



# academyEX Converge Research Symposium 2024



14th June 2024



## Contents

<b>KEYNOTE SPEAKER</b>	<b>4</b>
<b>Dr Madelaine White</b>	<b>4</b>
TIED TO AN INVISIBLE STRING: EMBRACING LIFELONG LEARNING IN YOUR CAREER	4
<b>RESEARCH WORKSHOPS</b>	<b>5</b>
THE KOKO MODEL: A SAMOAN INDIGENOUS CULTURAL SAFETY MODEL FOR RESEARCHERS	6
THE POWER OF SYNERGY: TRANSFORMING COLLABORATIVE PROBLEM-SOLVING INTO HIGH-IMPACT DESIGN-BASED RESEARCH	8
COMMANDING THE DIGITAL AGE: LEADERSHIP CAPABILITIES FOR THE ERA OF AI	9
EXPLORING LEGO SERIOUS PLAY AS A TOOL FOR LEARNING	11
THE FUTURES COMPASS: A TOOL FOR NAVIGATING THE FORESEEABLE FUTURE AND BEYOND	14
<b>RESEARCH PRESENTATIONS</b>	<b>16</b>
COPILOT FOR CONSUMPTION: EXPLORING THE IMPACT OF MICROSOFT 365 COPILOT ON USER LICENSE CONSUMPTION	17
BRINGING FAMILY HISTORY TO LIFE – HOW TECHNOLOGY CAN HELP BRIDGE THE GAP BETWEEN FACTS AND FEELINGS	22
YOUTH UNDERSTANDING OF PSYCHOLOGICAL SAFETY AND GROUP PARTICIPATION ACROSS NEUROTYPES	26
NAVIGATING DIGITAL MIGRATION: A STUDY ON EMPOWERING MĀORI AND PASIFIKA TALENT FOR THE INTERACTIVE MEDIA/DIGITAL LANDSCAPE	34



NAVIGATING AI INTEGRATION IN NEW ZEALAND SECONDARY SCHOOLS	38
REDEFINING THE DOMESTIC LANDSCAPE: INSIGHTS FROM NZ WOMEN ON UNPAID WORK AND TECHNOLOGICAL INTERVENTION	43
REGENERATE GAME JAM - REIMAGINING FARMS IN GAMES TO SHOWCASE ORGANIC, REGENERATIVE AND INDIGENOUS FARMING KNOWLEDGE	46
<b>POSTER PRESENTATIONS</b>	<b>50</b>



## Keynote Speaker

Dr Madelaine White

### Tied to an Invisible String: embracing lifelong learning in your career

Maddie currently serves as the Strategic Partnerships Manager at Gillies McIndoe Research Institute (GMRI), where she leverages over a decade of experience in translational science and research commercialization to drive positive health outcomes. She is passionate about empowering Ph.D. graduates and is dedicated to equipping them with the essential skills, opportunities, and networks vital for success across diverse professional landscapes, thereby enriching New Zealand's innovation ecosystem.

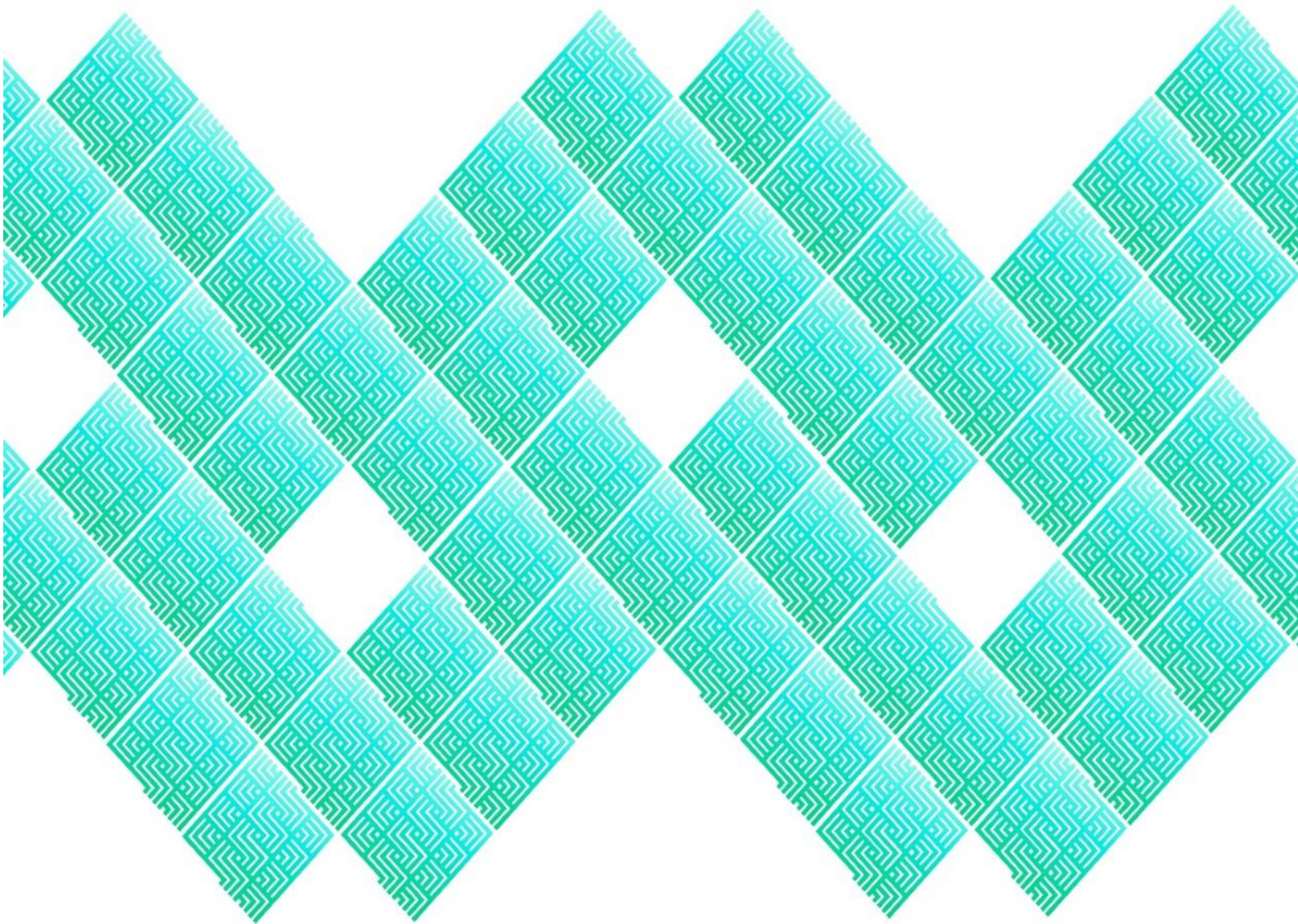
In her current role, Maddie is proud to be partnered with AFT Pharmaceuticals and Massey Ventures in two commercialization projects focused on developing topical creams for Strawberry Birthmarks and Keloid scars. Additionally, she is actively involved in cell and molecular research aimed at understanding the development and progression of vascular anomalies and glioblastoma. In this capacity, Maddie supervises two Ph.D. students and a postdoctoral fellow, guiding their research endeavours and fostering their professional growth.

Maddie's expertise lies in formulating and executing strategies that translate intricate scientific research into tangible applications, effectively collaborating with industry and government stakeholders, licensing intellectual property, and nurturing collaborative relationships spanning academia, industry, and indigenous communities. Her track record includes numerous peer-reviewed publications in esteemed journals, underscoring her proficiency and collaborative accomplishments across varied domains such as immunology, parasitology, and molecular biology.





# Research Workshops







# The Koko Model: A Samoan Indigenous Cultural Safety Model for Researchers

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**Salā Marie Young**

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## Workshop Summary

**Key Learning Outcomes:** Explore the Koko model, a Samoan Indigenous approach, and its application through seven distinct phases to create culturally safe research environments.

**Summary:** The Koko model represents a culturally sensitive Samoan Indigenous methodology created for facilitating talanoa (conversations/interviews) with participants from Pacific Peoples. Taking inspiration from the traditional practice of preparing Koko Samoa, a beloved beverage in Samoan culture, this model offers a systematic framework that emphasises cultural safety and inclusivity.

### The 7 Stages of the Koko Model

1. **A'a | Roots:** Suitable soil and a solid foundation rooted in genealogy, culture, land, and identity are essential for creating a meaningful conversational space that genuinely honours kinship and the individuals' connections to the researcher.
2. **Koko | Pods:** It is crucial to carefully select and prioritise the individuals involved, clearly state the objectives and mutual benefit, while keeping the research purpose clear and straightforward.
3. **Fatu | Seeds:** Taking the seeds out of the Koko Pods. This is time-consuming, as is building and cultivating trust, rapport, and authenticity to facilitate open and honest dialogue. When participants see themselves in the researcher, there is more mutual regard and respectful rapport in the preparation phase of the research design.
4. **Fa'apala | Fermenting & Drying:** Capturing the data takes time; there is no shortcut in the fermenting process. However, as the richness of the themes becomes apparent, so does the gathering of broad insights and themes.
5. **Faapa'u | Drying/Roasting:** Only the best quality is used at this stage. Thematic analysis is engaged with a focus on ensuring quality control.
6. **Tanoa Tu'i Koko | Hand Grinding:** Once dried and roasted, the koko is peeled and ground into a paste, which is then pressed into moulds or cups, and allowed to cool and solidify. In the Koko model, this is where raw data is analysed, shaped and translated into practical insights.
7. **Koko Samoa:** The solid block is then added to water and simmered until the koko disperses. Sometimes other ingredients are added to cater for individual tastes. Similarly, insights that arise from the use of the Koko model can be tailored to their audience, providing additional context. The end result, like a satisfying cup of Koko Samoa, is shared organic insights that benefit all stakeholders, ensuring the research outcomes are communal and impactful.



Based on the researcher's personal experiences of learning to make Koko Samoa while living in Samoa, this model seeks to establish a nurturing and supportive environment for participants to delve into cultural and identity-related subjects. The workshop will lead participants through the various stages of the Koko model, offering useful insights and illustrating how to implement this method in their research.

#### **Who Should Attend:**

- Academic researchers engaged in collaboration with Samoan indigenous communities
- Qualitative researchers with a focus on culturally safe methodologies
- Leaders and decision-makers involved in public and private sector initiatives concerning Pacific Peoples

Attendees will gain insights into the Koko model's unique approach and learn how to implement its principles to foster a respectful and inclusive research environment.

#### **About the presenter**

**Salā Marie Young** MTF, MInstD, hails from the villages of Leauva'a (from whence her matai title comes), Saleimoa and Sapapāli'i, Samoa. She is founder of Pacific Enterprise People, an organization that provides governance and technology capability-building to Pacific-led organisations and entrepreneurs. She is currently undertaking doctoral studies at Ōtākou Whakaihu Waka (The University of Otago) on the topic of Samoan and Tongan indigenous governance models for the early childhood education sector. Salā completed her MTF with AcademyEX in 2022, winning the Manaaki award for the quality of care shown to interview participants. The topic of Marie's thesis, "How might technology help New Zealand-born Samoans connect to their culture", was unexpectedly emotive for talanoa participants, as trauma and grief was shared about their cultural identity. It was during this interview process that the Koko model was developed.



# The Power of Synergy: Transforming Collaborative Problem-Solving into High-Impact Design-Based Research

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**Milla Inkila**

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## *Workshop Summary*

During this workshop, we will explore the dynamic intersection of co-design and design-based research (DBR) in educational contexts. Milla Inkila will share her experience in co-design and DBR, and we will ideate where those could help us design solutions to address complex problems in our professional practices.

The core idea behind design-based research (DBR) is to create a symbiotic relationship between research and practice by designing and refining educational interventions in real-world settings. Since it is an iterative and collaborative approach to problem-solving, it is particularly well-suited to developing and evaluating educational interventions and innovations. Many DBR scholars believe that the best way to conduct research would be to achieve the right balance between theory-building and practical impact.

Co-design on the other hand, also known as participatory design or user-centered design, is an approach that actively engages end-users, stakeholders, and relevant communities in the design and development of educational interventions, products, and/or processes.

This workshop aims to equip participants with practical insights and strategies for effectively addressing complex challenges in our professional practices. We'll explore how collaborative problem-solving can lead to research with a broader impact.





# Commanding the Digital Age: Leadership Capabilities for the Era of AI

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**Dianne Rafter & Lynne Miller**

**Will you be Team Robot or Team Human? Are you ready to embrace the leadership skills that will empower future ready, human-centric workplaces?**

## *Workshop Summary*

As artificial intelligence (AI) rapidly transforms industries and reshapes job markets, effective leadership is critical. Understanding and harnessing AI's potential is no longer just a technological challenge but a fundamental leadership skill. This workshop aims to move the discussion beyond what we already know about 'good leadership', exploring the following question: what are the additional or new capabilities needed by leaders to help navigate and thrive in the AI era, where uncertainty and accelerated change are the new normal?

By the end of the session, participants will:

- Have reflected on how AI will impact them personally, in their work contexts and in society
- Have a deeper understanding of the leadership capabilities required in the AI era
- Leave inspired to be the leaders that we need for the future

### **Who this workshop is for:**

People leaders and those who have a leader (i.e., everyone!). We are all humans navigating a time in history that could be considered the Great Transition (1). Leadership needs to come from us all. We need to know what to expect and how best to prepare. The activities in this workshop will benefit from diversity of thought, so if you are curious, please come!

### **Workshop Structure:**

- Scene setting: Quick fire quiz on AI in the workplace - how much do you know?
- Work, worker and workplace changes: how organizations are likely to respond and adapt, and the new requirements of leaders
- Breakout Brainstorm: What are the critical digital leadership competencies? (Team Human vs Team Robot)
- Breakout Brainstorm: Making sense and structure of the new capabilities - how should organizations approach upskilling their workforce?
- Wrap Up



### **Expectations:**

Participants are expected to actively contribute to discussions, share insights, and collaborate with their teams to identify key leadership capabilities needed in the AI era. These sessions will foster critical thinking and creativity, encouraging participants to envision practical applications of AI in leadership roles.

### **About the authors**

**Dianne Rafter:** Future thinking. Change adaptive. Human-centric leadership. As an Audiologist, Dianne has a background in the hearing health care industry spanning 24 years, with leadership roles in both the clinical and commercial sides of the industry. With a deep curiosity about human potential in a future shaped by rapidly evolving and disruptive technologies, she recently completed the Masters in Technological Futures Program (Gen19). Her research explored strategies to empower professionals to be ready for change, focusing on the development of future-ready leadership and environments that enable individuals to thrive. She believes in raising awareness and personalizing the benefits of technology, like AI, to ensure everyone is part of the conversation and feel empowered to proactively create their own futures.

**Lynne Miller:** GM HR Strategic Delivery - Finance Transformation. Lynne is proficient in global strategic HR, OD, Learning and Development, executive coaching, transformation and growing all aspects of organisational capability at the functional/ technical or leadership /behavioural level. Lynne is a guest lecturer for the Massey University MBA, and a keynote speaker on the topics of 'Leading in the era of AI' and 'NZ's broken talent pipeline.' Having previously completed a Masters in HR strategy and the management of change, she is now updating her professional expertise through the Masters in Technological Futures Program (Gen 22), where she is looking at critical leadership competencies for successful digital transformations.



## Exploring Lego Serious Play as a Tool for Learning

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**David Parsons**

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### Workshop Summary

Lego is a product that has been used widely in contexts beyond its original intent as a toy, with adults as well as children. Lego has three main areas (beyond play) in which its means of expression and collaborative potential may be particularly useful, namely, therapy, teaching and experiential learning, and organisational processes. In the education space, it has been used, for example, for control systems using Lego Mindstorms, assisting those with autism and similar conditions, teaching agile software development methods and exploring the Cynefin framework among many other examples. The ways that educators choose to use Lego in their practice are many and varied, but one structured approach is to adopt LEGO® SERIOUS PLAY®.

LEGO® SERIOUS PLAY® is essentially a constructionist activity, where everyone builds and everyone discusses. It assumes that the answers are already in the room and encourages participants to think with their hands, in a similar vein to the prototype phase of Design Thinking. Some key features of a Lego Serious Play session are that it should be long enough to fully explore the problem and that the artefacts that are built are metaphorical, not representational.

This workshop will provide an overview of the principles and processes of LEGO® SERIOUS PLAY® through a hands-on exploration of applying it to a given problem. At each stage of the workshop, participants will experience each of the key aspects of the method and will be given the opportunity to reflect on how they work in practice. The workshop will conclude with a discussion that addresses the success (or otherwise) of applying the method and how the participants might be able to apply it in their own practice in future.

#### Who should attend:

This workshop is perfect for educators, therapists, business professionals, and team leaders looking to incorporate innovative, hands-on techniques into their practices. Whether you're working in teaching, therapy, experiential learning, or organisational processes, this workshop can equip you with a novel approach to problem-solving and team-building

#### About the presenter

**David Parsons** is Research Director at academyEX, dedicated to supporting and promoting research activities within the organisation. His academic background is in digital technology, with a Master's in Computer Science and a PhD in Information Technology. He has a special interest in the relationship between education and technology, both education about technology and education with technology. He has had a long career in both academia and industry, starting in the UK in the late 1980s lecturing in Computing in London, before taking up an academic role at Southampton Solent University. Following this he worked as a trainer and consultant in the software industry for a range



of companies, including partner roles with IBM and Oracle. He moved to New Zealand to take up a role at Massey University in 2003, later becoming Associate Professor in Information Technology. He joined The Mind Lab (now academyEX) in 2015. He has published many books and articles on topics across computer programming, software development processes and technology enhanced learning. He is editor in Chief of the International Journal of Mobile and Blended Learning and a Certified member of the Association for Learning Technologies.



## Supercharging Innovation with AI and No-Code Tools

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**Paula Gair**

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### *Workshop Summary*

We will explore the transformative potential of artificial intelligence (AI) and AI powered no-code tools and how they can support, simplify and supercharge Innovation.

Traditional innovation processes often involve significant technical expertise and other barriers and obstacles. The core focus of the workshop is to consider how we might leverage AI and no-code tools in order to democratise Innovation.

Over 60 minutes we will discuss how these tools can be used (touching on Design Thinking, Human Centred Design and other models of Innovation). We will explore how we can use AI and no code tools for aspects of Innovation and also consider how AI is supercharging no code tools.

You'll leave with an idea of different tools you can use at different stages of the Innovation Journey and we'll crowd source tools and techniques in the workshop. We'll delve into practical experiences and experiments. Bring your device if you'd like to try some tools along the way or we can work together on screen.

This workshop is for today's innovators, business leaders, entrepreneurs, product managers, and anyone interested in removing barriers in traditional innovation processes. It's particularly beneficial to those who wish to comprehend how AI and no-code tools can democratise and supercharge innovation.

### **About the presenter**

Paula Gair has spent over 15 years working globally and consulting for international Not For Profits in their digital transformations returning to New Zealand in 2011. In 2017, she became the first student to enrol in the Master of Technological Futures program at Tech Futures Lab at academyEX, where she completed a project on cyber security risks and mitigation for non-technical audiences. This project led to the creation of deriskme, a startup focused on cyber security, online safety, and privacy for families and schools.

In her academyEX mahi, Paula advises Master of Technological Futures students, with specialist areas of interest in Privacy, Cyber Security, and Online Safety. Recently, she has led initiatives on AI tools and practices to support research and led a no-code community of practice to help students develop their project ideas into reality.



# The Futures Compass: A Tool for Navigating the Foreseeable Future and Beyond

Research Workshop

academyEX Converge Research Symposium, 14th June 2024

**Huw Jones**

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## *Workshop Summary*

In a rapidly changing world, navigating the future requires a blend of indigenous wisdom and modern-day strategic foresight.

The Futures Compass: A Tool for Navigating the Foreseeable Future and Beyond is a 60-minute workshop designed to introduce an emerging personal and collective development framework that draws inspiration from the ancient practices of indigenous wayfinders, the precision of the Polynesian Star Compass, and the Japanese concept of Ikigai.

The aim of this workshop is to equip participants with the skills and insights necessary to navigate change, uncertainty, and the future.

### **Participants in this workshop will:**

- Understand the core principles of the Polynesian Star Compass and how it can be applied to personal and professional growth.
- Explore a complementary alternative to the concept of Ikigai and learn how to identify their own purpose and passion in life.
- Engage in a mindfulness practice to enhance self-awareness and clarity of thought.

The workshop will begin with an introduction to the Futures Compass framework, highlighting the parallels between ancient navigation techniques, the Polynesian Star Compass and futures thinking. Participants will then engage in an interactive session designed to help them identify their own "true north" based on their Values (the traits and attitudes that shape their worldview), Value (the talents and attributes that come naturally to them), Vocation (the responsibilities and calling they are most drawn to), and Vision (the image of a desirable future they are currently working towards).

A key component of the workshop is a guided mindfulness practice. Participants will have the opportunity to partake in a session designed to cultivate presence and awareness. This practice will involve guided visualization, breathwork, and simple standing movements, enabling participants to connect deeply with their inner selves and the world around them. By grounding themselves in the present moment, attendees will be better equipped to envision and navigate their futures with clarity and confidence.





**By the end of the workshop, participants will:**

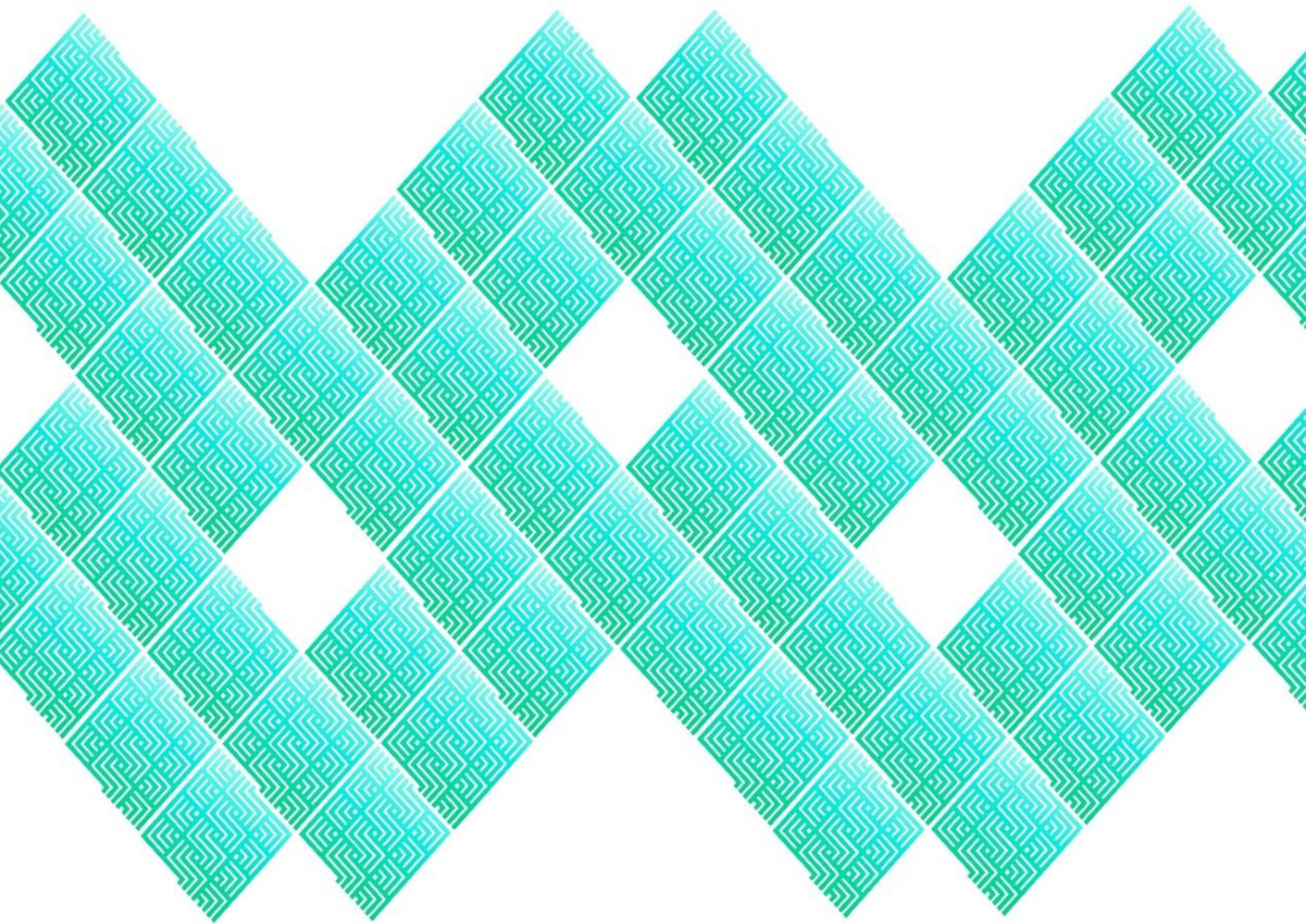
- Develop a personalized framework for navigating their futures, informed by the principles of the Futures Compass.
- Enhance their self-awareness and mindfulness skills, leading to greater personal and professional fulfillment.
- Be equipped with practical tools and techniques for identifying and pursuing their life's purpose.
- Build resilience and adaptability, enabling them to thrive in an uncertain and rapidly changing world.
- Connect with like-minded individuals who share an interest in futures thinking, indigenous wisdom, and personal growth.

Join us for The Futures Compass: A Tool for Navigating the Foreseeable Future and Beyond and embark on a journey of self-discovery, strategic foresight, and meaningful growth.

Whether you are a researcher, consultant, industry advisor, senior executive, entrepreneur, or simply someone interested in mindfulness and strategic foresight, this workshop offers valuable insights and practical tools to help you navigate your path towards a fulfilling and purpose-driven future.



# Research Presentations





# Copilot for Consumption: Exploring the Impact of Microsoft 365 Copilot on User License Consumption

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Noelle Savill**

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In the ever-evolving landscape of digital productivity tools, Microsoft 365 (M365) stands out as a cornerstone for numerous businesses worldwide. According to Statista, Microsoft 365 has 30% market share of major office productivity software worldwide compared to its major competitor Google with 44% market share (Vailshery, 2024). Additionally, "Microsoft 365 Copilot promises to bring generative AI to knowledge workers from right inside the programs many use daily, such as Word, Excel, PowerPoint, or Teams. Because of its value proposition, we [Forrester] forecast that nearly 6.9 million US knowledge workers will adopt Microsoft 365 Copilot by the end of 2024" (Gownder, 2023). The introduction of M365 Copilot has sparked interest in its potential to enhance user productivity, but does it actually optimise M365 license consumption? This study delves into the question: Does M365 Copilot increase overall user consumption of Microsoft 365 licenses?

License consumption refers to the utilisation of software licenses within a given organisation or user base. In the context of Microsoft 365, license consumption typically refers to the extent to which users actively utilise the features, applications and services included in their Microsoft 365 subscription ("License Consumption" defined with the help of ChatGPT). This includes activities such as accessing and using productivity tools like Microsoft Word, Excel, and PowerPoint, utilising collaboration platforms like Teams and SharePoint, and leveraging cloud storage solutions like OneDrive. Understanding license consumption helps organisations assess the value derived from their software investments and optimise licensing strategies to meet user needs effectively.<sup>1</sup>

The research endeavors to bridge this gap by conducting a comparative analysis of M365 consumption rates before and after the implementation of Copilot. The fundamental premise lies in examining whether Copilot, touted as a productivity-boosting tool, genuinely amplifies M365 usage per user. The implications of such augmentation extend to businesses, potentially optimising their investments in M365 licenses.

This study addresses several pertinent considerations. Firstly, while Copilot promises productivity enhancement, it does so by automating tasks rather than fostering deeper user proficiency in M365 products. Consequently, the inquiry extends beyond mere consumption metrics to assess whether Copilot facilitates access to a broader array of M365 tools and features. The dichotomy between speed and depth in utilisation forms a central theoretical backdrop, prompting reflection on whether accelerated usage equates to optimal productivity.

In Microsoft's own published Work Trend Index Special Report, "Research findings from early Copilot users" showed, "70% said they were more productive, 29% faster overall in a series of tasks (searching, writing and summarizing), nearly 4x faster catching up a missed meeting and 77% said they didn't want to give it up" (*What Can Copilot's Earliest Users Teach Us About Generative AI at Work?*, 2023). While these stats seem impressive overall, they do not necessarily prove that more of the M365 suite of products are being consumed. It does show that speed is improved. Additionally, "68% said





Copilot improved the quality of their work,” showing improvement in accuracy and quality (*What Can Copilot’s Earliest Users Teach Us About Generative AI at Work?*, 2023).

One senior user interviewed stated, “We are seeing meaningful impact in our daily lives; it makes a difference when we are able to find information faster or we are shown relevant content. We are more agile, Microsoft Copilot is helping us to have the right information at our fingertips,” said Sarah Lewandowski, Global Technology & Innovation Lead, Bayer (*What Can Copilot’s Earliest Users Teach Us About Generative AI at Work?*, 2023).

As a Microsoft 365 consultant and expert, I would hope that organisations are utilising Microsoft 365 usage analytics to track user consumption overall. This would ultimately impact strategy around user adoption and training. The opportunities for integrating M365 usage analytics with Power BI would give senior leadership

greater data visualisation over their productivity suite and user proficiency. The Microsoft 365 overview report offers insights into user adoption and usage trends within the ecosystem. It provides information on user adoption rates, active usage, communication preferences, collaboration activities, storage utilization, and device connectivity. Organizations can use this data to optimize their Microsoft 365 deployment, enhance productivity, and align digital workplace strategies with user needs (Edwards & et. al, 2024).

By implementing these usage reports prior to adoption of Copilot, would give any organisation visibility over any changes in consumption. I attempted to report on my organisation’s consumption of M365 tools before and after Copilot. At Houston Technology Group, an organisation with approximately 33 licensed M365 users, of which only 6 have Copilot licenses, I attempted to compare Microsoft 365 usage reports to Copilot’s Adoption by app report. Figure 1 shows the number of daily unique users by app since the 13th of February 2024 to the 12th of May 2024, with Word and Outlook as the filters applied from the M365 applications listed.

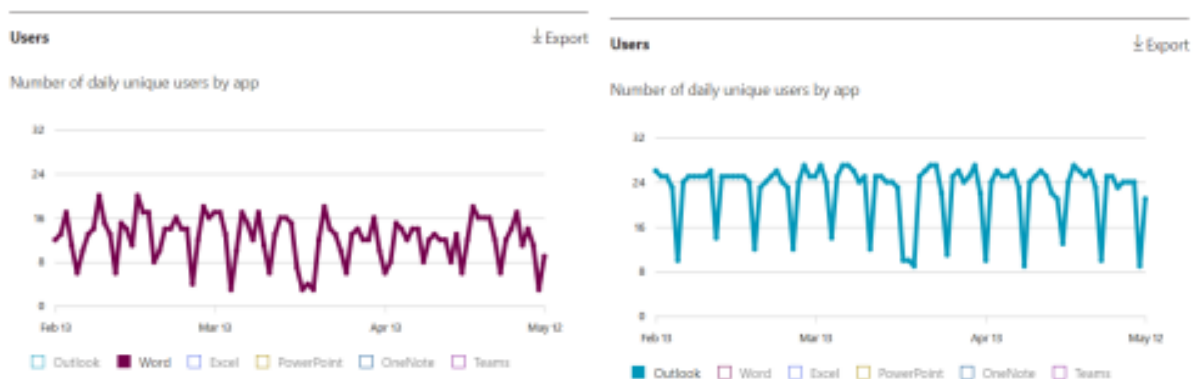


Figure 1: Daily unique users by app (Word and Outlook)

Figure 2 shows the number of enabled and active users of Copilot for Microsoft 365 apps for the selected period spanning from the 15th of November 2023 to the 12th of May 2024.

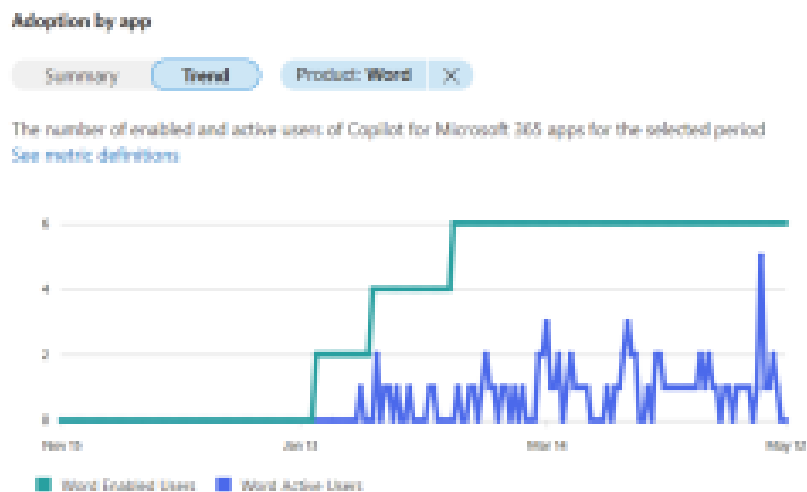


Figure 2: enabled and active users of Copilot

While correlation doesn't always infer causation, I would've liked to see an increase in usage analytics over the period that Copilot was implemented. These reports do not show that. It is worth mentioning that the metrics recorded in these two reports are quite different, but this comparison was the closest I could find in Microsoft's available consumption data. (ChatGPT generated summary based on information from <https://learn.microsoft.com/en-us/microsoft-365/admin/usage-analytics/usage-analytics?view=o365-worldwide>)

While my organisation is probably not the best example due to its small user size in comparison to an even smaller Copilot user group, it was the most accessible to me at this moment in time.

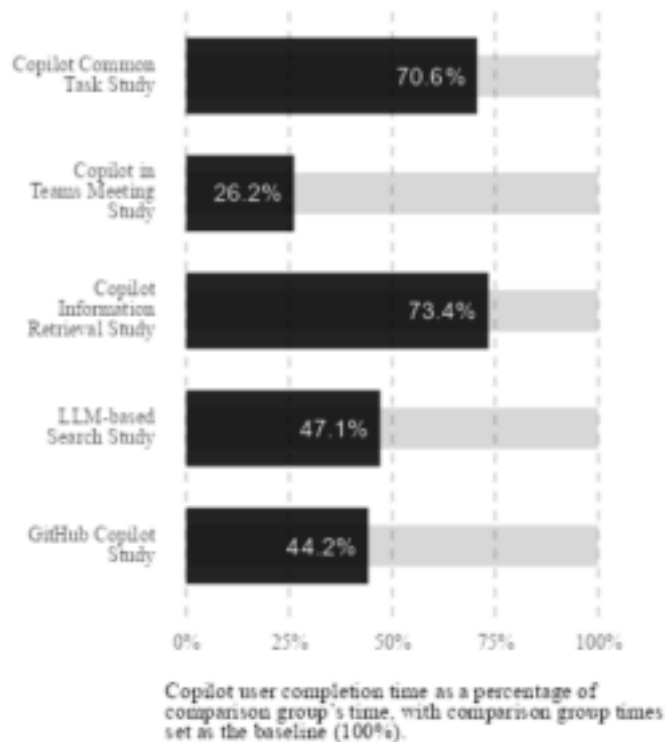
Leveraging M365 usage analytics, my research advocates for a comparison between pre-Copilot and post-Copilot implementation phases. This comparative analysis serves as a robust framework for evaluating the tangible impact of Copilot on M365 license consumption and could potentially validate the increased licensing cost of Copilot. Before rolling out Copilot to more users in our organisation, I plan to observe and track consumption throughout the adoption process.

In all my research seeking to find consumption data pre- and post-Copilot, all I could find was information about productivity impacts, which were almost always measured in time saved. For example, a Forrester article states, "Currently, quantifying hard-dollar return on investment for Microsoft 365 Copilot remains challenging, with emphasis placed on labor time-savings rather than monetary gains. While updates have been made to the core business case, most Copilot customers still struggle to measure tangible financial ROI" (Gownder, 2024). While the aim of this article wasn't necessarily to determine increased license consumption, it proves the concerns around measuring Copilot's ROI has yet to be resolved.

An article published by Microsoft Research demonstrated the overall productivity gains in five different studies where researchers measured and defined productivity by speed, quality and effort (Cambon, et. al, 2023). I commend this research as it sought to demonstrate increased productivity not only by speed or time, however, it was unable to demonstrate any change in consumption. The following findings were produced:

### Task completion speed of Copilot users versus baseline

A cross-study comparison shows Copilot users consistently completed tasks more quickly



My research sought to contextualise consumption within the broader narrative of digital literacy and AI adoption. The rapid assimilation of AI tools underscores a contemporary urgency to cultivate digital proficiency. Copilot, as an AI-driven augmentation within the M365 ecosystem, aligns with this narrative, catering to users familiar with and entrenched in M365 operations. My concern is that the rapid adoption of Copilot is directly related to the sense of urgency to avoid being left behind rather than the actual ROI, which has yet to be demonstrated. Most research about Copilot has been conducted by Microsoft itself, which inhibits its credibility seeing as much of the data has been utilised for marketing purposes.

I would urge more researchers to pursue further investigation to then produce reputable evidence to demonstrate Copilot's ROI. It seems entirely possible to prove Copilot's impact on consumption with Microsoft's analytics and usage tools, but it is necessary that the units of measurement are consistent across reports in order to accurately understand the correlation between Copilot and M365 licenses. Also, I would question Microsoft's measurement of usage. In Microsoft's usage reports, it measures by "daily unique users by app," which doesn't show how much of that tool was used. For example, one user could simply open an application while another user used 10-15 unique features of the application for a period spanning 4-5 hours, but the report is counting each interaction as the same. I don't understand how that demonstrates usage let alone consumption.

In conclusion, this research aspires to offer empirical insights into the efficacy of M365 Copilot as a catalyst for enhancing M365 license consumption. By juxtaposing pre- and post-Copilot usage patterns, the study aims to inform businesses regarding the tangible benefits and cost-effectiveness of integrating Copilot into their M365 infrastructure but remains inconclusive at this time. Further





investigation is required to demonstrate any sort of impact on the relationship between Copilot and Microsoft 365 licenses.

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## About the author

Noelle Savill is a dynamic tech enthusiast based in Hamilton, New Zealand. With a unique background in music and technology, she bridges the gap between creativity and innovation. As a Modern Work UX Consultant at Houston Technology Group, Noelle leverages her diverse expertise to enhance user experiences and drive digital transformation. With a keen focus on empowering women in technology and fostering diversity, she actively mentors aspiring professionals and advocates for inclusivity in the tech industry.



## Bringing family history to life – how technology can help bridge the gap between facts and feelings

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Suitauloa Simon Young**

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This research presentation is a work-in-progress – and therefore incomplete - update on Simon's Master of Technological Futures (MTF) project, which aims to explore how technology might help amateur family historians gain a greater sense of identity and belonging by enabling them to craft emotionally rich, contextually informed, visually compelling multimedia family stories. It seeks to fill a perceived gap in the US\$3-10 billion online genealogy market, where major platforms like Ancestry.com focus more on growing family trees (quantity of data) rather than telling meaningful stories (quality of data). The project will test key assumptions around user needs and validate a minimum viable product (MVP) with diverse potential users.

The researcher's personal experiences serve as the primary motivation behind this project. Receiving a family tree at the age of 29, he quickly realized that genealogical data alone, without proper historical context, is meaningless. The passing of his mother instilled in him a desire to preserve family photos (of which there were many) and stories for future generations – however his childlessness forced him to think 'outside the box', of a platform that went beyond his immediate extended family, to all families. This idea began as a book and evolved into a platform that would enable amateur family historians to tell their stories powerfully.

His ongoing journey of decolonization prompted reflection on his privileged position as a descendant of settler colonists, while supporting his Samoan wife Salā Marie Young's master's thesis on diaspora identity exposed him to the alienation and mental health impacts of being separated from one's cultural roots (Young, 2022). Reflecting on his journey, he realised that decolonisation of beliefs rarely happens from a place of being made to feel guilty or wrong, but instead from caring, open discussion about the topics of identity, common values, and having a clear-eyed willingness to understand history.

With a professional background in digital storytelling including radio, social media, online video and websites, the researcher now aims to combine his skills and passions to launch an entrepreneurial venture that addresses the perceived gap in the market.

### **Stakeholders, Assumptions, and Research Questions:**

The project hypothesizes three key customer segments, each with unique needs:

1. descendants of colonizers (or colonists) who are curious to understand their roots and systemic privilege
2. indigenous peoples trying to fit ancient customs into modern technology not designed for them
3. diaspora populations deeply conflicted about identity and belonging.



It is important to note that these three segments are not mutually exclusive, i.e. one person can be part of two or even all three segments. In fact, often the competing identities cause a lot of trauma. Because these three identities are so entwined, the aim is to create a platform that meets (as much as possible) the complementary needs of each segment.

The main research question guiding this project is: How might technology help amateur family historians find a greater sense of their place in the world through crafting emotionally engaging, contextually informed, and visually compelling family stories?

Several sub-questions and assumptions will be explored across all customer segments, to attempt to ascertain the desirability, viability, and feasibility of a potential platform. Because this research is still at a very early stage, the assumptions inherent in each question will be explained, as well as indications from early research:

1. **Desirability:** What might the market be for family history software that focuses on multimedia storytelling (quality of data) rather than volume (quantity of data)? Assumption: Existing platforms lack emotionally engaging storytelling tools.
2. **Viability:** How might the genealogy needs of collective cultures be met affordably and profitably compared with existing business models? Assumption: There is an underserved market, especially indigenous and collective cultures, due to prohibitive costs, individualistic product design, and lack of culturally sensitive features on current platforms.
3. **Feasibility:** How might automated technology (including AI) help a non-skilled storyteller create an emotionally engaging story from raw data? Assumption: The ability to tell rich, contextual family stories can enhance identity, self-esteem, and social harmony.

### **Industry Analysis and Academic Framing**

The online genealogy market is dominated by players who appear to focus more on growing family trees than crafting stories. Social media analysis suggests users are overloaded with data quantity rather than quality, with key challenges including data privacy concerns and the absence of consistent industry standards.

Adjacent industries, such as graphic design and website creation software, are witnessing trends of consolidation, simplification, and serving professional users as middlemen to the end user. For example, Wix has an active agency/reseller model, which provides agencies with resources and incentives so they can in turn on-sell the product to their customers. This may be a potential model in the genealogy space.

The project will draw upon various academic disciplines and concepts, including defining genealogy through lenses of history, kinship, identity, and technology; understanding diverse motivations for and impacts of genealogical research; and learning from similar digital story curation initiatives globally. A decolonizing methodology, as outlined by Linda Tuhiwai-Smith (Tuhiwai-Smith, 2021), will be employed to centre indigenous perspectives and challenge the researcher's own colonial mindset.

### **Methodology and Data Collection**

A mixed-methods approach will be utilized, consisting of:



1. Autoethnography: Prototyping the experience by manually creating a personal family history YouTube channel, "One Ancestor at a Time," to gain first-hand insights into the storytelling process and user needs. This has been ongoing since January 2024.
2. Empathy interviews: Conducting open-ended conversations with a diverse group of 12-16 stakeholders (including indigenous peoples, diaspora descendants, and descendants of colonizers) to understand their motivations, challenges, and desires in relation to family history research. This has been underway since May 2024.
3. Survey: Scaling insights by surveying a wider sample of potential users to validate and quantify the findings from the interviews. This is yet to be begun.
4. Design sprint(s): Engaging in collaborative prototyping and user testing of an early-stage minimum viable product (MVP) to gather feedback and iterate on the design. (Blank & Dorf, 2012; Ries, 2011; Maurya, 2022). This is scheduled for August 2024.
5. Ongoing testing and iteration: Continuously refining the product based on user feedback to ensure it meets the needs and expectations of the target audience.

Data will be collected through various means, including desk research, field-testing existing platforms, keyword research, interviews, surveys, and design sprints. Thematic analysis will be employed to identify patterns and priorities in user needs and preferences, while financial modelling will be conducted to assess the viability of different business models. Prototyping and user testing will validate the desirability and feasibility of the proposed solution.

Dissemination, Engagement, and Impact: Participants will be invited to join a community to stay updated on the project's progress, fostering a sense of involvement and ownership. The researcher's social media channels, including the "One Ancestor at a Time" YouTube channel (One Ancestor at a Time, 2024), will be leveraged to share developments and gather ongoing feedback. The aim is to cultivate a group of "true fans" who can help disseminate the value proposition and generate interest in the project. If traction is gained, dedicated branding for the new platform will be established, potentially attracting further investment and partnerships.

The project's impact extends beyond its immediate commercial viability. By contributing meaningful insights into the interplay of identity, storytelling, and technology, it has the potential to advance social psychological knowledge and digital product design principles to serve the identity needs of diverse groups. The insights gained may also inform broader discussions around decolonization, cultural preservation, and the role of technology in fostering social cohesion. Ultimately, the project seeks to address an existential question: can technology help us find our place in the world and with each other? The answers uncovered may light the way toward more inclusive and meaningful digital experiences that bridge divides and foster belonging.

### **Timeframe, Challenges, and Conclusion**

The project will be divided into two parts:

- Part 1 (currently in progress; January-June 2024): Conduct primary and secondary research, autoethnography, and exploratory conversations. Finalize research protocols.
- Part 2 (August 2024-March 2025): Conduct further interviews, surveys, and design sprints. Analyse insights to validate problem-solution fit. Develop and test MVP (Minimum Viable Product, as per Blank & Dorf, 2012). Complete academic requirements.



Potential challenges include conflicting user needs (e.g., data privacy vs. interconnectedness), the researcher's limited experience in financial modelling, and the rapid pace of technological change. These challenges will be mitigated by seeking expert assistance when needed, staying agile and responsive to user feedback, and focusing on delivering core value rather than chasing features.

In conclusion, this research project aims to explore how technology can be leveraged to help family historians craft emotionally engaging, contextually rich stories that foster a greater sense of identity and belonging. By filling a perceived gap in the online genealogy market and centering the needs of underserved communities, the project seeks to create a more inclusive and meaningful digital storytelling experience. Through a mixed methods approach and a commitment to ongoing user engagement, the researcher hopes to validate the desirability, feasibility, and viability of the proposed solution, while contributing to broader discussions around technology, identity, and social cohesion. Ultimately, the project's success will be measured not only by its commercial outcomes but by its ability to help individuals find their place in the world and see others with more compassion, through the power of story.

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## About the author

Suitauloa Simon Young is an experienced communicator with a passion for creating cross-cultural understanding. Married to Salā Marie Young for 26 years, the couple has learned deeply about each other's cultures, but also about the Chinese culture having worked in the China marketing space for over a decade, advising multinational brands on their technology and marketing strategies in China.

Simon has also been a journalist for publications like NZ Herald, Idealog, NZ Marketing, and NZ Management, a conference speaker and chair in China, Australia and New Zealand, and author of a self-published book.

Born to pākeha parents and descended from Scottish, Irish, German, and English settlers, Simon is fascinated by cultural identity and its effects on wellbeing, both for individuals and society. In 2023 Simon and Marie took the step of accepting matai (chief) titles in the Samoan village of Leauva'a, giving them an opportunity to continue to serve their wider community and family.

Simon has a Certificate in Legal Studies from AUT University and is in the process of completing his Master of Technological Futures.



# Youth Understanding of Psychological Safety and Group Participation Across Neurotypes

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Lara Nettle**

Psychological safety, originally researched in the field of organizational behaviour, refers to a shared belief that individuals will not be punished or humiliated for challenging the status quo, making mistakes, or even asking questions. Although it could be rationally assumed that psychological safety would be crucial in educational settings, there is a dearth of research around psychological safety from the perspective of students. Neurodivergent youth, who often face significant barriers to participation and inclusion might be even more sensitive to a lack of psychological safety. This study aims to explore the impact of psychological safety on group participation and engagement among youth, including neurodivergent youth, using Gamechangers League as a case study.

## **Background**

Gamechangers League is a social enterprise that provides neurodiversity affirming, psychologically safe environments for gifted and twice-exceptional youth to engage in tabletop role-playing games (TTRPGs). The initiative was born out of the founder's personal experiences and the need to create a supportive environment for their gifted and AuDHD child. The program has grown significantly since its inception in 2018, now encompassing multiple groups and venues. Participants often include children who have experienced marginalisation, bullying, or trauma in traditional school settings.

## **Research Aim and Hypothesis**

The study aims to understand youth perspectives on psychological safety and identify key elements for building a culture of safety. The hypothesis is that by intentionally addressing safety needs for all participants, an environment can be created where all participants feel safe to fully engage, regardless of their neurotype.

## **Methodology**

The research employs a mixed-methods approach, combining Participatory Action Research (PAR) and Narrative Inquiry. PAR involves collaboration with participants to better understand social issues, while Narrative Inquiry records the lived experiences of individuals. Data collection methods will include pre-interview questionnaires, focus groups, semi-structured interviews, and a literature review. The study will involve two to three focus groups, each representing the diverse demographic profile of Gamechangers League participants. Focus groups will be up to 6 participants, grouped by duration of exposure to Gamechangers League. The current phase involves discussion with a group of older children who have ages out of our groups or are not able to be involved in the study, but who fit the "gifted/2e" profile.

Research indicates that marginalised groups, including neurodivergent students, often face significant barriers to participation and inclusion in educational settings. These barriers can lead to adverse outcomes such as school refusal, withdrawal, and long-term mental health issues. Universal Design for Learning (UDL) shows promise in addressing these barriers, but its effectiveness is hindered by a lack of inclusive culture and psychological safety.





## **Gamechangers League: A Case Study**

Gamechangers League aims to provide a welcoming environment where all young people can engage in social play within a supportive and inclusive culture. The programme's success is attributed in part to its focus on psychological safety, which

is fostered through clear guidelines and expectations, a culture of mutual respect, and an emphasis on pro-social behaviour. The "GCL Expectations" document outlines the principles that guide participant behaviour and interactions, ensuring that all participants feel safe and supported.

Having run Gamechangers League for over 4 years now, I have supported multiple children who have been unable to engage with other social environments, including children who cannot attend school, and who struggle to leave the house. These children engage eagerly and continue to choose to attend our groups. This would suggest that participants in Gamechangers League feel a high degree of psychological safety, which positively impacts their engagement and participation. The inclusive culture and clear guidelines help participants feel understood and supported, reducing the need for masking, and allowing them to fully engage in the activities.

The two main ways we create and reinforce a culture of psychological safety within Gamechangers League, are through our values, and how we embody those values in the way we interact with staff, parents, and especially our child participants. Because we have a relatively high number of participants who have experienced a lack of psychological safety in other contexts, I found it useful to create a document that outlines the way participants can expect to be treated, and by extension, how they are expected to treat others at our games. This "GCL Expectations" document is usually presented to participants before their first game with us, and they have an opportunity to ask questions and give feedback on the document.

Our 11 points cover how our games may differ from games they have experienced elsewhere, that we have an explicitly "pro-social" agenda, and how that protects them as players. The first point, for example, introduces the idea that we are a team, that all members of the team have different strengths, and that together, it is our diversity and cooperation that make us powerful.

Gamechangers League was conceived as a space that respects the intellectual drive and curiosity of gifted kids, affirms neurodivergent processing, sensory perception, and communication styles, and is strengths based. By offering an engaging activity that appeals to the creative and quirky "out of the box" thinkers, scaffolding and supporting strong pro-social connections, providing a sensory tools and environment that encourages kids to meet their own sensory needs while respecting the needs of others, and celebrating what they do well, instead of focusing on challenges, I believe we have created an environment where our children feel safe, have fun, feel a sense of belonging and connectedness to others.

The expectations document has power, it can prime kids to experience the game differently, knowing that their experiences matter in this environment. Crucially though, the document only has power because of the culture we have built over the years. Our culture is top down, our staff feel valued and respected, and they are then able to embody that culture in their interactions with our children - in a way that is authentic and spontaneous.

## **Implications for Education**

The findings from this study have significant implications for educational settings. By fostering a culture of psychological safety and inclusivity, schools can better support neurodivergent students



and improve their engagement and participation. The principles of UDL, combined with a focus on psychological safety, can help create environments where all students feel valued and supported.

## **Conclusion**

This study highlights the importance of psychological safety in promoting group participation and engagement among all youth, and especially neurodivergent youth. Gamechangers League serves as a model for creating inclusive and supportive environments that cater to the diverse needs of all participants. By understanding and addressing the safety needs of neurodiverse students, educators can create more inclusive and effective learning environments.

## **Future Research**

Future research should explore the long-term impact of psychological safety on educational outcomes for neurodiverse students. Additionally, studies should investigate the applicability of the Gamechangers League model in other educational and social settings to determine its generalisability and potential for broader implementation.

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The author acknowledges the use of Perplexity AI in the preparation of this extended abstract. The full (35 page) research proposal was uploaded to Perplexity AI, and an extended abstract was requested. The author then extensively edited the text supplied by the AI for corrections, clarity, and author voice.



## Reimagining Skilled Work for Aotearoa

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Katie Desai**

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Work is a significant part of life for New Zealanders with 2.8m of the population actively working in 2023. On average, our workforce works 38.69 paid hours per week contributing to more than 70 million hours worked per week. Today's system of work continues to follow an 8-hour day that was first introduced in the mid 1800's as a promise of colonisation, to create better working conditions for the primarily male workforce carrying out physical labour. In 1936, the 5-day work week was mandated nationwide and although there have been small changes to the structure of our working week since, this rate of change has not kept up with other modifications to modern working life. The rise of the knowledge economy, coupled with advancements in technology, has transformed the nature of work dramatically. Additionally, women now represent 43% of full-time workers which has drastically changed the makeup of households and demands on families.

In Aotearoa, employees work significantly longer hours than European counterparts, averaging 1,748 hours per year. The NZ Productivity Commission in 2021 identified that despite this high level of input, productivity levels lag many nations who work fewer hours per capita. The Wellbeing Tick survey found that 400k kiwi workers (approx. 15%) regularly work longer than their contracted hours. However, research from economist John Pencavel shows that marginal productivity drops significantly for those working 50 hours per week and working any longer generates very little benefit. The normalisation of chronic workplace stress and increased levels of burnout contributes to absenteeism currently estimated to cost New Zealand workplaces \$1.85 billion each year. These challenges are being addressed locally and globally by a proliferation of wellbeing programmes, resilience training and trials of alternative work systems. The 4-day week is the most widely trialled and has demonstrated gains in productivity across fewer working hours, as well as far reaching health, environment, and societal benefits. The rise in portfolio work, fractional leadership and other models also seeks to address similar challenges. Reaching out to my professional network on LinkedIn (approx. 1000 professionals) I observed positive attitudes towards change to our current work systems with 88% claiming that the 8-hour day over a 5 day working week no longer suited them.

**“The best antidote to burnout is not teaching coping skills to handle stress. It's redesigning work to reduce stress.” - Adam Grant, LinkedIn**

I set out on a mission to reimagine the working week to understand the question *“How might we create opportunities for highly skilled workers, in medium to large businesses, to more effectively contribute to the workforce in Aotearoa?”* This seeks to uncover the problems that professionals face and learn about potential opportunities to generate benefits for individuals, organisations, and society as a whole. To explore this topic, I adopted a phenomenological lens to understand working norms as a phenomenon and to draw on people's lived experiences to answer the research question.

Alongside this approach I have also leveraged;



- Story-telling techniques inspired by Dr Teah Carlson’s research on Rangitahi Wellbeing, which gathered Pūrākau or ancestral stories to inspire solutions.
- Product discovery practices using empathy to identify root cause problems
- A range of lived experiences beyond the primary participants of this study (my experiences, experiences from my LinkedIn community & industry experts) in order to draw conclusions from a broad range of perspectives.
- Pre and Post Surveys with participants to inform sampling and analysis

The primary data gathered in this study comes from 12 participants who work in professional roles in medium to large organisations. My sample represents views across the professional working population, including males and females, multiple ethnicities and different seniority levels of professionals aged between 25 & 65. During 60-minute face to face sessions participants shared the story of their working lives, focusing on how they have worked, what worked well for them and what they would change. The stories shared were powerful. Some participants were in tears, others shared information that they had suppressed for 20 years, others had ‘aha’ moments about missing moments with their children due to work. Co-creating narratives from the transcripts and using thematic analysis uncovered 4 important themes.

1. **Norms are established early in careers:** Participants in this study consistently described their early working years as the foundation of their career. Their early experiences formed attitudes and behaviours that now act as the benchmarks or norms for evaluating their current roles and those around them. Many observed successes in their early career through working longer and harder than others as this allowed them to develop skills and experience quickly. Others were grateful for being employed such that they were prepared to go above and beyond to demonstrate their commitment and retain their jobs.

“You’re so happy that somebody is taking you on and you just work your butt off, trying to impress people. Get the work done, do whatever it takes, do whatever they tell you to do.”

*Research Participant*

2. **Key ingredients for effectiveness at work:** Across all participants, career growth, positive leadership and relationships with colleagues were highlighted as the most important aspects of their career. Many spoke about their loyalty towards companies and roles with opportunities to learn and grow and with great leaders and colleagues to learn from and socialise with. However, where these aspects were missing or negative, it caused high anxiety and stress and often motivated participants to seek out new roles in other companies.

“I was really enjoying the work because I worked with a lot of smart people who were helping me and I was learning all this cool stuff.”

*Research Participant*

3. **Workplace Technology can both help and hinder work-life balance:** When thinking about the future, technology advancements are a focus for participants. Some are more informed than others, and talk about virtual assistants, virtual reality headsets and leveraging AI in the workplace. There is a hope that these advancements become an enabler for highly productive remote working. However, there was also some caution around the need to continue to connect face to face and being able to authentically switch off from work. Boundary setting was an important topic for many

and one that was increasingly difficult to manage, impacting on the ability to balance work around other aspects of life.

“Just having the confidence to be like, ‘No, this is the end of my day’ and then just shutting off...so that when I am home, I am home”

*Research Participant*

4. **Working outside of the norm is challenging:** The rationale for attempting to work differently comes from a desire to create better balance between work and home life, in particular for those who are parents. Being in control of work, workload and hours was appealing with some actively choosing voluntary unemployment or professional underutilisation to achieve the balance they required. This comes with sacrifice, often financial, which excludes some participants from pursuing opportunities that provide the balance that they need. In addition, it was a common concern, particularly from younger participants, that working differently would limit career progress and growth opportunities.

“I do feel like sitting in a part time role, that my career is currently stalled”

*Research Participant*

**Conclusions:** Reflecting on the stories and experiences of working life, although people like the idea of working differently, it is exceedingly difficult for individuals to achieve this within the current system of work. Trying to reimagine what work could look like is challenging as there are many trade-offs that break the norms established throughout their careers. Some of these challenges can be alleviated by organisations, for example limiting the out of hours usage of technology, some are constraints of the wider system. As such, there is a need to adapt more broadly to create a modern human-led system of work that unlocks the potential in our workforce.

Figure 1 shows how we can flip our thinking from system first to employee first, to design a system that works optimally for the people that make up the organisation.

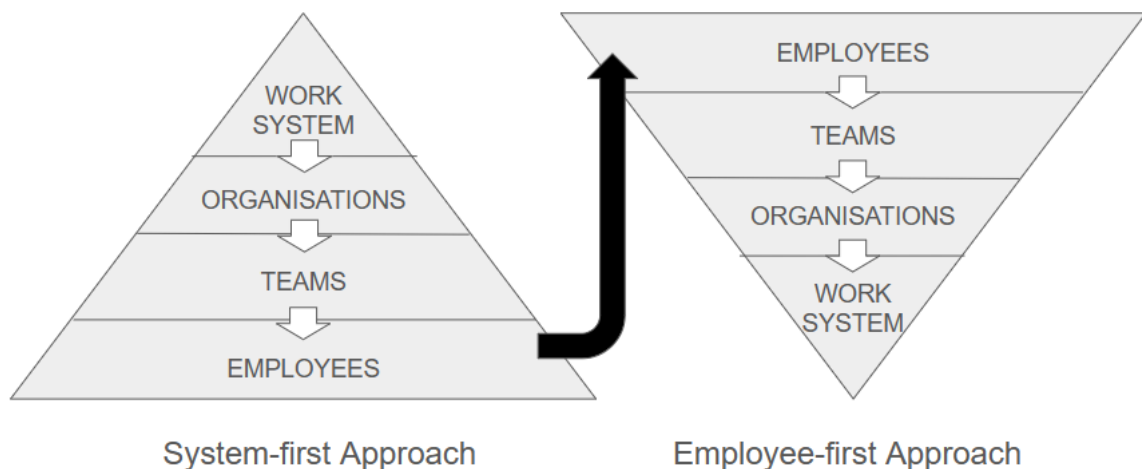


Figure 1: Flipping our thinking to reimagine work



Many of the new frameworks, such as the 4-day week, follow a similar philosophy by working with teams and organisations to define the best way to schedule the 80% of work time. To achieve this, empathetic leadership is a critical skill that helps to surface the needs of individual employees and can also lead to increased engagement and performance. Innovators Excellent and Humankind see the opportunity to use human-led design to enhance employee experience. Researcher Dr Ellen Joan Ford's #workschoolhours framework includes belonging and autonomy to help working parents bring their whole authentic self to work.

Gathering and empathising with real human stories, as demonstrated in this research, can become a catalyst for meaningful change. These stories have the power to unlock constructive discussions to help enhance workplace effectiveness, reduce the impact of burnout and generate value for individuals, organisations and wider society.

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## About the author

**Katie Desai** is a wife and mother of two children and has 16 years of experience in large organisations across New Zealand and the UK. As a leader navigating complex strategies, new product initiatives and transformation, she has both seen and personally experienced the negative impact that workplace pressures can have on individuals and the outcomes of the organisation and its customers. Despite her career experience and ambitions, since becoming a parent she has found it challenging to optimise work to contribute her skills whilst achieving the balance to sustain parenting, health, and personal endeavours. Alongside this study, Katie has adapted to a portfolio way of working by setting up Tipping Point NZ, a product discovery consultancy that champions product thinking as a problem-solving technique to create better outcomes. She is passionate about empowering others to define their work life priorities and find solutions to help them move towards sustainable career paths that enable them to live their best lives.





## Navigating Digital Migration: A Study on Empowering Māori and Pasifika Talent for the Interactive Media/Digital Landscape

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Rio Hemopo – Hunuki**

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*“Interactive Media has the beauty of being a weightless, intangible product that requires little physical infrastructure and is not hindered by geographical location. It is globally scalable and has few trade barriers, creating the real potential to be a sustainable and profitable business venture for the future.” (NZ Game Developers Association, 2019).*

This Kaupapa Māori (KM) research project sought to better understand the potential for Interactive Media (IM) to be an effective digital tool for Māori/Pasifika rangatahi and talent to pursue high-value careers in the growing digital sector.

For my master’s project, I chose to explore how Interactive Media, this exciting and engaging platform with its powerful pop culture influence, can inspire Māori/Pasifika design talent - through the telling of their unique whakapapa and history in a way that authentically reflects their culture, is meaningful/relatable to them, and leads them towards high-value digital career opportunities. The Interactive Aotearoa Report of 2019 describes Interactive Media as follows -

*“Interactive media combines content with software code. It is media content that responds to user interaction, rather than being scripted in advance. The content adapts to our actions, answers, behaviour and input, leading to unique entertainment, education or cultural experiences.” - Interactive Aotearoa Report 2019*

Interactive Media (IM), offers a wide range of experiences and creative technologies that explore mediums such as (but are not limited to), Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR), Digital Gaming, Mobile Apps/Games and Social Media (Websites, Digital Platforms).

**How might Indigenous Communities contribute to, enrich and leverage this opportunity to engage, and be part of this fast-growing IM and Digital sector?**

Recognising that Interactive Media and the digital sector offer exciting opportunities for Māori and Pasifika talent, the first step was to understand the broader ecosystems that exist and/or need to be addressed to ensure that opportunities for digital careers can be leveraged and created.

As I began to investigate the current educational paths, and what systems support Māori/Pasifika students and talent into Interactive Media or digital sector roles - what I found in the early stages was concerning. The Digital Skills Aotearoa Report 2021 presented the declining participation rates for Māori, Pacific and Women in digital career pathways and the risk that Aotearoa NZ would not be captured in the code being developed or algorithms and user interfaces of future digital tools. This would further exacerbate the underrepresentation of indigenous voices and lens in Aotearoa’s growing digital sector.



This led to the following master's research question - *How could Interactive Media be leveraged to encourage Māori/Pasifika learners into digital sector paths and digital careers?*

I was curious to see if IM could be a solution to the problem of declining digital participation and to understand if there may be even deeper value to be explored via the digital creative arts.

The Digital Skills Aotearoa Report 2021, while flagging the concerning decline in digital participation rates amongst Māori, did not expand or identify any potential cultural and/or external social factors experienced by these communities that may be contributing to the observed decline.

*Why aren't greater numbers of Māori/Pasifika participating in digital career pathways, in Aotearoa NZ's growing digital sector?*

In response to the sub-question above, 3 key areas were identified for research:

- Education - School/Kura, Institute/Training, Government Policies/Strategy
- Industry - Institute/Training, Digital Studios, Government Policies/Strategy
- Hapū/Iwi - Whānau/Governance, Kura, Government Partnerships

The Industry (Digital) group were interviewed and agreed that there is a huge gap in diversity within the sector. They were confident that the talent and resources are present in the Māori/Pasifika communities but currently, this hadn't translated into what they experienced and saw within the industry.

They observed an increase of Māori/Pasifika entering the digital sector, but this was at the shallow end of the scale and not at levels that might create transformation to either their communities or industry at this time.

Overall, they felt positive regarding secondary and tertiary paths of study and training available to Māori and Pasifika students wanting to enter digital sector careers, however, they were unclear on the short-term impact on the industry.

Tokona Te Rake, based in Otautahi (Christchurch), is a Ngai Tahu initiative that is taking a proactive stance in response to the digital capability and capacity of their rangatahi/youth and providing training and opportunities to grow Māori digital innovators across the digital spectrum.

## **Output**

In addition to the master's report, I co-designed an Augmented Reality (AR) Hapū resource output in collaboration with various members within the hapū / iwi (Hikairo ki Tōngariro / Tūwharetoa). This resource is a 9-card Augmented Reality Card set to convey the origin story of 'Ka Mate' haka as known and told by Hikairo ki Tōngariro hapū. I produced a 3 card Proof of Concept that I trialled with various hapū/iwi members, rangatahi and kura that provided valuable feedback, insights and co-design knowledge for the hapū and the research.

The Augmented Reality hapū resources generated layer upon layer of learning and experience in powerful and occasionally, challenging ways. It was a humbling experience to work with whānau in a creative, kaupapa-driven project for the hapū and our tupuna. I appreciate their faith and minaaki for the kaupapa and the mahi they produced.

Having had the opportunity to develop and project manage a kaupapa like this, with a foundation of whānautanga and kotahitanga, proved to me the positive and productive value of Kaupapa Māori methods beyond research environments and applications.



I felt the relationships between whānau/hapū and to the pūrakau itself, created an intangible foundation of depth and respect for the kaupapa and the work.

The production of a Proof-of-Concept output provided clear evidence and confirmation of the exciting potential for IM hapū projects. The Augmented Reality Hapū resource/concept created immediate value for the hapū, the research findings and the basis for ongoing exploration into IM as a viable digital path and career opportunity for Māori/Pasifika talent.

I am confident, based on this PoC project, that there is real potential in the development of further Interactive Media hapū projects and that the digital capabilities can be grown at hapū and Ahi Kā levels to generate this content.

### **Methodology**

I utilised a Kaupapa Māori (KM) research methodology as the foundational lens of the project, supplemented by Autoethnographical methods in the assessment of the learnings and processes the research produced.

KM methodology provided the foundation for the research methods. The research undertaken included a combination of observation, interviews and quantitative research. This was conducted with various stakeholders and participants, predominantly Māori and across a range of the digital sector, hapū groups/members, and education (kura, kura kaupapa).

The following KM guidelines come from Dr Fiona Cram's Katoa Ltd website. There are seven listed in total, with the four most relevant to my research listed below.

Seven Māori cultural values can guide Kaupapa Māori research (Cram, 2009; Smith, 1999). These were first mentioned by Linda Smith in her 1999 book, *Decolonizing methodologies*, and then picked up by Fiona Cram in her writing about Kaupapa Maori and Indigenous research ethics. They have since become known as Community-Up Research Practices in acknowledgement that they are good practices for all researchers to follow. including (Katoa, n.d.)

- I. Manaaki ki te tangata - looking after people. This is about sharing, hosting and being generous with time, expertise, relationships, etc.
- II. Kia tupato - be cautious. Researchers need to be politically astute, culturally safe, and reflexive practitioners. Staying safe may mean collaborating with elders and others who can guide research processes, as well as the researchers themselves within communities.
- III. Kāua e takahia te mana o te tangata - do not trample on the mana (dignity) of people. People are often the experts on their own lives, including their challenges, needs and aspirations. Look for ways to collaborate on research reports, as well as research agendas.
- IV. Kia mahaki - be humble. Researchers should find ways of sharing their knowledge while remaining humble. The sharing of expertise between researchers and participants leads to a shared understanding that will make research more trustworthy.

In respect to the research, the four guidelines were implemented through the interviewing and observation process. For example, I travelled to meet with participants, provided various koha and allowed for the research to proceed at 'the pace of trust'. I include a case in point in my research where I had to pause our work for several months due to a misunderstanding concerning a depiction of the pūrakau (story) that I had included in the early storyboarding of the Augmented Reality Card set. This example demonstrated all four guidelines in action.

From the analysis perspective, the KM methodology ensured that a Māori worldview and lens could be employed to record/collect mātauranga (knowledge) and to critically evaluate the



mātauranga that had been shared. It allowed the research and analysis to be carried out appropriately and respectfully and acknowledged the Māori worldview as credible and valuable.

The findings of the research indicate the need for further investigation of IM as a tool for digital career paths and for the broader potential that IM could provide Māori and Pasifika. The areas for focus are education, mātauranga/traditional knowledge, creative arts and digital literacy. At a broader level, the creation of innovative and relatable digital resources is another area worthy of further research.

### Reflection

As the high-value potential of digital technology and digital career opportunities continue to grow in Aotearoa and the world, Māori and Pasifika must recognise the diverse pathways to access digital sector careers. Accessing digital opportunities through mediums such as Interactive Media and the Digital Creative Arts is the ideal pathway for rangatahi talent to become engaged and participate in digital technologies.

By creating the Augmented Reality Proof of Concept (PoC) in collaboration with Hikairo ki Tōngariro hapū this study was able to demonstrate and establish that, Interactive Media can indeed be leveraged as a tool for digital development and a potential pathway into digital sector careers for hapū talent.

While the PoC provided clear evidence of the potential for Interactive Media concerning the hapū and kura, the research will require an extended period of ongoing study to generate definitive insights into its efficacy and success as a vehicle for Māori and Pasifika talent in digital careers.

Furthermore, the PoC proved that there is a desire to engage and develop innovative digital resources that are relevant and relatable to akonga/students and talent across the hapū. It would be valuable to complete the Augmented Reality hapū project and continue developing digital skills and capability within the hapū through new Interactive Media outputs.

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## Navigating AI Integration in New Zealand Secondary Schools

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Susana Tomaz**

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In a world where Generative AI (AI) is rapidly reshaping the educational landscape, and absenteeism continues on the rise [10], we find ourselves at a pivotal moment. As our students are already navigating this new technology, there is a pressing need for schools to adapt their pedagogical practices to the demands of a rapidly changing workforce [19, 20]. Children who entered Early Childhood Education (ECE) this year will be young adults by 2035, ready to enter the workforce. Automation and globalisation are reshaping the world's economy, with an expectation within the next 5 years that 75% of businesses will adopt technologies like cloud computing, big data, and AI [18].

The OECD Economic Surveys: New Zealand 2024 The OECD Economic Surveys: New Zealand 2024 recognised New Zealand's highly talented and motivated teaching professionals, as being let down by a system performing below its potential. With significant deficiencies, including an overly reduced operational capacity of the Ministry of Education. The report advocates for a major overhaul of the education policy framework for New Zealand schools. However, failing to incorporate AI into an education framework overhaul poses a significant risk of exacerbating the digital divide, as well as, missing out on opportunities for dynamic, tailored learning facilitated by technologies like generative AI, augmented reality, and game-based learning. Students from disadvantaged backgrounds or underserved regions may be left further behind if they lack access to AI-powered educational tools and personalised learning experiences [9].

Research indicates that AI has the potential to revolutionise education, playing a significant role in transforming instructional design and student learning by personalising learning experiences, providing real-time feedback, and creating highly interactive and engaging learning environments, thereby enhancing student readiness for the future [6, 9, 15]. AI also has the potential to improve student engagement and motivation [12]. Moreover, incorporating the Education 4.0 framework, which is designed to prepare students for the future by integrating emerging technologies such as AI, should foster key skills like global citizenship, innovation, creativity, and interpersonal skills. This framework also advocates for the strategic implementation of AI in education [20]. AI should not only improve teaching effectiveness but also enhance the human-centered approach to education by freeing up educators from administrative tasks and therefore augment the role of the teacher empowering them to focus on building relationships with students [16, 19].

However, research also identified substantial challenges around the implementation of AI in education settings, such as concerns about the reliability, accuracy, and ethical considerations of AI applications, which educators must address with care [4, 9]. The critical need for immediate governance and regulation of technology within the educational sector has been highly recommended and nations have been advised to establish their own guidelines for the design and application of technology in education, particularly to address the rapid developments in artificial intelligence [13,14]. This perspective is pivotal in ensuring that technology's integration into education is both effective and ethically sound [11].



The Ministry of Education of New Zealand published guidance for schools in March 2023, which has since undergone review [5]. Following this, in February 2024, Netsafe developed a template for an AI policy for schools along with a teacher guide for generative AI [7]. Despite these efforts, a survey conducted between August and November 2023 revealed a significant gap: many schools lack AI policies to support the safe and thoughtful integration of AI tools. Additionally, over half of the educators reported not having received professional learning related to AI [3]. This highlights the urgent need for more comprehensive support and training to ensure effective AI exploration and adoption in education.

This research aims to explore how secondary schools across Aotearoa, New Zealand, are adapting to and integrating Generative AI. It evaluates the progress made following the Ministry of Education's guidelines issued a year ago and Netsafe's AI School Policy introduced three months ago [7], as well as insights from Gander, T., & Shaw, B. (2024). Through a detailed evidence review and stakeholder consultations, the study seeks to identify the resources and strategies necessary for successful AI integration and to develop and test a Minimum Viable Product (MVP). The methodology comprises a four-stage approach: Stage 1 involves surveying school leaders and teachers to uncover the challenges and enablers of AI integration in secondary school settings. Stage 2 focuses on examining international best practices and emerging ideas, informed by survey data analysis and focus group discussions with key stakeholders. Stage 3 will identify collaborators to co-develop and implement an MVP in selected secondary schools. Stage 4 pilots the MVP, gathers feedback from participating teachers and students, and conveys the findings and recommendations to the Ministry of Education, assessing the initiative's success and potential for broader scalability. This structured approach aims to provide a robust framework for the effective and equitable integration of AI in New Zealand's secondary education system.

To inform on this, a survey was conducted between 1 May and 25 May, and Senior School Leaders, Middle leaders/Unit holders, and classroom teachers were invited to participate. A total of 99 responses were analysed providing clarity on the current landscape of AI integration within secondary schools in New Zealand and highlighting that the adoption of Artificial Intelligence (AI) in New Zealand secondary schools is progressing at a very slow pace, highlighting a critical challenge, a marked lack of awareness among educators and school leaders regarding the Generative AI Guidelines issued by the Ministry of Education. This knowledge gap exposed a broader issue of inconsistent application and standardisation of AI technologies in schools, which poses a risk of exacerbating existing inequalities and widening the digital divide [9, 11]. Furthermore, the survey indicated strong support among participants for the development of an AI Framework reflecting a pressing need for structured guidance and resources to effectively integrate AI into teaching and learning processes, ensuring all students benefit from technological advancements.

Furthermore, this study draws on international frameworks and innovations to provide additional insights and comparative analysis. Examples include the Southern Australian AI Framework and EduChat chatbot for schools and the forthcoming Digital Textbooks/AI chatbots to be introduced into South Korean classrooms in January 2025 [16]. These international perspectives will offer a broader context, illustrating both successful strategies and potential pitfalls in the implementation of AI across different educational systems. By examining these models, the study aims to identify best practices that could guide the way forward for New Zealand. This approach will provide pathways to enhance the effective and equitable integration of AI in New Zealand schools, ensuring that all students benefit from these technological advancements. This research also introduces two emerging ideas that could potentially support schools and kura to navigate the integration of AI in secondary education. The first idea will explore the benefits of developing an AI framework for schools, discussing key elements to include for alignment with our unique context through a Te Ao Māori lens. This approach seeks to integrate AI into teaching and learning processes





in a way that enhances educational outcomes for all while fostering AI literacy for both educators and students [11]. Research indicates that implementing an AI framework in higher education enhances personalised learning, ensures ethical use, balances AI adoption, prepares students for AI-driven workplaces, fosters holistic competencies, provides the necessary training, ensures equity, and supports continuous improvement [2, 17].

The second emerging idea explores the potential of creating and adopting a "walled garden" AI tool. This tool is envisioned as a secure, controlled digital environment where educators can experiment with and deploy AI technologies safely and effectively guarded through the Microsoft Azure AI content safety available to all New Zealand schools [21]. The "walled garden" approach is designed to protect users from potential risks associated with AI, build trust among educators and provide a robust platform for developing essential AI literacy in schools for both educators and students and a safe medium to explore best practice that leverages AI. Research indicates that creating a walled garden tool for AI in education ensures reliable, accurate content by training AI models on proprietary educational materials, reduces the risk of AI errors and misinformation, and helps educators trust AI to personalise learning and automate tasks, ultimately enhancing the teaching experience and student outcomes.[1]

The research also aims to spark a dialogue among policymakers, educators, and technology experts on how best to harness the potential of AI in education, ensuring that its deployment is not only technologically sound but also socially equitable. By outlining a roadmap for AI integration that includes both a strategic framework and innovative tools, the presentation seeks to explore how to best equip New Zealand schools with the necessary resources to navigate the complexities of AI adoption, ultimately fostering an environment where technology enhances strong pedagogical practices that benefit all.

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## About the author

**Susana Tomaz** is originally from Lisbon and started her career in Molecular Genetics at UCL in London transitioning into STEM Education focusing on innovative future-focused curriculum design. This equipped her with the necessary platform to shape the curriculum and directly inspire young minds in STEM fields.

Based in New Zealand, she spearheads the STEAM program at Westlake Girls School which promoted the development of innovative solutions to community issues aligned to the UN Sustainable goals by using emerging technology. This innovative program has recently gained recognition in the International OECD study "Career Pathways in a Rapidly Changing World."

As an Across School Lead (ASL) for her local Community of Learning, which includes nine schools and over 7,500 learners, Susana has worked on curriculum design and enhancing teacher capability in STEAM pedagogy and emerging technology integration. More recently, Susana has been working on integrating Artificial Intelligence in Education (AIED) tools as part of a collaboration with the Asia-Europe Foundation (ASEF) on "Leading Change: Digital Transformation of Education in the Era of AI." She has recently become a Special Award Fellow for IRCAI, the International Research Centre for Artificial Intelligence under the auspices of UNESCO. Consequently, she is now part of a network of educators and professionals dedicated to advancing the role of Artificial Intelligence in education as an IRCAI Fellow.

Susana has recently embarked on a Master's program in Technological Futures with academyEx, focusing on AI in Education, demonstrating her commitment to furthering her expertise in this evolving field.



# Redefining the Domestic Landscape: Insights from NZ Women on Unpaid Work and Technological Intervention

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

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He rau ringa e oti ai

## Many hands make light work

Women have made great strides towards equality in the workforce over recent decades, however the story on the home front is not so rosy. My research using original data collected from over 500 working kiwi mothers shows that 68% of women surveyed feel they do ‘the bulk’ of unpaid work within the home. While we aspire to equality at home, this research confirms a baffling and persistent inequity; that most women are still 1950’s housewives while now being working ‘boss babes’.

The findings of my research align with existing body of research in this area, for example data from across 10 UN nations in the ECE region, published in 2023 showed that the main barrier to women’s full participation in the labour market has to do with family responsibilities involving domestic and care work.

The Australian Bureau of Statistics defines domestic activities as activities done to maintain and manage the household. The ABS Time Use Survey published in 2022 showed 93% of females and 82% of males reported participating in domestic activities. However overall, females were more likely than males to participate in most types of domestic activity. The following table provides three examples:

Activity	Females	Males
Housework	70%	42%
Food and drink preparation	75%	55%
Shopping	38%	31%

Two areas where male participation was higher was in home and vehicle maintenance (males 10%, females 4%), and grounds care and maintenance (males 15.3%, females 13.9%).



Finally, an APEC policy brief published in 2022 found women in the APEC region spend an average of around 4 hours and 20 minutes daily doing unpaid care and domestic work, almost three times the time spent by men the same, in line with the global average.

While differences in participation in household labour and care activities differ from region to region, internationally the trend remains the same; women still do the bulk of unpaid work, regardless of their employment status. These differences are particularly seen following the birth of children in the family. The OECD noted in 2019, “Womens greater share of unpaid care partially explains the slow and uneven progress towards gender equality and women’s economic empowerment.

My research question asked, “How might we support mothers to return to paid work, by utilising emerging digital technology to provide a service to support unpaid work (eg housekeeping, administration, laundry etc)?”

It aimed to explore how emerging digital technology might support mothers returning to work after having children in practical ways with persistent inequities in regard to unpaid and domestic work. It aimed to find a technology-based solution to make the lives of working mothers easier. It asked how emerging disruptive technology might be used to drive change towards a more equally distributed contribution to society, through paid work, by mothers.

## Method

### Empathy Interviews

Following intensive desk research, I interviewed four working mothers to ask them more about their experience of unpaid work in the home, tested some assumptions, for example around security and consistency of personnel and used insights to inform my primary method of research gathering, the survey. These in-depth conversations gave me further scaffolding for questions to include in the survey. They highlighted key things I would need to test, for example how many people would be open to a subscription-based service, and how many would be happy having a small group of people responsible for work in their home.

### Online survey and analysis

This allowed me to test ideas of my own and those raised in empathy interviews with a wider audience of working kiwi mums. My goal was to get 400 completed surveys returned, I received 521 in approximately two weeks. Receiving that level of engagement illustrated how relevant this conversation and potential service is to working mothers. The survey was my primary source of research for answering questions around desirability, feasibility, and viability.

Importantly, almost 80% of research participants wanted a service or product that could assist them with this part of their lives delivered through an app, validating the potential of a technological solution in this space.

I analysed the data using thematic analysis as well as word count or text analysis.

## What I found out

As one research participant put it, ‘It’s like I need a wife sometimes to help me with my wife / mother duties’.



My research found that working mothers want easy-to-use, cost effective reliable and flexible solutions to help juggle their family's needs. They want to access this through an app, and while valuing safety, the majority of them are happy to be assisted by a small group of people (at different times) rather than the same person every time. They are open to a subscription-based solution, booking slots to scale up and down with the needs of their family, while maintaining a consistent baseline. They don't just want practical support, they are exhausted by the mental load and want the app to help them with reminders, referrals and life admin. The solution must be cost effective and reliable, and ideally include functionality to prioritise tasks they want completed

My research demonstrated, there is a strong appetite from digitally savvy women looking for a technological solution to make their lives easier. The solution should be designed in a way that makes unpaid work visible and encourages collaborative responsibility within the family.

### How the business might work: Neighbourly X Uber X 'The Village'

This research validated a minimum viable product and provided a long list of possible future features that would need more user testing prior to investment and development. Key features that would set this service part and respond to what working mothers asked for:

- Subscription based
- Hyper local service
- App based
- A pod/small group of people per area, instead of same person every time
- 45 minutes - 15 travel time
- Charge \$30 for 45-minute blocks
- Can book multiple in a row or throughout the week
- 15 minute or 30-minute task blocks
- Ability to click on task to prioritise
- Regular slot plus ad-hoc
- Subscription e.g., 10 hours a month - block out hours a month in advance, or order like supermarket shopping slots and once they are booked the slot disappears
- Package of baseline cleaning and then x hours per month of extra ad hoc hours that you book

Ideally, I would like the app to be free to use, generating revenue through the hours worked through the app, referral services for associated tasks, and in-app affiliate links for example to pre prepared meals or children's gifts.

### About the author

**Lindsay Price** is a strategic communications specialist, with experience in government relations, public policy, media relations and stakeholder management. She is a Barrister and Solicitor of the High Court of New Zealand with an LLB from Otago University and a Masters in Technological Futures from AcademyEX. The majority of her career has been spent in financial services; she has also worked in Washington DC, and in local and central government, and the not-for-profit sector.





## REGENERATE Game Jam - reimagining farms in games to showcase organic, regenerative and indigenous farming knowledge

Research Presentation

academyEX Converge Research Symposium, 14th June 2024

**Niva Kay and Kerry Topp**

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This research aims to explore the potential of game jams to promote sustainable and regenerative agricultural imaginaries through video games. It aims to increase the representation of organic-regenerative and indigenous farming practices, foster inclusivity and diversity, and engage youth in this discourse.

According to the UN, we lose the equivalent of one soccer field of soil to erosion every 5 seconds (FAO, 2020). We are facing a global soil crisis, and unsustainable agriculture is the main driver of it (FAO, 2020). A healthy soil structure, built and maintained by no-tilling and other regenerative soil practices, is the habitat for more than 40% of terrestrial organisms associated with soils during their life cycle (Decaëns et al., 2006).

In addition to the benefits to soil, small, organic, and regenerative farms as a predominant model for food production offer many other ecological benefits; research shows that smaller farms have higher yields and are more biodiverse, both in the crops and on the farm in general, than larger farms (Ricciardi et al., 2021).

This research explores the relationship between imaginaries and popular culture, particularly in regard to games and farming. It is set to answer the question 'How might games and game jams contribute to the representations of organic-regenerative agriculture?' Exploring how the choice to either continue amplifying existing hegemonic imaginaries in games or shift to alternative, sustainable imaginaries might play a role in how fast or slow our transition to future-focused, organic-regenerative agriculture will be. The article sits within the study of media influence and that of sociotechnical imaginaries as they relate to perceptions of farming; and looks into the use of collaborative game creation experiences, in particular game jams, for increasing the representation of organic regenerative and indigenous farming practices as a possible influence on agricultural future imaginaries.

This presentation will begin by discussing the concept of media influence and how it perpetuated hegemonic sociotechnical imaginaries. Specifically, it will cover the representation of agricultural imaginaries in games.

Video games are cultural objects that can contribute to the normalisation of hegemonic sociotechnical imaginaries (Wagner & Gałuszka, 2020). Video games have an ever-growing power and social relevance as contemporary media, a huge financial turnover and a vast audience - any single hit video game is played over a billion hours per year (Paul, 2013). As cultural objects, video games contain layers of meaning, generally divided into three areas, the meaning of games, in games and around games (Paul, 2013). In this presentation we will explore how the meaning in games is designed by the game developers, is created from the values embedded in various elements that create a game and emerges from their interactions (Flanagan & Nissenbaum, 2014).



We then focus on the representation of farms in games and how it is divided into a dichotomy to advance a hegemonic narrative of the role of specific elements of science and technology in the claimed advancement in agriculture by positioning farming in a dichotomy of representation. On one side of this dichotomy are what we refer to as ‘Old McDonalds Farms’, which are rustic and rooted in a perception of organic and small-scale farming as being a thing of the past. On the other side is ‘Big Ag Techno Farm’, a sociotechnical imaginary of mega monoculture industrial farms operated by large tractors and futuristic machines. The subtext is that if you object to the ‘Big Ag Techno Farm’ you must be stuck in some past version of Old McDonald’s farm. This perception glorifies advances in petrol-based industrial monoculture farming as being the sole future forward-thinking and science-head-spearing farming option. At the same time, advances in the sciences of ecology, soil science, climate studies, biodiversity, mycology pollution and public health all of which inform and are used to advance contemporary organic and regenerative practices are disregarded.

This observation of the dominance of neoliberal mechanised sociotechnical imaginaries of agriculture aligns with the body of research on sociotechnical imaginaries, the way pop culture represents and can be used to understand and analyse them.

In their research into the representation of sociotechnical energy imaginaries in digital games, Wagner and Galuska (2020) concluded that they obey to rules of current neoliberal sociotechnical regimes as they:

*“support the hegemonic discourses in terms of reproducing the idea of centralisation, economic growth, and control over resources. Nature is presented as a reservoir of goods that can be used by humans to make their lives more convenient”* (Wagner & Gałuszka, 2020).

Therefore, it is not surprising to find a similar trend of hegemonic industrial farms in digital agricultural imaginaries. Despite the growing interest in an alternative, scientifically backed-up sociotechnical imaginary of small scale, organic and regenerative agriculture (Goulet, 2020; Thompson, 2018), digital imaginaries offer no representation of feasible, alternative ecological farms that challenge the sociotechnical regime of industrial farming.

Grace (2019) also recognises that games reinforce cultural standards through the framing of goals, an idea that is very similar to sociotechnical imaginaries. Or, in his own words:

*“You may notice that many common goals are actually informed by cultural standards. Bigger is better is not a universal human truth. More wealth is better isn’t a universal truth either. Much of the meaning is already baked into our framing of problems and goals before we even play”* (Grace, 2019)

A few games related to imaginary farms claim to show organic and regenerative practices. However, similarly to what Wagner and Galuska (2020) have found in the energy sector, they do not present these alternatives through a viable lens. In fact, they tend to lean thematically towards the ‘Old McDonald Farm’, thus increasing the impression that sustainable agriculture is regressive.

After establishing the problem of current representation, our presentation carries on to examine how we attempted to address these issues by running three online REGENERATE game jams. REGENERATE Game Jam is part of the category known as “purposeful game jam”. Past game jams of this type have dealt with a variety of social issues such as climate change, inclusivity, anti-fascism and more. (Lai et al., 2021)



According to Grace (2016), the game jam in itself is a playful experience, so while jammers engage playfully with the process of making games, in a safe environment, in REGENERATE Game Jam, they also play, in a sense, with agricultural imaginaries, brainstorming and engaging with information and the representations they are looking into for their game. For everyone involved in the jam, from jammers to mentors, guest speakers and supporters, the game jam is a playful experience in which they engage with regenerative farming with a community of people.

The game jam in that sense has the capacity to function in a way that Wagner (2020) calls an innovation niche that creatively introduces “the possibility of acting, thinking and organising life differently” (Wagner & Gałuszka, 2020). Within the timeframe of the jam and its community, it is normal to be thinking about the possibilities for what farms can look like in games. Jammers get to experience first-hand the creative capacity, the mix between imagination and action, the invisible assumption that makes what is and the multitudes of what can be, that sociotechnical imaginaries sit in (Wagner & Gałuszka, 2020). For those who carry on making games or other media, that is an experience they will take forward.

We will explore the growth and evolution of this initiative from the inaugural REGENERATE Game Jam a 48-hour event in February 2022, which had over 100 participants who contributed to 21 submissions. The second - REGENERATE Game Jam Matariki, ran over 48 hours in June 2022 which highlighted and celebrated Māori food growing practices. The event started with an hour-long speaker session with Tihikura Hohaia and Aroha Healion, who shared their story, history, and cultural and agricultural practices from Parihaka. Additionally, mentors and experts were available across the weekend to support participants both with growing practices, tikanga and cultural representation. 18 games were submitted to REGENERATE Game Jam Matariki, many of them representing Māori practices, such as night fishing for eels, foraging for rongoā, growing kai for a matariki potluck, using traditional tools, and incorporating Karakia and maramataka in the game. The third iteration of REGENERATE Game Jam ran over 5 days in June 2023. Highlighting the 2023 edition’s achievements, we’ll examine the creation of 32 unique games by 450 participants from 48 countries. This collective effort, with its diversity of submissions, offers a mosaic of sectors, practices, and environments, presenting a plurality of alternative agricultural imaginaries that challenge the hegemony of agricultural sociotechnical imaginaries.

The presentation will also dissect the demographic data, emphasising youth engagement with 27% of New Zealand participants being between 13 and 18 years old, the 22% representation of female and non-binary individuals, and the remarkable ethnic diversity with 33% of major ethnic groups from New Zealand taking part. These statistics not only reflect the event’s inclusivity but also its success in attracting a diverse range of voices and perspectives.

By exploring the REGENERATE Game Jam's journey, achievements, and impact, this presentation aims to inspire further discussions and collaborations about using games as a medium for promoting sustainable and regenerative imaginaries, transforming agricultural practices, amplifying indigenous knowledge, and fostering a more inclusive and diverse community.

Key conclusions summarise the importance of creating games that showcase alternative agricultural imaginaries and that purposeful game jams diversify representations and create opportunities to engage with those imaginaries.

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## About the authors

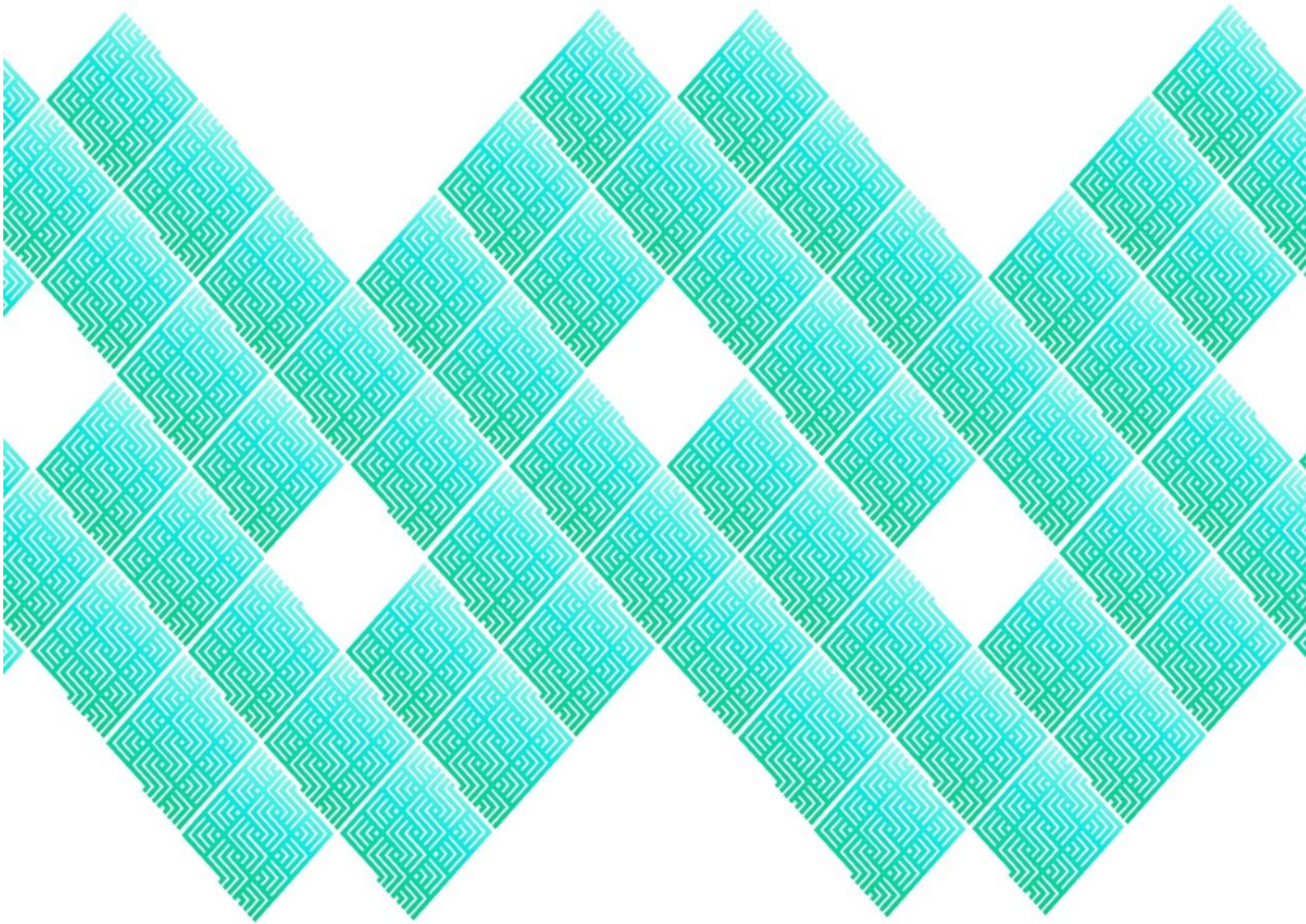
**Niva Kay** studied Interdisciplinary Environmental Studies and holds a Bachelor of Leadership for Change and a Master's in Technological Futures. Niva and her partner established Pākaraka Permaculture, a solar-powered regenerative market garden and education centre in Aotearoa. She is the co-author of ‘The Abundant Garden’ and ‘The Abundant Kitchen’, a co-organiser of REGENERATE Game Jam and writer/director/producer of the climate justice feature documentary *High Tide Don't Hide*.

**Kerry Topp** is the Founder and Kaiwhakahaere of The Kerry Topp Collective (The KTC), a boutique leadership and innovation practice, he also co-organises REGENERATE Game Jam. Kerry’s vision to be a ‘Good Ancestor’ aligns with his kaupapa to enhance community well-being by connecting people and technology. Recognised by Economic Development New Zealand in 2019, Kerry excels in fostering collaborative ecosystems that deliver not only economic returns but also social, cultural, and environmental impacts. His efforts are dedicated to boosting New Zealand’s prosperity and capabilities through innovative practices and indigenous storytelling.





# Poster Presentations





**Elizabeth Auina-Jones**

- Game On: A Gamified Approach to Rheumatic Fever Health Literacy in Aotearoa NZ.

**Judy Christie**

- Welcome to Future-Proof Me

**Paula Gair**

- Are The Kids Alright?

**Taimor Hazou**

- Harnessing AI for Grassroots Community Activation

**Joe Harris**

- Mānuka: For Healthier Cats and Dogs

**Vincent Lin**

- Peda + Meta + AI – Blueprint of SLA E-Solution

**Lee Timutimu**

- The collective wellbeing of our Māori tech leaders can empower the wellbeing of its community

**Susana Tomaz**

- How Might the Integration of AI Support Teachers in Developing Future Readiness Skills in Secondary Education?

**Carl Tullett**

- Project Phoenix: Let Your Reflection Inspire Others

**Lance Webb**

- Technological Advancement Transforming the Live Entertainment Industry

**Salā Marie Young**

- The Koko Model

**Simon Young**

- One Ancestor at a time