# GRDC PODCAST TRANSCRIPT

**GROUNDUP AGTECH ACCELERATOR**

[00:00:05] **Intro**  This is a GRDC podcast.

[00:00:14] **Darryl Anderson** We're in Toowoomba and the buzz in this room is all about innovative Agtech ideas. It's the showcase day for the cohort of innovators who've just finished the GroundUp Accelerator program sponsored by GRDC. Hello, I'm Darryl Anderson, and in this GRDC podcast, we'll meet some of those innovators and find out where GRDC's investment in the program, fits into its’ pursuit of enduring profitability for Australian grain growers. The GroundUp program runs out of Toowoomba's Agtech and Logistics Hub. Thomas Hall is the hub director.

[00:00:52] **Thomas Hall – Agtech and Logistics Hub** The GroundUp program's a 12 week accelerator program. Basically, over the 12 weeks, we cover a range of topics. We dive straight into the business model to start with, so taking a deep dive on each company to understand what's their business model and how they going to convert that into essentially a sales platform, be it, internet, hard sales, whatever it might be. We then go through marketing, their go to market strategy and we'll take the innovators through a financial advice course. So where we bring in the legal guys around term sheets and a lot of this legal structure and documents that they're probably not ofay with and used to, particularly if they're wanting to go and then pitch with VC funds. So after the legal session, we then go through with venture capital firms. This time we brought a company called Venture Crowd. They weren't there to pitch their company, more so provide a view into the venture capital world so if you are wanting to go down that capital raise path, this is what's going to be required of you.

[00:01:48] **Darryl Anderson** Which is great for the participants, of course. But what's in it for grain growers? What's GRDC's angle in co-sponsoring the program? Gillian Meppem is GRDC’s Senior Regional Manager - North, based here in Toowoomba.

[00:02:03] **Gillian Meppem GRDC** We've known for quite some time that we can't get to the next stage in production doing what we're doing now. We make incremental gains one and two per cent every year through the RD&E that GRDC invests in, but to make that step change requires real innovation, and for GRDC that means investing with non-traditional partners. So in 2019, we launched three initiatives addressing industry need for new innovation from those non-traditional partners. So we've got Growers as Innovators, the Australian Grains Accelerator Program, which GroundUp is one of and then the Grain Innovate Venture Capital Fund, really exciting initiatives to help the industry make that step change. So it's not tech for tech's sake. It's technology to assist and innovate, to solve a grower problem and not just a problem for today, but for tomorrow and for the years ahead. And that's what innovation truly means.

[00:02:57] **Darryl Anderson** So what kind of tech fits the bill? What great ideas did this GroundUp cohort bring to the table? Well, there were eight in all, and we're about to meet five. We'll start with a company that uses drones or UAV's and AI to find problems in your paddock.

[00:03:18] **Joseph Canning - Hawkeye Access** My name's Joseph Canning. I'm from Hawkeye Access, a UAV support company. So we have the technology, obviously I'm a drone pilot myself and we can come out and we can collect the data if that needs be. But if the farmer has their own infrastructure, we can just say, hey, listen, you need to select this height, this distance, this photo overlaps the processes and that, and then they just send us the data and we can process it from there.

[00:03:40] **Darryl Anderson** The data being simply an image?

[00:03:42] **Joseph Canning - Hawkeye Access** Photos,yeah, simple photos that we stitch together into what I call big orthomosaics, which are full farm or full paddock images, and then we send them through the processing of our software to identify what the farmer wants us to identify for them. The grains industry, we might be looking at our new program, which is machine learning, so we can actually start picking up disease or insect infestations or giving you simple counts of how many seedlings they've actually had grow on their paddocks. One of the big things we're going to target, first of all, is fall armyworm, which is devastating a lot of the corn industry this year and has been for quite a number of years. So if we can identify how to see that as say, a single infestation point rather than across the whole paddock, obviously then the management structure of that farmer then changes on how he's going to prevent that from spreading or getting through his crop. The reason I got into the GroundUp program was to bring what I have the machine learning into the industry faster to try and find out where its weaknesses were and exploit those and get those out of it before we took it to market and absolutely GroundUp programs done that. It's not only done it for the product that we want to bring in, but it's also done it for my business. I knew that there are some weak points in my company and the GroundUp program has really allowed me to understand those and see where I need to sure up my business to bring the best thing to the market.

[00:04:57] **Sarah Donovan - Cirquitive** I'm Sarah Donovan and my company is called Cirquitive and I'm a farmer based in central Queensland. Cirquitive is a cloud based digital traceability platform that makes agrochemical compliance easy for primary producers. It uses QR code technology to link the manufacturers of agrochemicals through to the uses of those agrochemicals through to the recyclers of the empty chemical containers. So everyone will see something different depending on who they are and what they need to make their business more effective. Non-compliance is a major problem for farmers at the present time, and they are so time poor with labour shortages and they just don't have the means to effectively record their chemical usage. They're using old paper based systems mixed with new inefficient digital systems. And what's really disappointing is that everyone's driving machinery now that can literally drive themselves. However, the systems underpinning compliance have not moved or advanced with those technologies in the paddock and it's really letting us down. I chose to do GroundUp because it was GRDC funded and also I do know the guys at the Agtech and Logistics hub in Toowoomba and when I saw that this opportunity came up, combined GRDC with the guys that I knew and the Agtech Logistics Hub, and I just thought what a perfect fit. And it's just ended up being such an amazing thing to be a part of, the camaraderie that I felt with the other participants and the support that I felt between them and also the guys at The Hub. But it's just been a wonderful journey and I've just learnt so much, but I've also realised the key really is collaboration and don't be afraid to ask people questions and they've hooked me up with some great people with fantastic skills that I would never have been confident enough to approach myself. And so I've had some wonderful introductions and I know that the support will be ongoing.

[00:07:00] **Paul Diamond - AirAgri** I'm Paul Diamond.

[00:07:02] **James Diamond - AirAgri** And I'm James Diamond.

[00:07:03] **Paul Diamond - AirAgri** And we're AirAgri.

[00:07:05] **James Diamond - AirAgri** AirAgri's a, Australian technology business, which is purely designed to protect Australian farming families.

[00:07:14] **Paul Diamond - AirAgri** Yes, So we did have a scenario on the farm where an employee flipped a tractor and he knew the farm very well and surprisingly after the incident, he had no idea where he was. With a simple click of a button, it sent an alert to me and I was to know exactly where he was and responsive in 10 -15 minutes to find him white is a ghost and, you know, settling him down, making sure he was okay.

[00:07:42] **James Diamond - AirAgri** In essence, it starts with giving some basic capabilities to farmers to create digital maps of their farms. It's obviously very critical to understand what a farm looks like as far as geography spaces and places and then what we do is we use technology and signals from mobile phones or some of our simplified IOT devices.

[00:08:03] **Darryl Anderson** IOT is Internet of Things?

[00:08:05] **James Diamond - AirAgri** Internet Of Things, yeah, so just wearables, really. Simple small devices that farmers can put in their pocket or on their belt, and that helps us get location metrics when the phones are out of reception, which I'm sure everyone can understand. So farmers, workers or family members can either manually trigger an alert through our devices, either on the mobile phone or through these wearables or IOT devices, or we have automated rules that are running in the background looking at where you are, what should you be doing, and something doesn't look right.

[00:08:38] **Darryl Anderson** Why did you want to get involved in GroundUp the program and did it do what you hoped it would?

[00:08:44] **James Diamond - AirAgri** Yeah, I think being vulnerable is like the first point of any type of progression, right? So honestly, from our perspective, vulnerability came in understanding that we come from a small part of the country and farming looks very different no matter where you are in the country. So this program has given us fantastic insights into broadacre cropping and other farming practices that we're not aware of. Obviously safety is a common denominator and the risk to that, but the connections, the insights and the learnings from this program have been absolutely incredible.

[00:09:24] **Nick Walker - Hindsite Industries** My name is Nick Walker. I'm the senior enterprise director at Hindsite Industries. We are a Aussie tech company that specialises in providing the right information to the right person at the right time. Technology that will enable farmers, corporate or individual, to assess problems that they might encounter on their properties, whether it's machine related, whether it's diagnosing a sick animal as an example, from a bio security perspective, or simply they have a new sensor which they need to install and they haven't received the right information on how to do that. Our software allows them to have a step by step process on how to do any of these features, as well as providing support from a subject matter expert perspective. I could be a farmer as an example, and then all of a sudden something goes wrong. I can then troubleshoot that problem by going through what we call a workflow, which is basically a digital step by step instructions on how to assess and diagnose the issue. And then at the end of that process, if I still require additional support, we then have our remote assistance feature, which will enable a farmer as an example, to then call an expert. And that expert can then diagnose and talk that customer through the problems that they're encountering. We have a software platform which is available on any browser, and we've also created a application which is on the Apple Store and Android store, and the software is also available offline. The application is one thing which can obviously can be used on your mobile device, but we have partnered with a really cool team called RealWear and RealWear have basically created what we call a head mounted tablet, which is a wireless voice activated system which enables us to put our software onto that device. The RealWear piece, is really exciting for us because it really enables that person to have a hands-on approach. The GroundUp program was propositioned to us and we said, you know what - we're super keen to be involved in that! I guess the thing that we really wanted to get out of the GroundUp program was making those connections with the right people to understand not only the problem that everybody's facing in their respective markets, but also how can we bring some additional value and help those? The connection with GRDC was basically getting those connections with different people in the industry. That's been invaluable for us. We're getting exposure to markets that ordinarily we probably wouldn't have had access to and as a company that's been involved with a number of accelerator programs, I would have to say this is one that's been not only organised, probably one of the best we've ever seen, but the activity and level of engagement has been second to none.

[00:11:53] **David McGrath - MagGrowTec** Hi, I'm David McGrath. I'm the business development manager for MagGrowTec in Australia and New Zealand. We have a magnetic assistance device that you can retrofit onto any boom sprayer that adds a massive amount of precision. If we are, as we've proved, being able to land more crop protection fluids onto the target, it means that they're not shooting off in the breeze. You know, this system really does specialise in canopy penetration. So you can bolt on any of the ancillary benefits stemming from that. So whether that's actual coverage for better agronomic outcomes, if it's better coverage for you to start to take a look at your water rates to drive efficiency and productivity, if it's just to cut waste, if it's to minimise your risk whenever you're up against neighbouring properties. There's a lot of different reasons, good reasons for people to be looking at this technology now. I got involved with the GRDC GroundUp program because as a company there's 40 staff, we're in four major territories around the world, we have 300 units installed globally, but we're a little bit behind in the Australian New Zealand markets. So I got involved with the program to bring the technology that's very relevant for considering the issues that are out there in the wider market. So I thought I would be able to talk to more customers by having a platform here at the Agtech Hub. I just find that it made me stop and think about everything that has been done and how takin’ a look at everything through the lens of Australia, specifically would definitely stand the technology and my focus with it, in better stead.

[00:13:50] **Gillian Meppem GRDC** So when you look at what they've achieved here at the Agtech and Logistics Hub through the GroundUp program, they've managed to bring in some very exciting organisations and individuals to take part in the accelerator program that will assist the grains industry to that next stage of innovation. We know that it takes a lot to develop something from literally the 'Ground Up' and it's an exciting space when you think about partnering innovative minds with producers. That's where the magic truly happens.

[00:14:26] **Darryl Anderson** That's Gillian Meppem from GRDC ending this GRDC podcast. We also heard from Thomas Hall, who's the director of the Agtech and Logistics Hub, and these GroundUp participants, Joseph Canning from Hawkeye Access, Sarah Donovan from Cirquitive, the Diamond brothers, James and Paul from AirAgri, Nick Walker from Hindsite and MagGrowTecs’ David McGrath. I'm Darryl Anderson. Thanks for listening.