National SCIENCE Challenges | SCIENCE FOR TECHNOLOGICAL INNOVATION | Kia kotahi mai – Te Ao Pūtaiao me Te Ao Hangarau

Personalised Value Chain (PVC)

Market Insights

&

Background for EoI

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1. Introduction

The Challenge we are Seeking to Overcome

Globally, digital and mobile connectedness between consumers and retailers/producers is undergoing significant change, and many corporate interests are investing heavily in this area. For a relatively isolated nation such as New Zealand, this digital shift presents a number of challenges and opportunities.

New Zealand producers tend to use intermediaries when exporting goods and services; this increases costs and reduces profit potential, removes control over brand, and creates a barrier to understanding consumer preferences. A PVC spearhead research project would aim to create novel technology that helps to strengthen relationships and understanding directly between sellers and buyers in ways that empower both sides of the market.

Objectives of the PVC spearhead project

- To help global consumers and (NZ) producers find, connect with and trust each other digitally in more efficient and effective ways, and with less need for costly intermediaries
- Provide opportunities for (NZ) science to be commercialised (in niche areas), potentially through software as a service enterprises
- Leverage New Zealand's strengths and indigenous values to achieve these outcomes to the benefit of all participants over the long term

What are the underpinning values of the PVC?

- For the betterment of the New Zealand economy
- Future-thinking … not based on what is currently possible and happening, but rather, looking at new technologies to impact marketplaces in five or ten years' time as consumers of the future come online

- A level playing field where consumers have more input, control and benefits than they currently do
- Using data and information to enable best matching of buyers and sellers
- Māori have a vested interest in trade, and important knowledge, ideas and values that can be applied in this area
- Direct and Personalised - rather than a focus on mass commodities sold through aggregators and intermediaries
- Understanding the importance of trust between producers and consumers, and this can include logistics and provenance
- Cover the range of New Zealand products and services, from dairy to tech and anything in between

The Research Areas

A Project Team was established to oversee the development of a research idea or ideas under the banner of a Personalised Value Chain (PVC). To support this work, a series of interviews were carried out with business people and their advisors, researchers and tech experts, and secondary research was also undertaken into technology and consumer trends. As a result, we have developed three potential areas for novel digital research that could help connect New Zealand exporters with global consumers (and vice versa). These are:

1. How can we empower consumers to protect their privacy while they are online, thereby creating better ecommerce options and experiences?
2. What are the defining characteristics of establishing trust using a Mātauranga Māori approach and how might we apply these principles to establishing online trust to strengthen relationships between (NZ) sellers and global buyers?
3. How can we make accurate predictions about consumer behaviour and demand when we have limited and/or poor quality data?

2. Market Insights

A total of 23 business people, advisors, tech experts and researchers offered their thoughts on the concept of the Personalised Value Chain. Initial discussions reviewed the PVC Project Team's Strawman document, with later interviews focusing more on exporters' distribution and marketing challenges, and the enabling role played by technology. Additionally, secondary documentation was consulted to gain a better insight into wider tech trends generally, and ecommerce more specifically.

The research revealed a number of market insights relevant to the call for PVC-related project teams:

1. Feedback on the PVC Concept
2. The Role of Intermediaries
    a. The Importance of Trust
    b. The Complexity of Exporting Goods & Services
3. The Changing Ecommerce Environment
4. The Desire to Better Understand Consumers (especially pre/non-customers)
5. The Desire to Help Consumers Better Understand New Zealand offerings

1. Feedback on the PVC Concept

There was a high level of enthusiasm for the problem(s) the PVC aims to address, that is, helping New Zealand exporters to better connect with global consumers digitally. The difficulties involved in such an undertaking were explored, with several key considerations being shared.

In terms of where New Zealand should be competing in global trade, the dominant view was that we should focus on high value goods and services that capitalise on New Zealand's unique advantages rather than selling low cost commodities. This provides guidance on how we focus our future sales and marketing activities: for commodities, aggregation sites can work well, for example, Amazon; in contrast, for high value offerings we need to create an experience to get attention and build loyalty.

"You compete with Amazon on experience."

Most of those spoken with thought that taking a broad approach, for example, creating an ecommerce platform for all New Zealand exporters, was simply too big of an undertaking with too many potential fish hooks to address. For example, who would be the 'trusted entity' responsible for a PVC ecommerce site? And who would operate it?

Additionally, several people considered the creation of a seller-buyer platform to be a design problem in the first instance. Big questions related to how people would first find and then be motivated to use such a site. Further, given an existing ecosystem that is dominated by a small

number of very powerful aggregator ecommerce sites (such as Alibaba), a PVC platform would have to be extremely easy to use, well marketed, and be accepted as trustworthy in order to draw in the critical mass of both sellers and buyers required.

"We need both sides of the market to use it."

"The online world is a crowded world, and getting cut through is difficult."

Some saw potential for matching AI/bots, although a real challenge lies in validating outputs. A key consideration here is how we might simultaneously achieve the dual goals of using customer data to enable predictive AI to create a great consumer experience, while also allowing consumers to protect their personal information. This was considered a useful area for further exploration given the apparently limited thinking from business about consumer privacy at the current time.

Thinking more broadly, heterogeneity is a key word when it comes to international trade. There are many differences that exporters must be aware of and respond to: B2B v B2C, performance and relationship stage of various industries and sectors in target markets, length of the supply chain, consumer segments, culture, and import regulations. A single solution that could help exporters navigate all this diversity seems unlikely, according to those interviewed. In contrast, focusing either on providing a total solution for individual industries, or clever tech that would solve a single challenge across industries was seen as desirable and more feasible. Yet another perspective was that solutions need to be market-specific because the way people use technology varies enormously between countries.

According to advisors, misconceptions held by (smaller) New Zealand exporters about cultures and lifestyles in various countries go hand in hand with an inability to build brands effectively. So while new tools could be very useful, feedback suggested that many New Zealand businesses would be reluctant and/or unable to embrace new technology that could help them connect with overseas consumers. The message perhaps is that a key consideration is ensuring solutions are easy to use for the SMEs that populate the economy.

When asked about clever tech currently being used to help link New Zealand sellers with global buyers, few examples were offered. Comments primarily centred on data, for example, Xero was cited as a company treading carefully with user privacy while still using analytics to improve experience.

2. The Role of Intermediaries

The PVC research focus was in part motivated by the recognition that while intermediaries are widely engaged by New Zealand exporters, there are disadvantages attached to their use.

On the positive side, overseas agents and distributors are well networked within their own markets. As such they provide legitimacy with local consumers who may not be aware of New Zealand brands, and they can provide crucial introductions to local businesses. They also have knowledge of integrators (bigger companies that bring together multiple products into one project) and upcoming tenders to help target B2B business development. Their knowledge of local culture and consumer demand can help with NPD and marketing activities. Distributors also tend to be well-versed with local import requirements and will more efficiently negotiate regulatory processes which are subject to change and are sometimes more informal than the 'official' rules indicate. Overall, these intermediaries facilitate speed to market not possible through simply relocating New Zealand staff to the new target location.

These advantages make it clear why New Zealand exporters continue to work through distributors and agents. At the same time, however, these intermediaries charge for their time, connections and expertise; this increases the cost of doing business in overseas markets. Additionally, they constitute a barrier to having direct relationships with customers, and hence, to understanding needs and preferences.

Payments can also be impacted by not having a direct relationship between buyers and sellers, and the longer the supply chain, the longer producers may have to wait as payment comes back through the links. Blockchain does offer the promise of a faster, cheaper payment system via Smart contracts.

"We want more control over the relationship with the end customer, and we want to lower the cost of the sale."

Intermediary relationships are not uniform. Export companies may progress along a journey from using distributors initially when their needs are significant, towards establishing their own staff and/or subsidiaries in-market once their confidence and knowledge has grown.

When asked what role digital could play in either replacing or enhancing the use of intermediaries, exporters and their advisors did not think replacement was possible. It is interesting to note that similar views were once held regarding other industries which have subsequently been disintermediated by technology, for example, travel and book stores. Enhancement suggestions related to increasing trust through proving provenance or providing an experience, for example, through virtual reality.

"There will always be a place for face to face."

"You have to figure out what people have to do that tech couldn't do, and what tech can do."

The issues of trust and complexity are highly related to intermediaries and are discussed further below.

2a. The Importance of Trust

The importance of trust was discussed frequently during interviews; it was considered vital to any online commerce/PVC-type initiative. Establishing trust in overseas markets is highly dependent on intermediaries, whether that is retailers in target markets, big ecommerce aggregator sites, or agent introductions. Despite the extensive use of third parties, New Zealand exporters still spend a great deal of time establishing trustful relationships through face-to-face interactions, and there is little evidence they are successfully employing digital tech to circumvent the need for travel; this is considered a real opportunity for the PVC initiative.

In practice, there are nuances in how trust can be established online within foreign markets. In the B2C realm, trust can operate very differently in different locations and consumer segments, for example millennials have higher engagement with and trust in mobile advertising than do older consumers. Those looking to establish trust in B2B interactions will encounter large differences by market in terms of receptiveness to particular product types and to New Zealand as a supplier.

Many of those spoken to were interested in how tech can be used to validate product authenticity. Advancements in blockchain are promising in terms of proving provenance. While blockchain is of great interest to New Zealand industries, it is noted that there is high interest in this technology across the globe, with multinational companies placing significant resources into logistics and traceability-related applications. It may be wise to look for clever blockchain technology created by others that can be modified to suit New Zealand's needs and/or integrated into other new technology developed.

2b. The Complexity of Exporting Goods & Services

There are many complexities involved in landing goods in other countries, for example, meeting biosecurity regulations. Additionally, exporting becomes more complex as businesses seek to add value to raw materials, and as new categories of products are invented – cellular agriculture and metamaterials, for example. Business and consumer cultures also vary enormously; the US has been described as 50 markets, for example.

There are already many logistics tools available and more being developed, with blockchain a common component. In terms of what tech tools would be useful to exporters but not currently available, it was noted by several of those spoken to that developing a constantly updating database of import/export regulations for markets around the world would be immensely useful. Equally though, this may be more of an integration/engineering exercise than one involving novel science and technology. Another interesting area highlighted is cross border payments using

cryptocurrencies, which may one day be as simple as sending an inter-country email is today; this could have important implications for our export nation.

3. The Changing Ecommerce Environment

It is acknowledged that technology resulting from PVC research must be future-focused, so a few key trends are important to consider:

Growing Incidence of Online Shopping.

Online shopping is growing in popularity, and many people now prefer it to bricks and mortar options. Mobile devices are frequently used to make purchases, often through mobile apps.

Younger people are spending more and more of their time online for socialising, learning and purchasing goods and services. They tend to be more comfortable with sharing their data than are older generations, especially if they are receiving back good value (e.g. convenience of Uber). Despite this, a growing unease with the way large multinationals are collecting, storing and using people's data is evident.

"It's incredible the amount of information people are prepared to share, often for very little in return."

Consumers are researching choices online using a variety of sources, often before entering an ecommerce site, with peer recommendations rated as more trustworthy than other sources of information.

"People want tangible ways to evaluate their choices."

Ubiquitous Connection.

Consumers are more digitally connected today than ever before, and this is continuing to increase through greater ownership of smartphones and tablets, and the introduction of wearables such as fitness trackers. In-home smart devices are also becoming more common, but even for those still using analogue machines, Amazon Prime now offers wifi-connected Dash Buttons that enable in-home reordering of specific products with the touch of a button.

Unconscious or effortless purchasing will soon be commonplace, particularly for household consumables.

The Rise of Video and Voice.

It is no longer vital to use a keyboard to participate in the digital world. Video is increasingly being used to communicate with consumers; the success of Snapchat shows the popularity of short clips, for example. Voice operated devices are also on the rise, and more of us are interacting with intelligent personal assistants such as Amazon's Alexa, which are adept at recommending products for purchase.

Dominance of Global E-commerce Aggregators.

Amazon and Alibaba are the best known aggregator sites across product categories, and there are also industry-specific aggregators, for example, in the travel industry. These present an opportunity to suppliers of reaching massive customer bases. Conversely, consumers can be steered towards whichever products offer the greatest profits to site owners, for example, there is a growing suspicion that Amazon's recommendation engine will drive consumers towards buying their own private label products, effectively pushing competing brands down the consideration list.

Growing Excellence in Convenience and Immediacy.

The rise of Alibaba (and others) in e-retailing has increased the level of immediacy expected by consumers. Consumers are being offered maximum convenience by global retailers with the choice of online or physical stores (or a combination of the two), membership schemes (for example Amazon Prime offers subscription discounts on groceries), and same day delivery (goods can often be delivered within the hour for a small fee).

Positive experience.

Online ecommerce providers collect masses of consumer data from which they learn how to provide the best shopping experiences. Transactions must be easy in terms of payment and using mobile devices, and seamless. Predictive personalisation is enabled by big data, which in turn is used to create a more meaningful connection overall.

Alibaba's Hema Supermarket is merging online and offline to create a superior experience. It allows shoppers to visit a bricks and mortar location where they use a mobile app to buy their own food, which can be cooked and eaten on premise or delivered to their home within 30 minutes.

For many consumers, the positive experience is as much about shared values as it is about enjoyment. Millennials, for example, are increasingly keen to learn about how suppliers are enacting sustainable approaches to doing business. QR codes are used to obtain background information on products while in-store, and with the rise of counterfeit food, many want proof of authenticity.

4. The Desire to Better Understand Consumers (especially non/pre-customers)

A commonly stated need for exporters was to better understand overseas markets and consumers. Market intelligence tends to be obtained through making connections with expats living in target markets (often facilitated by organisations such as NZTE and KEA), engaging intermediaries, and paying for market research. All these practices are time consuming and can be very expensive so exporters would benefit from a more streamlined way to gather market intelligence.

A particular challenge for high-growth businesses is proving to investors there will be competitive advantage in entering a new market – this requires depth knowledge of the competitive landscape and key consumer trends.

Several potential areas for exploration were suggested by informants:

- One idea was to capture data held by many individual organisations on overseas markets to create an *Export Database of National Interest*. Such a resource could bring together information from government entities such as NZTE, MFAT and Callaghan Innovation, from private business that already hold data on existing customers and markets, and from additional market research carried out by universities, for example. In exploring this notion further, some wondered whether this was more a consulting project that required funding and political will rather than new science. But the concept remains an interesting one and leads to questions such as: how can New Zealand as a whole make use of the pockets of data it does possess to assist individual exporters and industries in understanding overseas markets? And how do we persuade organisations to share their data?
- There was also interest in technology that would use virtual reality to enable 'personal' contact that feels 'real', as opposed to Skype or avatar-based communications products, for example. Such a tool could be applied to one-on-one and small group meetings, through to tradeshows of considerable size. The intent would be to achieve the same outcome as face to face meetings do in learning about and establishing trustful relationships with buyers, without the need to be in the same room.

"Currently it's who you know – how can digital connect people and open doors?"

- Finally, several people wondered how technology could help groups of NZ exporters (and others) collaborate in terms of expertise and data in ways that increased competitive advantage and reach in overseas markets. The perception was that businesses in this country are very siloed and protective of IP to the point where potentially beneficial partnerships are not explored. Again, the issue of trust comes into play.

"Can we look at New Zealand as a big company with different knowledge bases that could create competitive advantage?"

5. The Desire to Help Consumers Better Understand New Zealand offerings

Informants were very interested in exploring how technology could help global consumers better understand New Zealand products and services. Key themes were highly related: simulating an experience, telling the 'story', and establishing trust.

There was a high degree of interest in how immersive virtual reality could be used to allow those overseas to experience New Zealand-made products that would otherwise involve costly and time-consuming travel for either party.

"How can the customer see and feel and get the sense of a machine from another country, without having to be here?"

Telling the 'story' was of particular interest; again, virtual reality could have a role to play. In order to achieve a high level of consumer-connectedness, the story would need to be live/current and accessible via multiple platforms. The ability to 'meet' a virtual brand representative to learn about a product could be very motivating for consumers and increase brand interest and loyalty. New Zealand already has good expertise in creating virtual humans, for example, through Mark Sagar's work in interactive autonomously animated systems; Soul Machines recently announced they are applying their technology to customer relations in the financial industry.

"It's the experiential part – feel the energy and excitement of a product and the company that makes it. Be transported there."

It was expected that block chain would have a vital role to play in terms of 'proving' the stories being told. There is already some interesting work being carried out on testing food for authenticity, although it is understood there is some significant progress to be made before this can be used outside the laboratory. Blockchain also offers significant promise for food security.

3. Potential Research Directions

Three potential areas for novel digital research have been developed, each of which could help connect New Zealand exporters with global consumers (and vice versa).

1. How can we empower consumers to protect their privacy while they are online, thereby creating better ecommerce options and experiences?

Vision and what success looks like, including the relevance and potential value for NZ

As a trading nation, New Zealand is well placed to use online tools for communicating with and selling to end users (both B2B and B2C). It is not possible for us to compete against global aggregation ecommerce sites such as Amazon using the same business model, and given their commodity/low price focus, they may offer limited benefits as sales intermediaries if NZ Inc. aims to focus on high value products and services.

Alternatively, we could work towards developing another option for consumers where they can retain digital custody of their personal information (rather than surrendering it as a matter of course); their information would stay with them without being stored on ecommerce sites. Consumers would make their own decisions about when and with whom to share their data, and they would have the ability to change or withdraw permissions at any time from a central point.

Wider Context

Multinational companies such as Facebook and Amazon now collect massive quantities of data from those using their services. As the internet of things becomes ubiquitous, this collection of behavioural and descriptive data will only increase. Consumer data needs to have appropriate security and privacy controls applied to protect from unwanted and/or illegal activities, and breaches of trust. Achieving appropriate safeguards is a work in progress, for example, the EU will soon enact the General Data Protection Regulation (GDPR) intended to strengthen and unify data protection for its citizens.

It can be surprising how much people are willing to share online. Millennials appear particularly comfortable with disclosing personal information, as are consumers in general when there is confidence they are receiving fair value in return, for example, exchanging location information in return for the high convenience of Uber. At the same time, we can observe a growing concern by consumers about how their information is being collected, stored and used. There is, of course, a tension between allowing consumers to keep their data private and sharing enough so that ecommerce sites can provide the level of personalisation and seamlessness we now all take for granted.

How can we empower consumers while they are online, particularly with regard to protecting their own information, and create better ecommerce options and experiences as a result?

What is the new science inherent in this research direction?

There is a trade-off between allowing consumers to protect their own data AND sellers using consumer data to provide a more personalised, relevant and useful experience; how do we overcome this. Currently the encryption and storage technology does not exist to meet both sets of needs.

2 – What are the defining characteristics of establishing trust using a Mātauranga Māori approach and how might we apply these principles to establishing online trust to strengthen relationships between (NZ) sellers and global buyers?

Vision and what success looks like, including the relevance and potential value for New Zealand

In New Zealand, we are uniquely placed to explore how Māori values and practices are enacted in the creation and maintenance of trust. This includes whakapapa, levels of trust, behavioural and cultural mechanisms used, and how authentic stories are created.

Once we have a good understanding of this Māori-based Science of Trust, we might develop technology tools that enhance business relationships (including two-way communication) and export success without devaluing or compromising Mātauranga Māori and in a way that can be embraced by a range of Māori enterprises. This might lead to a Science of Digital Trust that works well for New Zealand, as well as other countries with an indigenous population.

The Māori economy is already worth around $50 billion and is heavily based in agriculture, forestry and fisheries. Using technology to enhance commercial relationships in ways that are consistent with Mātauranga Māori can only increase economic benefits. Further, it may be possible to create technology tools that can be sold to indigenous producers around the world.

Wider Context

In our discussions with business people and their advisors, the issue of trust came up often. Trust matters in the seller-buyer relationship whether a consumer is providing their credit card details to buy a single item, or when B2B relationships are being established and maintained. As supply chains lengthen and ever more players are involved, establishing trust becomes more difficult and new approaches are required. Block chain is one tool touted as able to create trust through a distributed ledger model, but what other strategies might we develop?

We know that currently, despite a wealth of enabling technology, businesses still rely heavily on building relationships through face to face contact; there will probably always be a place for

physically shaking hands. In New Zealand, Māori business people rely on a set of long-held interactional 'rules' that govern how relationships progress and how agreements are followed. As with mainstream business activities, there is high reliance on personal kanohi ki te kanohi (face to face) within the Māori economy, with only a relatively small role for technology.

An interesting question is: how do we maintain Māori knowledge, mana and systems of trust in a new, technological world? And more specifically, how might Mātauranga Māori inform the use of technology to tell our brand stories and strengthen relationships with customers around the globe?

What is the new science inherent in this research direction?

It is anticipated this research would be undertaken across two distinct phases.

There is a good body of literature already exploring the issue of brand-based trust. The topic has already been explored from a number of angles including measurement, psychology, customer loyalty, financial performance, and online factors. Similarly, research on global value chains and networks is also well advanced, and trust is a key element here too. The first phase of the proposed research area would add an additional layer to these bodies of knowledge. The Māori Science of Trust has not yet been mapped and documented, let alone applied to supply chains and brand-based trust, or to ecommerce in general.

In the first instance, this is seen as a sociological exploration of the Science of Trust within Māori culture to better understand the philosophy and range of practices. There is a high level of complexity inherent in this pursuit; it is part of a much bigger knowledge ecosystem which is intergenerational and evolving. Consequently, this phase would ideally bring together a range of people including iwi, Māori business leaders, Māori small business representatives, Māori researchers, and mainstream researchers to explore how Māori think about and enact the establishment and maintenance of trust. It is anticipated that this would create the foundation for then collaboratively creating a representative model or framework. Further, an exploration of how this model is relevant to establishing trust in business relationships would be undertaken, including the identification of where novel technology could create efficiencies and enhance effectiveness.

The second phase could involve a variety of science areas as identified during the first phase. These might include

- Virtual, Augmented and Mixed Realities for telling brand stories or simulating kanohi ki te kanohi business meetings
- Virtual, Augmented and Mixed Realities that can create immersive experiences of New Zealand goods, services, and origin
- Blockchain for proving the provenance/whakapapa of brand stories

- Matchmaking technology to help exporters (and others) collaborate with each other to increase competitive advantage

3 – How can we make accurate predictions about consumer behaviour and demand when we have limited and/or poor quality data?

Vision and what success looks like, including the relevance and potential value for NZ

There are many possible ways to approach the problem of New Zealand's lack of comprehensive big data on global consumers, and potentially turn it into an advantage. This proposed research direction is open to suggestions on how our small trading nation can apply some creativity to developing a technology-enabled understanding of overseas markets and consumers using small and/or unstructured data.

For example, could an agnostic digital assistant be developed to support each consumer in their purchasing decisions regardless of what site they are using, and can such a tool learn its owner's preferences in order to become the ultimate recommender system? How might this help vendors better meet consumer needs? Could a digital market research assistant be created to deliver market intelligence based on publically available online information?

Would it be possible to access dynamic information that focuses on human-computer interactions (as opposed to somewhat static datasets) to provide real-time insights that enable producers to respond and provide positive online experiences to consumers?

Should the focus be on discovering unmet, latent desires of consumers, where clues may well be found in unstructured qualitative data found in social media or blogs? Overlaying such unstructured data with proxy indicators could create a sophisticated knowledge system making unexpected links and predictions. How might this feed into sites where consumers interact to help develop new products and services? Further, can transfer machine learning be used to support predictive functionality?

Wider Context

Multination companies such as Facebook and Amazon now collect massive quantities of data on the online behaviour of users and employ the latest technologies, such as machine learning, to further refine their understanding of customers. By comparison, New Zealand does not have large, high quality data sets; consequently, we need to use alternative methods to understand and predict consumer behaviour and demand.

Expat Kiwis, intermediaries and paid market research are the primary sources of overseas market intelligence at this time, and businesses are also improving in terms of collecting and managing data from existing customers. Despite many sources of information, business people and their advisors

report that gaining traction in new markets can be slow, expensive, and require a great deal of travel.

How might digital technology allow us to make better use of New Zealand's existing small, imperfect data sets to understand global consumers and predict their behaviour and preferences?

What is the new science inherent in this research idea?

Depending on the particular approach taken, there are a number of science problems to overcome.

For example, in the area of making predictions using only small data sets, transfer machine learning is relevant. The current state of deep learning is that neural network architectures tend to be highly specialised within specific domain areas. Current applications include image recognition for medical diagnosis, and language recognition for translation. How the science could be applied to human choice-making and persuasion where large datasets based on past behaviour are not available is an area for further exploration. How latent and unmet consumer desires could be revealed is another new area.

4. List of Informants

Academic/Research Experts

Caroline Saunders, Lincoln University – Agribusiness and Economics Researcher

Rod McDonald, Ex-Plant and Food (email)

Markus Luczak-Roesch, Victoria University - Senior Lecturer School of Information Management

Kiri Dell, University of Auckland – Research Fellow

Alex Sim, University of Auckland - Blockchain/Law expert

Laurence Kubiak, NZEIR – CEO

Katharina Ruckstuhl, University of Otago - Associate Dean Māori, Business School

Business/Tech Advisors/Experts

Graeme Muller, NZTech – CEO (email)

Brooke Fitness, Fourth Media - COO

Brett Roberts, Datacom - Associate Director

Jake McInteer, Qrious – Solutions Engineer

Amanda Gilbertson - Innovation Consultant

Jason Rolfe, FMG - Area Manager, based in provinces

Linh Tra, KEA - Global Connections Adviser

Aroha Armstrong, Callaghan Innovation - Manager of Māori Business Development

Shay Wright, Te Whare Hukahuka - Co-founder

John Holt, Holt Data Science – Managing Director.

Business People

Rob Fyfe, Icebreaker - Chair

Ngapera Riley, Figure NZ – Deputy CEO

Jasper Holdsworth, Pultron Composites - CEO

Niven Brown, KanDO Innovation - Director

Dr Brendan Haigh, Miraka - GM of Innovation

Darryn Keiller, Autogrow - CEO