider, Telikom, and transferred to the Papua New Guinea Judiciary, National Judicial Staff Services in 2021. He is now working as an IT Support Officer, supporting approximately a thousand users spread across the country.

## **RiskScape – Communicating risk from natural hazards to build a more resilient New Zealand.**

Russel Garlick, Catalyst IT and Nick Horspool, Te Pū Ao GNS Science  
1:15 pm - 1:45 pm, Rangimarie Room 1

The flooding and cyclone events of early 2023 have put in to sharp focus the impacts from natural hazards. RiskScape, a collaboration between GNS Science, NIWA and Toka tū ake EQC, is a software application for analysing natural hazard and climate change consequences. Russel and Nick will present how RiskScape has iteratively evolved from a standalone tool for researchers to a web based tool for communicating risk to a broader audience. Using case studies from local events, they will explain how they have leveraged open source to build trust in the software and outline some of the challenges that still lay ahead.

**Russel Garlick** is Head of Projects at Catalyst IT and the Delivery Lead for the RiskScape software development programme. An ICAgile accredited trainer, Russel has been working with project teams of the last 20 years to help them improve how, when and what they deliver. Prior to joining the RiskScape team 5 years ago, Russel has led teams charged with the delivery of technical transformation projects for both the private and public sector.

**Nick Horspool** is a Senior Risk Scientist at GNS Science, a New Zealand Crown Research Institute. Nick has 15 years experience developing natural hazard risk models to quantify the impact natural hazards have on communities. Prior to joining GNS Science, Nick worked for Geoscience Australia on disaster risk management projects across the Asia-Pacific region. Nick has just finished his PhD on life-safety risk in earthquakes, and has a MSc in Seismology.

## **Cloud First – For digital resilience**

Tony Eyles, Department of Internal Affairs  
1:15 pm - 1:45 pm, Rangimarie Room 2

Government policy is Cloud first for many reasons. In its most advanced form, public Cloud, there is a strong case for digital resilience. With the right architectural design, culture, and operating processes in place, Cloud has inherent characteristics that can improve resilience. From enabling remote access (e.g. work from home), scalability of support services (e.g. COVID call centres), to geographic redundancy, physical security and data backup/recovery, the unprecedented investment happening now in onshore public Cloud infrastructure will put Government in good shape to weather disasters. In this session, you'll hear about the opportunities for government to leverage Cloud to increase their resilience and maintain service in crisis.

**Tony Eyles** leads the work for the GCDO that looks to accelerate transition of Government agencies to Cloud services. This is a multifaceted programme that has developed commercial agreements, security templates, guidance and policy as well as set up of the Cloud Capabilities Network. The programme has facilitated projects in AI and digital twin approaches to show the art of the possible in cloud services. Importantly, the team has also worked in a codesign capacity with iwi representatives and Stats NZ on advice and guidance for treatment of Māori data in the cloud. Prior to cloud, Tony helped set up the models and concepts defining the Digital Identity Services ecosystem, having consulted for years in the public and private sectors in identification and product development.

## **Lessons learned for public sector reform from the Australian Robodebt Royal Commission**

Pia Andrews, AWS (sabbatical)

1:50 pm - 2:20 pm, Oceania (in-person & online)

This presentation will cover key structural, technical, cultural and other insights gleaned from the Robodebt Royal Commission, and will tie these insights back into the APS Reform Agenda currently underway in Australia, with comparisons and recommendations for the New Zealand Government based on the speakers experience in both jurisdictions.

**Pia Andrews** is an open government, digital transformation and data geek who has been trying to make the world a better place for 20 years. She usually works within the (public sector) machine to transform public services, policies and culture through greater transparency, democratic engagement, citizen-centric design, open data, emerging technologies and real, pragmatic actual innovation in the public sector and beyond. She believes that tech culture has a huge role to play in achieving better policy planning, outcomes, public engagement and a better public service all round. Pia is currently taking something of a public sector sabbatical, working as a Strategic Advisor to the Public Sector in AWS. She is in a newly formed team made up of experienced public servants who provide futures oriented policy and outcomes focused advice, support, exploration and experimentation, to agencies and departments across Australia, New Zealand and Oceania.

## **From digital ravine to digital abyss: Equitable digital operations service**

Mehrdad Fatemi, Ministry of Education and Andrew Gurr, Fusion Networks Ltd

1:50 pm - 2:20 pm, Rangimarie Room 1

The presentation will consider how the digital divide impacts our national resilience, and ability to respond during times of crises both effectively and efficiently. Furthermore, we will consider why we need a consolidated government intervention, how we went about address this issue, by building an Equity Digital Operations Service in collaboration with communities and the industry. Finally, we will discuss what we have learned from implementing EDOS and the pathway forward.

**Mehrdad Fatemi** is currently leading the digital equity programme at the Ministry of Education where a range of initiatives are being developed to tackle inequity in accessing digital services and resources for students. Over the past 25 years Mehrdad has held positions in technology leadership, engineering and architecture for some blue chip national and international organisations alongside large government agencies. Mehrdad enjoys auto-mechanics and woodworking in his spare time.

**Andrew Gurr** - Andrew has been managing businesses for over 30 years, the last 20 in the Tech sector. He has a Bachelor of Architecture and Business and enjoys woodworking in his spare time. In 2009 he started Fusion Networks Ltd, which has been instrumental in developing Tech services for various industries including transport and education. The combination led to the development of an Equity Digital Services team operating under the umbrella EDOS in 2019 in response to the Covid pandemic. Fusion has delivered various significant nation networking and communications projects, but another passion of Andrew is the development team within Fusion which develops intelligent automation, data and web-based system solutions. Andrew is also very passionate about education and has spearheaded the development of Digital Tech learning programs for schools as well as the development of successful Fusion's Intern program that over the past 7 years has provided pathways to employment for many students. Andrew has served on the board of Intelligent Transport in New Zealand, and participates in various education forums and panels looking to improve learning opportunities for all New Zealanders to the Tech industry

## **Walking the tight-rope | Balancing resilience, safety and wellbeing online - Kia noho Kaumaru Tuihono**

Anjela Webster, Generation Online

1:50 pm - 2:20 pm, Rangimarie Room 2

Lives are lived seamlessly online and offline for working, living, learning, connecting, and simply having fun. We are spending more time online than ever before. We know activities of 'bad actors', scams, and identity and information theft is rife. However, implications stemming from other online challenges are as eroding. Understanding the digital environment and its' complexities from a wellbeing | Hauora perspective is critical if we are to develop critical skills and strategies that support our resilience, safety, and wellbeing. This presentation will explore these aspects through a Hauora | wellbeing lens to support, and develop our capability and resiliency online and offline.

**Anjela Webster** [M.Ed. (hons); B.Ed.; Dip. Positive Psychology and Wellbeing and MoE Accredited Facilitator] is the founder of Generation Online, a leading voice in Aotearoa around the online complexities, challenges, and risks for people of all ages.

Anjela has extensive knowledge and experience in training and educating in this space, and founded G:O after five years with Netsafe as an Education Advisor.

Generation Online partners and works with industry, education and government in a range of ways, and we've been honoured to partner with Netsafe, Mindshift, The Light Project, Te Pū Tiaki Mana Taonga Museums Aotearoa, Life Education, Victoria and Massey University.

As a consultant and principal advisor in this rapidly evolving space, Anjela has supported many organisations, kura, and groups including the MoE, NZSTA, PPTA, NZEI, Police, DHBs, DIA, Refugee and ESOL groups, universities, and Guidance Counsellors in pragmatic, positive and tailored educative solutions.

As digital technologies and innovations evolve, so does the need for awareness, knowledge and skills as end-users of the digital products used for working, learning and living. The intersections between digital engagement, resilience and safety are integral and need to be considered as part of the wider wellbeing and safety initiatives across organisations and industry.

### **Digital resilience lessons from disasters (panel)**

2:25 pm - 2:55 pm, Oceania (in-person & online)

**Chair:** Mike Chapman, Archives NZ

#### **Panellists:**

- Simon Mason, Stats NZ
- Fiona Dally, MBIE

**Simon Mason** is Deputy Government Statistician and Deputy Chief Executive for Census and Collection Operations. Simon joined Stats NZ in July 2020. He is the Senior Responsible Officer for the 2023 Census and leads the organisation's collection operations team. He is also Senior Responsible Officer for the Future of Population and Social Statistics programme which is looking at an end-to-end redesign of social and population statistics to provide better access to data for all people of Aotearoa New Zealand. Before joining Stats NZ, Simon was the Acting Deputy Commissioner Corporate Integrity and Assurance at Inland Revenue. He was also a member of Inland Revenue's Business Transformation Programme leadership team, managing the commercial and procurement functions. Simon brings extensive commercial and programme experience, having held several roles in both private and public organisations. He is a member of the Institute of Directors.

**Fiona Dally** is Lead Advisor, National Security System, Ministry of Business, Innovation and Employment. She works across MBIE to coordinate the Ministry's interface with the Officials' Committee for Domestic and External Security Coordination (ODESC system) which performs a crisis management function across all hazards/all risks. This role is very varied and she has been involved in multiple responses and incident management teams including MBIE's approach to COVID-19, fuel security, supporting the coordination of the Carbon Dioxide supply shortage. More recently she has provided all of government liaison for MBIE into the Cyclone Gabrielle response. She has worked across multiple portfolio's within MBIE to coordinate pan Ministry insights into ongoing readiness and legislative changes which may impact our Emergency Management approach and MBIE's responsibilities.

### **Creating digital resiliency with Digital Boost Checkable**

Malcolm Luey, MBIE and Rob Hawthorne, Google  
2:25 pm - 2:55 pm, Rangimarie Room 1

During the pandemic, MBIE identified that small businesses that had strong digital presence, such as online shopping, contact us, booking forms, etc., were much more resilient to the impacts of the lock downs than small businesses that did not.

Malcolm Luey (Director of Innovation, Business & Consumer Branch for MBIE) realised that MBIE could do a lot more to assist the ~540,000 small businesses in Aotearoa. This is where Digital Boost Checkable was born.

Checkable provides small business owners the tools and capabilities they need to enhance their digital presence. The owner simply puts in their website, social media handles and if they wish, their financials. Checkable will then help them to understand their digital presence and reach, provide a plan of action that allows the owners to take quick actions and a plan they can take to their financiers to apply for funding.

### **Who stole my peace?**

Bushra Nur, Ministry for Primary Industries  
2:25 pm - 2:55 pm, Rangimarie Room 2

Who Stole My Peace is a personal story shared by Bushra Nur as she navigated working in the tech sector as a project manager, switching jobs to take on a PMO leadership role in a different organization while juggling studying full-time for her MBA. Bushra shares her experiences and lessons learned from burning out and how she has taken those lessons and applied it to her roles since and the coaching she now provides her team on resilience.

I was born in Fiji to Fiji-Indian parents and spent my formative years there. From my ethnic background and growing up in a multi-cultural Pacific country, I bring a different perspective. I studied science in school and went on to university to graduate with a double majors degree in Computing Science & Information Systems. I moved to New Zealand permanently in 2005 and pursued further studies by graduating with a Postgraduate Certificate in Computing Science from Auckland University of Technology. While studying, I was offered a job at EDS in Wellington. Moving to a new city with no connections and no familiarity, I began my adventure of living and working in my new home.

Starting as a developer and realizing I didn't enjoy it at all, I decided to give project management a go and did not look back. Today my interests have shifted to strategic portfolio management, business architecture, technology roadmaps, governance and benefits realization.



Outside of work, my biggest achievement was completing walking 100km for the Oxfam Trailwalker which was a test of mental resilience in itself! Not shying away from challenges, I opt for roles that take me outside my comfort zone.

### **The chiefs talk digital resilience (panel)**

3:30 pm - 4:10 pm, Oceania (in-person & online)

**Sponsored by Catalyst**

**Chair:** Richard Foy, Starfleet Command

#### **Panellists:**

- Stuart Wakefield, Ministry of Education
- Bill Moses, Public Service Commission
- Suzanne Pullman, Commerce Commission

**Bill Moses** is the Chief Digital Officer for the Public Service Commission and has worked for the public service for 10 years. Prior to that he worked in the private sector delivering some large government digital projects. He has a passion for linking people, agencies and project together for the greater good.

**Mark Horgan** is Chief Advisor to the Chief Digital Officer at the Ministry of Education.

**Suzanne Pullman** is the Chief Information Officer of the Commerce Commission and has over 13 years' experience in IT across Government agencies and the private sector. Having stepped up into the role of CIO in 2020, just weeks before the global COVID pandemic, digital resilience has been a key focus for her in recent years.

**Richard Foy** is an Aotearoa New Zealand-born son of Chinese immigrants, accomplished public speaker, failed comic-novelist and a technology-savvy futurist who's enthusiastically committed to a career of public service and leadership. Richard is a former Chief Archivist of Archives NZ, our National Archives, an LDC (Leadership Development Centre) Fellow, and a Starfleet Officer.

"As a Chinese Kiwi, born-and-bred in Aotearoa New Zealand, I grew up in Wainuiomata learning to navigate two worlds: the See Yip Cantonese-speaking Chinese culture of my immigrant forebears, and the predominantly Pākehā (in the '70s-'80s) culture of my local community. In adulthood, I've learned to navigate the third world of Te Ao Māori, notably through my public service career and leadership roles. In the past decade, I've learned to navigate my fourth world, as my youngest daughter Lucy is a Chinese-German Kiwi. I happily embrace 'yum cha, meat pies, hangi and sauerkraut'—and the diversity of cultural traditions and flavours they embody—all with equal gusto!"

Outside of work, Richard is obsessed with his children, Star Trek/Wars, and fungi, sometimes in that order, but seldom in combination.

### **Cyber security in a broken world (keynote)**

Steve Honiss and James 'Elf' Eldridge, ZX Security

4:10 pm - 4:45 pm, Oceania (in-person & online)

Making an organization resilient towards cyberattacks can seem like a daunting task, especially when so many large international organisations are regularly being successfully attacked by hackers. Steve Honiss and Elf Eldridge will talk through the realities of attacking and defending organisations with disparate digital infrastructure and staff, based on their experience breaking into and defending organizations. They will cover best practice cybersecurity advice for SMEs in the context of recent newsworthy breaches. They will present a pragmatic approach to security, from

the importance of getting the basics right to common issues we encounter when securing cloud systems.

**Steve Honiss** is an experienced Chief Information Security Officer, leading the team of cyber security consultants specialising in Governance, Risk and Compliance at ZX Security. Certified Information Security Manager (CISM) Master of Strategic Studies (MSS) from Victoria University of Wellington, Member of the Institute of Directors.

**Dr. Elf Eldridge:** Elf's day job with ZX Security involves attempting to attack the digital infrastructure of clients to identify weaknesses. Elf also writes and delivers cybersecurity training courses for the NZ Institute of IT professionals that cover everything from the NZISM to cybersecurity Incident Response.