Agritech Leaders Data Reference
Group Meeting
22 July 2021
MINUTES - draft

Attendees		Apologies
Kenneth Irons (Precision Farming – AgriTechNZ Chair) Brendan O'Connell (AgriTechNZ Chief Executive) Dave Dodds (Figured) Gavin McEwen (Farmax) Haydn Read (Apanui) Iain Boyd (ANZCO Foods) Klaeri Schelhowe (Trust Alliance/TrackBack) Max Watt (FarmIQ) Mike Barley (HortPlus) Murray McCallum (Eagle Technology) Oscar Ellison (Levno) Russell Craig (Microsoft NZ) Todd White (FarmIQ) Wayne McNee (LIC) Will Noble (FarmIQ)	**Jane Wrigglesworth** (Secretariat)	Mark Begbie (PlantTech Research Institute)

The meeting began at 3.32

1) **Welcome and Apologies**
   The Chair welcomed attendees and noted the apologies. He thanked everyone for their presence and contribution.

2) **Housekeeping**
   Brendan expressed thanks to everyone present. He noted that the minutes will be available following each meeting – both to attendees and the significant stakeholder group who have expressed an interest in this work.

   The meeting is recorded for secretariat purposes only and the recording will be deleted once minutes have been completed. If you wish to express an idea and not have it recorded in the minutes, please indicate so beforehand.

Kenneth left the meeting at 3.40pm.

3) **Introductions**
   Brendan invited roundtable introductions, and asked this group:
   - what problems they thought worth solving in the context of the NZ data landscape,
   - what they thought the role of this group could be, and
   - what resources and opportunities they could bring to this group.

- **Klaeri Schelhowe** – Delivery Director for Trust Alliance New Zealand and TrackBack. This group should be an exchange communication platform and use case enabler for utilising new technology for sharing data and unlock the value for sometimes painful compliance work in the primary sector. First, how can we help the farmers and growers to repurpose data and unlock value across the supply chain? Second, how do we bring all other groups in our orbit together and bring the benefit out of that? What we are working on right now is digital identity, which is hopefully an enabler in the prerequisite to start sharing data. Can we find another use case to prove the technology and show how easy it could be in the real world?

- **Russell Craig** – National Technology Officer at Microsoft NZ. Data is the lifeblood of our industries. There are clearly problems both in the public and private sector that we can overcome. Would hope to create a whole raft of opportunities, both for producers to be able to produce more efficiently and effectively and to make better investment management decisions, and hopefully to move to more precision regulation type models, reduce the compliance burden and improve the compliance and regulatory outcomes. Microsoft can bring technology to this group, including digital identity, but what is really needed here is a significant step change amongst all parties and their understanding of what it takes to share data in a trusted and successful manner, to institutionalise that and put the tools and techniques in people's hands to be able to move forward. How do we close the data divide between public and private organisations?

- **Gavin McEwen** – CEO of Farmax. This is about helping the primary industry and all the people involved in the business. Ever since I've been involved in agricultural IT, the farmers and others using it have said it is painful. They have to enter data more than once, and sometimes several times. That is a hindrance to the uptake of the technology that can actually help those farm businesses. It's important to have the early adopters, but it's also important for us to understand the middle of the bell curve and then address the needs. Collaboration and data integration will go a long way towards that, but foremost we have to understand their needs. Collaboration and integration have been a key strategy for Farmax for 10 years. We have experience walking the talk, both from positive and negative experience.

- **Iain Boyd** - Head of IT for ANZCO Foods. We increasingly see that everyone is hungry for data. Everyone is keen to get insights. The more data sources we can collect the more we can create those insights. This group has a role to play in removing the duplication of effort and costs to organisations. There is an element of people reinventing the wheel when it comes to looking at APIs for sharing data. There has been a lot of talk about sharing data, but that willingness to commit to taking action and sharing is really important. That is a role this group can play. Across this group, we have the ability to ensure that what we come up with is robust in terms of digital identity, and the ability to share data in ways that are safe. I have spent 20 years in enterprise technology – I know a wide range of technology vendors and platforms. I am technical myself. I have a wide network both in the primary industry and the agritech industry. I am happy to introduce people where it makes sense and bring my experience to bear where I think will make a meaningful input.

- **Dave Dodds** – CEO at Figured. Active in the agritech industry in the past 6-7 years. Came into this group with some trepidation that it would be singularly focused on data standards, whereas I think the issues facing the industry in relation to data sharing and data interoperability are probably more profound than defining standards. We have to work around issues of governance to data in terms of use and data ownership. We need to do a lot of work on how permissioning should actually be resolved, how we prioritise integration efforts versus our own core businesses. Particularly, a lot of the businesses in the New Zealand equity landscape have significant legacy stakes. We need to do quite a lot of thinking in relation to how to create an effective ecosystem of partnerships and relationships and integrations that move data. Digital identity and data standards are secondary to these more critical issues that are probably contributing to the market failure that

we've seen so far in this industry. I am highly motivated to assist this industry. We have some experience in it on a small scale. We are a modern tech company that could offer a different lens.

Hadyn joined the meeting at 3.59pm

- **Haydn Read** – An infrastructure and data background, living on a farm in the Bay of Plenty. That take on data and analytics and the whole digital environment, what some people call a digital twin, is an enormous opportunity in this country. How do we set the scene? How do we organise ourselves in a digital sense for to enable this group to do the kind of analytics or interrogations on the landscape, in whatever form of shape it takes, in a standardised and harmonised way? The first challenge for this group is to create a circumstance where we can actually understand each other's space in a digital sense, and analyse across the landscape to do what we all want to do.
- **Will Nobel** – CEO of Farm IQ. We have a perspective of what the issues are around data. Beyond the simple issue of data interoperability, re also look towards data portability. Something that is a barrier to that is data ownership. From Farm IQ's perspective, Farm IQ doesn't own the data. We may draw analytics form the data, but that data belongs to our farmers. We are simply the custodians and curators of that data. That idea of sovereignty is one that I think is mismatched across the industry. It's one of the things that prevents us making significant progress around interoperability and portability of data. Max was involved in the DataLinker and New Zealand farm data standards work. So, there is corporate memory that we bring to the table, along with our access to 5000-plus farmers who are engaging with a data platform, that data platform being farm IQ, and a resource of 10 years' worth of data that we can potentially leverage to bring use cases.
- **Todd White** – FarmIQ. We are very well aligned to what Gavin was saying – our main focus is to solve duplication issues that farmers have. Technology should not be a hindrance and extra burden. It should enable businesses to run better and add value.
- **Max Watt** – FarmIQ, Data Architect. Previously worked for Pāmu (Landcorp Farming), plus a stint in the mining industry doing data. Have been around agricultural data for a long time. I understand the system structures and problems. I would love to see us empower the farmers. Giving the farmers the ownership of the data enables them to get the most value, and it also enables the agritech industry to have a direct path to market, to get that data and add value to it. One problem is a lack of rapport in the industry. Personal qualities – good ideas and vision about what a data platform could look like, including ownership, ethics and structures.
- **Mike Barley** – HortPlus. A small company that affectively pioneered a decision report system for delivering weather and disease risk forecasts for horticulture growers in the early 2000s. For me, it's around that decision support platform – the right data at the right time. A lot of what we do is data driven. What I have seen over the years is increasing pressure on growers and farmers – they are having to do a lot more. Duplication of data. There is an opportunity to reduce this. We all recognise the value of data interoperability and the value of sharing data.
- **Murray McCallum** – Heads up the agribusiness for Eagle Technology. Eagle has been working with the primary sector for nearly 50 years. This this group has the ability to try to solve some of these problems, particularly around data management. Quite often we find in farming organisations' or primary sector organisations' that their own systems won't talk to each other. Breaking down those silos and duplication of data is usually costly. Not only are we dealing in the primary sector, we're dealing across regional government. We know organisations that want to be able to collaborate with the primary sector to make it efficient. We're involved with organisations like TANZ, have a vision of blockchain with rising costs, particularly around logistics. If you look at the freight component now, farmers exporting or importing goods, costs are trebling or quadrupling. How can we be more efficient in this area? I believe blockchain is one mechanism to trying to make that data

- **Wayne NcNee**, CE of LIC. I am part of this group because I think it's important that businesses like ours that collect and hold a lot of data are a part of this discussion. It's a lot about farmers not having to enter data multiple times. It's a problem we can collectively help to fix. One thing to focus on is the compliance challenges of the future. There is also the opportunity for companies to supply data to consumers to help raise the value of the goods to sell. We need that discussion with more of the corporates that hold some of that data. You can set standards and agree frameworks, but if the people sitting on the data aren't interested in sharing it, it won't get us anywhere. LIC has 9000 farmers using its software. We have a vast array of various types of data in our system. Significant technology team. We have a willingness to share data to help farmers. We see partnership as a key part of our strategy. We want to be part of finding solutions for farmers. There are technical challenges in the costs associated with that. We have the benefit of having some capital. We want to see things move on and not be one of those groups that talks about things but doesn't get anywhere.
- **Oscar Ellison** – Levno. We are in the agri IT space. We have over 10,000 sensors around New Zealand on over 8,000 farms. IoT is an interesting part of this discussion. You have communication, prices plummeting, sensor prices plummeting. The rate of deployment is doubling every year. The pull of data we are collecting is huge. The accuracy of ownership is not easy. It's not just the farmers – you also have the sharemilkers, the landowners. That is an extra complexity on top of what is already a difficult problem in the ag sector. We have done a lot of work in the legal space on getting those agreements right to get the data structure.
- **Brendan O'connell** – CEO, AgriTechNZ. AgriTechNZ has been involved from the Precision Agriculture Association (PAANZ) days. We have had some involvement in the data standards work. A group like AgriTechNZ has a role to play, solely because we are not commercial – we are independent. We can promote the availability of shared work, be a repository for things that are shared across the sector, but the value will come through better data use.

4) General Discussion

- **Dave Dodds** – I personally don't think the role of data definitions and data standards are critical to success and connecting up ecosystems. Vibrant ecosystems around the world don't have data standards at their core, or they seldom do, unless you're dealing at quite a low level. I don't know if the biggest issue is mapping one person's data set onto another. We certainly haven't found that to be the case, compared to more systemic issues around understanding data access rights, who has a willingness to share, and understanding how to govern that.
- **Haydn** – Probably some of those things are the first cab off the rank, but as soon as you have finished that, you will find that you need standards in one way, shape or form to enable the next step of actually doing the work. Everywhere we go there are standards. What we don't have is a lexicon when we talk about things in a digital sense that is able to be harmonised and understood by a whole group of people who don't have the same world view. If you want to do it in a digital sense, you absolutely have to do it, particularly if you start putting the types of data that might be land use data and financial data and understanding how you join those through digital lexicons. In the fullness of time, we will and must put those things together. But those other things are no less important - access, the laws around connectivity, the laws around data sovereignty, the law around use in IP.
- **Russell** – It's worth pointing out that what one person calls agricultural data another interested stakeholder calls environmental data.
- **Russell** – A lot of the data that needs sharing is sitting in government databases.

- **Brendan** – There are a couple of opportunities for us to engage and influence. First, that crown role and the fact that they don't look for leading edge and ask for advice. MPI has contracted PWC to effectively do a state of the union on data usage within primary systems in New Zealand. If anyone would like to be part of that PCW review that MPI is driving, let me know. (Russel happy to).
- **Russell** – It would it be useful to have PWC engaged in this group.
- **Dave Dodds** – There is $60b of lending into the agri sector in New Zealand. Have we thought about the banks' requirements and data sharing?
- **Brendan** –I had intended to have them here as a representative. I will take your advice on who that should be. (Dave Dodds and Brendan to talk offline to see who best person to approach.)
- **Oscar** – I come from start-up land where we think about moving fast and how we can affect change quite quickly. I wonder if we can think of how we can get some quick wins out of this. Maybe a simple pieces of data that a lot of people want access to, to find a way to start sharing it.
- **Haydn** – Russel's point is important. The Government has a lot of data.
- **Klaeri** - I definitely want to emphasise to bring all the 16 councils together as a steering committee.
- **Klaeri** – One thought is to reach out to the Minister for the Digital Economy and Communications, David Clark. His announcement the day before may be another source to reach out and collaborate: https://www.newsroom.co.nz/david-clark-wants-to-shepherd-nz-into-the-digital-era

Next Steps:
- Engage with PwC team on the review commissioned by MPI – to support and learn.
- From this collection of "problems worth solving" create a list of focus options to prioritise at next session and align with other industry initiatives.

The meeting closed at 5.00pm