



FCC Knowledge Podcast – Episode: Turning ideas into action: Stories of success, strategy and growth

PODCAST TRANSCRIPT

Interviewer: Marty Seymour (MS)

Guest: Alanna Koch (AK), Dr. Joy Agnew (JA), Brett McRae (BM)

MS: From AgExpert, it's the FCC Knowledge Podcast, a show that features real Canadian producers, real stories, and real good conversations about the business of farming. I'm your host, Marty Seymour.

JA: We're not just going to have robots running everything for us. That's never going to be the reality. Everyone thinks that robots and machine learning, everything, and artificial intelligence, it's all going to be automated, but it's not.

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MS: Welcome to this special edition of our podcast where we took our show on the road. We went to Canadian Western Agribition and caught up with three winners of the Canadian Western Agribition's 50 Most Influential People in Canadian Agriculture. Dr. Joy Agnew and Alanna Koch and I were on stage at the Grain Expo and chatted about where they saw opportunities in the industry. And I did some follow-up afterwards with Brett McRae, a rancher from Manitoba. All three of our guests had a ton of wisdom to share about mentorship, innovation, digital ag, and frankly, they were just interesting people to meet. I think you're going to enjoy our chat today, so stick around.

To start today's live show, I first caught up with Alanna Koch from Edenwold, Saskatchewan. Alanna is the recipient of the Mentors Award in Canadian Western Agribition's Top 50 in Canadian Agriculture. Alanna has a really diverse experience and extensive knowledge from years in the agriculture industry. Alanna and her husband Gerry have a very interesting story, and they did something quite rare. They decided to purchase land in their 40s and jump back into farming as producers. And they did it without the help of a family succession plan. Alanna and Gerry currently own a grain and oilseeds farm and operate KoHert Agri. Alanna has had a great career in Canadian agriculture. Apart from many high-level positions she's held, she's also the current board chair of the Global Institute for Food Security at the University of Saskatchewan. And

she's chair of the CN Agriculture Advisory Council as well. You can probably imagine that she's met a lot of really great mentors over the years. I'll let her tell you more.

AK: I was really fortunate in my career to have a lot really important people that either were very actively my mentors, because I sought them out, or they saw something in me that maybe I didn't see. Or lots of informal mentorship and role modelling. So, I just think it's about giving back to the people that are in the industry. And I'm always thrilled when people seek out advice and mentorship from me, and I think that's what we all need to do. And it's also about continuous learning. I still look to my mentors, even though I'm well along in my career. There's always room for improvement. There's so many programs now, which is so exciting, compared to when I first started my career. So, there is the Next Gen Mentorship Program that Canadian Western Agribition puts on with the support of the Saskatchewan Ministry of Agriculture. I know I am going to becoming involved in 4-H Canada's mentorship program. Cattlemen's Young Leaders have a mentorship program through Canadian Cattlemen's Association. So, there's lots of mentorship programs now. And there's also just informal mentorship where I'll just be contacted by somebody that says, hey, would take a minute with me, would you have a coffee? And then it's that connection that goes on.

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MS: Our second guest is Dr. Joy Agnew from Olds College Smart Farm. She was awarded an innovator's award at Canadian Western Agribition's Top 50 in Canadian Agriculture. Joy is from a grain farm near Prince Albert, Saskatchewan, and she earned a Master's in Bioresources and Food Engineering at the University of Alberta and then went on to get her PhD in Saskatoon in Ag Bio Engineering at the University of Saskatchewan. So, needless to say, she's really smart. That's why there's no surprise she's involved in the Olds Smart Farm. So, what exactly is a smart farm?

JA: A great question that I answer all the time, what is a smart farm? What is the Olds College Smart Farm? And really, there's no one single definition of a smart farm, but the definition that we use is, any farm that is adopting technologies, or using data, or adopting practices in a way specifically to improve productivity, profitability, and sustainability of our farm. The Olds College Smart Farm, though, is a little bit different in that we're doing that as part of a commercially operating farm, but we're also providing access to infrastructure and experts, to the innovators, and the start-ups, and the companies developing new technologies, to help prove out those technologies and scale them. So, the Olds College Smart Farm is an operating farm, but it's also providing that access to support to help the innovators develop their ideas.

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MS: So, when I think smart farm, I've got sensors and robots in my head. Paint a picture for me of what I would see if I went to Olds.

JA: At the Olds College Smart Farm, we are adopting leading edge and newly commercialized ideas and technologies in order to evaluate how well they operate on our farm so that we can provide that feedback back to providers, as well as provide that real producer experience back to the innovators. To say, this worked because of this, or this wasn't really functional, or it didn't integrate into my operation, so it really wasn't valuable to me. One of the things that we're always really focused on is return on investment because farmers are always really interested and need to know the value of a specific technology or practice for their operation in Western Canada.

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MS: Joy was definitely speaking my language. If you've listened to this podcast enough, you'll have figured out by now that I'm a bit of a data nut and I love talking about ag tech. Joy reminded me about some of the work we did at FCC a few years ago. We realized that only 50% of farm records are digitized. There's lots of room to grow in tech adoption based on that stat alone. So, given that I had two of the most influential people in agriculture on stage with me, I thought I'd ask them their thoughts on data collection in our industry.

JA: In 2018 when the Smart Farm was established at Olds College, there was very little data and digitized records for the Smart Farm, so we basically had to start from nothing in order to build out that digitized record piece for our own operations. And then to help us better understand, to better share with producers that maybe hadn't done the deep dive into data yet on which pieces or layers of data are most critical to help them manage their operations, and how that's going to help them. How do they get into it? How do they get into digitization? How do they get into looking at trends and some of the records to help them make in-season management decisions and overall management decisions? Because that's really all that data is. It's there as a tool to help decision-making to mitigate risk.

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MS: So, Alanna, you're actively farming. And maybe just describe your farm in terms of how you and Gerry divide the business up. And then I want your thoughts on data because you have some pretty good perspective.

AK: Yeah, thanks. Gerry and I, we're sort of late bloomers, so we started our farm in our mid-40s. We farm just 2,000 acres, a combination of owned and leased land. And we're grains and oilseeds, so we grow wheat, canola, flax, pulses. And how we split up the operation, my husband Gerry Hertz is the guy that really runs the financial side of the business as far as accounting. He's the agronomist, obviously. He runs all of the equipment. My side is probably more on the human resource management side, a little bit on the organizational side. I'm kind of the gopher, so I do a lot of the running in our busy season, and I feed the crew. So, that's my role, but we make the decisions together. I'm not the financial guru, but I understand the information, and I'm definitely part of all the decisions that we make, whether it's purchase decisions or marketing decisions.

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MS: You're at the largest cattle show in the country. If you wanted to diversify, now is the place Gerry, hint, hint. I think the Angus sale is on Thursday. You have some thoughts on data. It's not unlike the ones that I have about how we collect so much of it and what we do. So, when you think of data on the farm, what do you like and what's your irritation?

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AK: The irritation probably is just there is so much information now that we can gather, and sometimes feel obligated to gather, and it's a bit overwhelming. And data, big data, is the new term, digitization. But it's about making it real for your operation. Gerry is a spreadsheet guy, he's a finance numbers guy, he gets pretty granular in analyzing our profitability and trends. We were one of the original customers of Settler, which is now AgExpert, which FCC has. A little shout out there for AgExpert.

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MS: Thank you.

AK: We're also customers of FieldView, and I think we're year three in that. And so, we've got a lot of financial information we look at, and we have a lot of crop information and agronomy information. But you can't use it all, and maybe we eventually will, but it's about harvesting the data that works for you in your decisions. What are the trends? How do you decide what you're going to grow? What's working for you? How does profitability look on each piece of land, and on each crop that you're growing year to year? How's your marketing decisions? What kind of risk management are you using? We use options. They've worked for us from a risk management perspective. You're not always going to sell at the top of the market, as much as you'd like to. So, it's using the data that works for you in the size of operation and what you can take in and digest. Don't be overwhelmed by it.

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MS: So, Joy, you come from the applied science side of the equation. You're working with start-ups and mature companies on the data side. When you hear that, what do you think?

JA: I 100% agree, because it's easy to collect data. It's far, far more difficult and challenging to figure out how to convert that into some sort of insight, or actionable intelligence, or any kind of result. So, at the Smart Farm we need to collect hundreds of layers of data in order to provide the training data sets that these innovators need to develop new algorithms and new machine learning systems to help develop the next and latest tool or technology that might be deployed on the farm. As farm operators ourselves, we're also very keen on understanding which bits of this data is most important to us in order to

manage our risk and our cost of production. And understand how profitable or productive some of our land can be, or how much more improvement we can generate out of that land.

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MS: I think Joy and Alanna gave us some really valuable advice here. If you think about it, data collection is a very valuable tool for improving our operation, but it can be quite overwhelming to the average farmer. And I think Alanna really nails it, is the tech has to work for you, so harvesting the specific data that benefits you needs to be directly important to you. It can take some time to sort that out, but thankfully we've got people like Joy on the other side of the ledger, evaluating the tech for us. Hopefully, her work can help speed up our search for meaningful data collection tools.

Let's look at it in real time with the campus, or the Olds College model. You have land spread everywhere. Tell us where you've got pockets of land.

JA: We have land obviously right in Olds proper. We have land west of Didsbury, land west of Carstairs, and land near Lacombe. So, it's, I think, up to a 120-kilometre distance total.

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MS: So, now you're going to manage that land because you're trying to run a working farm in your model, collecting data from all the farms. Are you running them as independent entities with different outcomes, or are they measured against each other?

JA: That's a great question. It comes back to one of the preparatory questions that I thought about for today's podcast was around our strategic planning, or what's our vision, or what's our goal for the Smart Farm? And that's still something that's evolving, quite honestly. The Smart Farm was established in 2018, and the team has just really been building and rallying around that. And what is our goal? Is it to be as profitable as possible? Is it to be as productive? Is it to be most sustainable? Or is it there to be this sandbox or playground for learning for both producers, for students, for industry? We're still figuring that out, honestly. So, at this point we are using data and we're managing our land in the various locations in a way that's incorporating teaching and learning and applied research as much as possible, while trying to at least cover our costs.

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MS: Oh, I like that part. Okay, Alanna, that's not a bad segue here, aside about planning and goal setting. I'm assuming, because your farm history is kind of unique where you were in farming directly, then you were away, and then you came back. And so, can you help us understand what goals and 'strat' planning maybe look like in each of those chapters?

AK: That's right. We had an early start in farming right at the start of our marriage. And it was the '80s, and it was double-digit interest rates, and it was a drought. And so, we thought we were done farming. We got out, and both had a career in ag, and thought we wouldn't be back. But here we are, we're back in, excited to be back. And I think that it's really about being intentional about your plans. Really thinking through where do you want to go? How big do you want to get? What are your plans, immediate, medium, and long term? I think too often farmers feel like the decisions are out of their hands. Well, I have no choice but to buy more land, or I have no choice but to expand, or I have no choice but to hire more people. That's on the growth side. But also, be willing to take risk. If anything, I think maybe Gerry and I didn't take enough risk. We probably could have purchased more land, for example. But it's about that very deliberate and intentional conversation to be able to have a strategic plan. I know that sounds funny, but have a strategic plan for your operation. Really think through, have active conversations, and it's active check-ins as well. Just because you decided something one year doesn't mean it's actually going to last, because things are ever-evolving. Market conditions are changing, land becomes available, or more human resources become available, which is also a limiting factor on lots of operations. So, I think it is about that active conversation. And this also leads into succession which is a whole other topic. But too often, farms don't have the active conversation about succession which is also very much about the strategic plan for the operation. That's where people get into a lot of trouble.

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MS: The strat plan and planning thing gets me every time. Because we've probably had 15 farmers come through this podcast series since we've done it, and everyone gives me the same thing. But I'm still unclear if I have to write it down. Can it be on a napkin? Can I make it up at the coffee shop when I get there for coffee row? How do you guys structure it? Because I sense it's different everywhere.

AK: It will be different everywhere. We have an active discussion. We already know what we're doing next year as far as our cropping plan. We've had that in place already for a few weeks. Lots of people are doing that because we now need to do all of our input purchases anyway, but we already know what we're growing three years from now too. So, that kind of stuff is written down. Even our equipment purchases, we already know what's ahead, what we are going to need to replace. A lot of those things are written down and well thought out. As for personal goals or where we think we're going to be, as we start thinking about semi-retirement, retirement, those aren't written down. Maybe they should be, Marty, but they aren't. But we have very active conversation about it and make sure that we're on the same page. And if we're not, well, how are we going to get there? I think it's important actually to write it down. The bigger the operation I think the more important it is. The more family members involved in the operation, the more important it is. To be that intentional about, let's write it down and then do that annual check-in, are we still all on the same page? I think that's really important. If you don't write it down, then is it as real?

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MS: Yes. As Alanna mentioned, succession, or what we at FCC like to call farm transition, is another topic that's directly connected to strategic planning. We just released a couple really good episodes on this, so if you follow our podcast, go back and check them out. They're on farm transition, and they're available on all podcast platforms. One thing my previous guests made clear is that at some point in the farm transition process you definitely need to start writing things down. But you can start by asking the right questions and having open conversations, just like Alanna. So, this topic got me thinking. We know it's important for individual farms to formalize their strategic planning. But does the ag industry itself have a strategy or a common goal? Joy's perspective, as a regular communicator with ag tech companies and research interests, I thought she might have an answer for us.

JA: Honestly, from my desk, I know it doesn't seem like it. Everyone is just chasing the next big thing, or what they think they can make profit off of. But ultimately, I think everything boils down to overall improving productivity, profitability, and sustainability of food production. And if you dig deep enough, I guess, every new idea, every new innovation that comes our way is pointing to one of those three things, or sometimes more than one, which is good, but sometimes you have to dig pretty far. Because sometimes they're more focused on the flashiness of it, or the fact that it's fully digitized, or it's trying to reach that last 2%, and they're ignoring that first 50% or 60% overall improvement in productivity that they could be more focused on. So yeah, that's a great question that I don't think I can really answer. Because I always have to boil it back down to what our overall strategy is, is that working with technology, innovators, and our own land to just try to improve that profitability and sustainability.

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MS: And what do you think when you hear that? Because you have an interesting vantage point from both the professional side of the off-farm interests you have with your board work, etcetera, Alanna, versus the day-to-day running the farm. When you hear that, what comes to mind?

AK: Joy's right that it's exciting to see all of the shine on ag tech. But we have to be a little bit careful at not running after every shiny thing, would be my only comment. It's a little bit even on the agronomy and on the input side. There's a lot of really interesting products out there that are going after the 0.5% or maybe 1% extra profit if you use this product. But meanwhile, maybe we're not looking at what could actually earn us an extra 20%. If we took better care of the basics, we could take better care of the operation in a bigger way. So, sustainability is key now, and I think innovation is absolutely going to lead us down that path. It's really important. The work you're doing at Olds, I know some of the work we're doing at the Global Institute for Food Security, it's absolutely critical for agriculture to be able to go on the sustainability path. But we have to just be careful that we don't get too scattered and smattered, and don't focus on the basics and the principles and doing the basics right.

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MS: I think I really love this idea that the ag industry's unifying strategy should be to improve the productivity, profitability, and sustainability of food production. And as my guests rightly suggest, sometimes our tech efforts are too focused on small gains rather than those larger structural improvements that give us the biggest benefit. For this reason, I think it's important that we're very thorough when we're deciding what tech to adopt.

So, that throws me back your way around strategic planning, and future, and sustainability. Kind of interested. I think Olds is in a really good spot to be a leader in this space and give us some applied usage, things around regenerative, around sustainability. Where are you guys at on that journey?

JA: We're baselining, basically. Because the only way to measure progress or improvement in overall soil health or emissions is to understand baselining. So, it even goes back to understanding how to utilize data, or what's the most important data for production. And that, from my perspective, is cost of production. Understanding cost of production on a field-by-field basis, or commodity-by-commodity basis, or a whole-farm basis. You have to start somewhere. So, on the sustainability front, getting a really good understanding of our soil health and soil health variability, and our overall footprint, I guess, so that we can look at evaluating adopting alternative practices, or adopting new ways of managing our land, or incorporating livestock on land that previously never had livestock, those types of practices, we can then measure the benefit.

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MS: So, they're baselining. What does that sound like for you? That feels like the gap on that is super wide. We have an institution here that's resourced to do that work. How does that feel from the farming level when you hear that?

AK: If you think about zero till and what it's done to improve soil health, and build organic matter, and what we've been doing now since the birth of zero till which really began decades ago, it's too bad we didn't know the importance of baselining back then, right Joy? Because boy, if we'd known where we'd started with that basic change in how we were going to operate our farms, we could really show the improvement, really prove out what we've done better. So, it's really important that you're looking at that baseline for all of these other practices that man, if we didn't measure yesterday, let's start measuring today. And that's what I would say about agriculture. We really need to start thinking about how we tell our story, and it's got to be based on data, on facts, on statistics, on baselines, so that we can demonstrate we are sustainable, we are a solution.

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MS: Do you think we're moving fast enough on that, Alanna? And if you didn't say yes, my supplemental question would be, what's getting in the way?

AK: We're probably never moving fast enough on all the things that we need to do, but we have started to have the conversation. I know that the Global Institute for Food Security is working on this national index on sustainability. There's quite a few industry partners involved, the work you're doing at the Smart Farm, we have begun what probably we should have done years ago, but at least we've started, and we are doing it in a collaborative way. We are bringing all commodities online. Of course, beef has come a long way, if we took at the round table on sustainable beef and you look at the value chain there. So yeah, it's never fast enough, it's never enough, but man, we've got to get started. And I think we have gotten started and now it's about working together. No point in having commodities work separately, that's never the answer, so better together, and I think we've started that process.

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MS: I really value this advice from Alanna. We really need a baseline of data to work from. You can't track things like soil health without having some sort of baseline to draw a comparison from. She's 100% right, and it's hard to demonstrate improvements of overall sustainability without it. The best time to start identifying a baseline is today. So, thankfully I think we're getting better at data collection in the ag world, but there's more work to do on this.

Let's start with the future. I love the future, where we're going, and maybe from the vantage point of Smart Farm, if you push fast forward on our industry 10 years, maybe 20, how do you paint the picture for agriculture? What does it look like to you, Joy?

JA: Blurry. I get that question a lot because oh, we're dealing with leading-edge technologies and maybe what might be commercially available in the next five years. If I think back five years ago, if I was asked that same question, what do you see five or ten years from now, I'd be nowhere near where what we're doing right now. So, it's hard to think about 10 or 20 years out from now, with the way technology and computer science and the speed of connectivity, and rural connectivity, and broadband connectivity, how all that is really going to change. But one thing I know for sure is that we're not just going to have robots running everything for us. That's never going to be the reality. Everyone thinks that robots and machine learning, everything, and artificial intelligence, it's all going to be automated, but it's not. Those are tools that will allow the human part of making decisions and farming possibly more streamlined, but we're never going to take that human element out of it. There's no way to accurately or perfectly model the way a human brain thinks through decisions. And even gut feel is part of that that can never be programmed into a computer. There's always going to be that human element, and the artificial intelligence and tools are just going to be the tools that would help that.

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MS: What do you think of that?

AK: Bang on. Again, data, drones, robots, all of those things, I think we can get pretty excited about them and think that they're going to take all the risk out of our business, or going to take over, and we're going to just sit and watch them do the work in the field. It's not reality. They are tools. And the key is to make sure that we have the best tools possible. They're going to be ever-evolving, ever-changing, ever-exciting. But it's how then we can utilize them as the farmers and operators and the ranchers, another tool. A great tool, an amazing tool, but it's not going to take over the need for smart people, and still people very involved in agriculture.

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MS: If you look through the future of the industry through your lens, so we've got, I'll say, the academic side, the research applied, and the production side, 10 years, 20 years, what does our industry look like from your vantage point?

AK: I think very dynamic, very complex. I tend to always get a little bit maybe too focused on policy, but I do worry. Joy talked about blurry. I worry a little bit about the blur and the worry of where government regulation is going to go. This pressure on sustainability, the environmental component, even social pressure from the public as far as where their food comes from, the practices we use. So, those are all, I think, challenges that will become more complex and more ever-present. That's never going to change for us as farmers, and so we better get over it and recognize it's here to stay. How are we going to deal with it? It is about making sure we're doing the right thing, and then telling people how we're doing the right thing and showing people that we're doing the right thing. And communicating in a way that isn't defensive and well, they're just going to get it because I'm going to tell them. But more, let's have a conversation. We have mutual interests here. My family eats the food that I produce, your family does too, let's have a conversation about consumer choice. So, it's going to be a very exciting time. I think lots of opportunity. It's great to see young people seeing themselves in the industry, even though maybe they didn't come from agriculture. But for sure, complexity and challenges ahead. And hopefully we're allowed to use the modern tools and technologies that are coming. But then it's up to us to be able to communicate why it's so important that those tools are there. That's the only way we're going to stay sustainable, and competitive, and profitable.

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MS: Well, we hate to disappoint you, but I think my guests agree that robots aren't ever going to run the farm for you. Tech does, however, give us a lot of great tools that are going to make our jobs easier and ultimately help make our farms more efficient and profitable when we use them correctly. Now, the trick is to communicate this to the public and the policy-makers so that we can show them why this tech is necessary and valuable to our industry and help us further demonstrate how we continue to improve. And as Alanna suggests, the pressure to improve the sustainability of our farms is here to stay. So, it's time for us to write down our stories and keep our industry progressing.

So, you've described an incredibly complex environment. I guess the complexity is not going to go down as we move forward then. So, where do you guys get help in terms of all those complexities? We've talked everything from digitization, to future planning, to even this complexity thing. How do you and Gerry get help or support, or what does that look like?

AK: I think, first of all, we do have some professionals that help us. We use an accountant, we do have a financial advisor. So, for us, we have a smaller operation. Those are the tools we use. We also are out talking to people all the time. We attend industry events. We're always trying to get new information, make sure we're talking to people who are leading edge in the industry and staying ahead of trends and understanding what's coming at us. For some operations, they literally have firms that work with them on the consulting side on everything from agronomy right through to financial planning. And I think that's the key is for us to understand, we don't have it all figured out as farmers, that it's good to bring in experts. Again, it's on the tool side. It's another tool. Get the best advice you can. That's the only way we're going to find our way through this complexity. And then make sure that we're availing ourselves of all the risk management tools we can, whether that be on the insurance side or on the consultancy side. And that's all about managing the risk because there is lots of it, but there's also lots of opportunity too.

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MS: Fair. So, Joy, in your model, where do you guys get help? Because you're equally as complex, just with maybe different outcomes you're chasing.

JA: One of the things that we lean on heavily is our panel of producers in both Alberta and Saskatchewan that we connect with. Our Smart Farm team and our smart ecosystem leadership team connects with a couple of times a year to ask them questions about how things are going on their operation, point us in the right direction, make sure we're asking and answering the right questions. So, we're hearing from them what are they struggling with in terms of technology, or data, or just their operations. And one of the really most eye-opening things that I learned in one of the first producer panel sessions I attended was that overwhelmingly, as we went around the table, the main concern, or the main wondering, or the main gap, I guess, that the producers were seeing was on the human resources side. Help us manage our people, help us manage our team, help us manage our resources better. And I thought, huh, we've been focusing on hundreds of layers of data, and the latest weather station, and this and that is not going to help that at all. So, how do we reset our vision or goal or focus so that we can be a more holistic smart farm and resource for producers?

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MS: Well said. We're nearing the end, the finish line here of our chat. I usually wrap up with this series of questions because I find them super fun. And the first one is, your biggest fail, or your do-over. Because I've learned that most people always learn from others'

mistakes. And so, if you look back on your time in farming, Alanna, biggest wreck or your do-over?

AK: Our do-over is we should have bought more land. At the time that we came into farming, Gerry and I are pretty risk averse after our experience in the '80s, but we definitely should have bought more land at the time. So, that's probably the biggest do over. But it is what it is, and we've expanded a little later than we should have. But yeah, that's probably our biggest regret.

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MS: Fair enough. How about you, Joy? You guys are fairly new on your journey. 2018, Smart Farm was born.

JA: I'm going to answer this question not from a production lens, but from a more professional lens, is that the thing that I wish I'd done differently as a young professional growing up was, I didn't leverage the experts and the mentors in the industry as much as I should have. Because the lessons learned and the wisdom that is gained just from having a conversation with some of these mentors, like Alanna, who's more than willing to talk to young professionals and young producers. What you're going to gain out of those conversations is going to pay off 10-fold, 20-fold, 100-fold, versus googling everything and trying to learn it on your own. So, attending events like this is great, but just having meaningful conversations with experts and mentors is so, so critical.

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MS: Well said, and such a great way to tie it back to where we started with Alanna being recognized as one of our mentors and Top 50 in Canadian Agriculture. Last question to you then Alanna is, what advice would you have for your younger self, if you went back to 20... but you can't use the land one again. But what advice would you give your younger self?

AK: I sometimes needed to be shoved through the door. The door would be open, and I would be, I'm not ready, I can't do that, I don't know enough about that. And only, thank goodness I had mentors and other people around me that actually had to kick me in the butt to get me through the door. It's, I think my younger self should have just been more willing to take on all of the opportunities and challenges. Have my mind open to what all the options would be that I could do. I think too often people think they need to be ready for the opportunity. You don't have to be ready, you have to be interested. You have to obviously have some skills. You have to know what you don't know. But don't think you have to be ready because you don't. You take on that new challenge to just step into it even if you're not quite ready. So, that's, I think, the advice I'd give myself.

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MS: Wow, that's a great way to end. So, thank you guys for joining us today here on the FCC Podcast, and for our audience for sitting through this with us. Really enjoyed it, so thank you.

JA: Thank you.

AK: Thank you.

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MS: After the break, we're going to catch up with Brett McRae, another Top 50 in Canadian Agriculture award winner, and we'll wrap up our Agribition Special. Don't go anywhere.

BM: The only time we're going to run a test is if it's going to change our management, and it's going to influence and make us change the direction of where we're going. And I've really thought of that like yes, that's the data we need to collect. There's data for data's sake, and then there's data for actually making decisions on your farm and being useful.

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MS: The FCC Knowledge Podcast is brought to you by AgExpert, farm management software designed for Canadian agriculture. Learn more at AgExpert.ca.

Now for Part 2 of our Agribition Special. I had the chance to sit down with Brett McRae, the recipient of the Upstart Award as part of the 50 Most Influential People in Canadian Agriculture. Brett and his wife Chantel own and operate McRae Land & Livestock, located 15 minutes southwest of Brandon. I'll let Brett tell you what they're up to.

BM: We run a mixed operation of grain and cattle, focused on regenerative agriculture. We have purebred Angus cattle. So, we sell two-year-old bulls every spring, and then various other purebred livestock. We're a no-till grain farming operation. We have a diverse amount of crops that we grow. We focus on diversity and the five soil health principles, it's a big part of our operation. And then to fill in the gaps as we fight to expand and scale up, there's a host of other little enterprises and things that we do to keep busy and keep the wheels turning.

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MS: Congrats on the Top 50 in Canadian Agriculture. You're an Upstart.

BM: Thank you.

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MS: How does it feel? You get the call you're top 50. What does that mean?

BM: It's an extreme honour to get something like that. To have an award this prestigious, I was blown away. I had no idea this was coming, knew nothing about it. My wife did, so when I come and told her she was smirking. It was like, oh yeah, they were telling us that you were going to win this thing. And she was very, very proud of me. That being said, I feel like, I'm the guy that ...? I'm one of the top 50? Especially when you look at the rest of the winners in this, there's some amazing people that I really look up to. And I'm just another guy who doesn't have it figured out and is doing the best I can with the information that I have.

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MS: Well, that's why you're on the podcast. Most of our guests are exactly that, just regular folks doing what they do. And so, congrats on being an Upstart. I assume there'll be a statue outside of the City of Brandon soon?

BM: Yeah, I'm sure.

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MS: So, you just listened to us at the Grain Expo talk a little bit. We spoke with Alanna Koch from the farming perspective and then Olds College from the smart farm side. What did you think?

BM: It was good. I really liked ... a lot of their thought process was very similar to how I approach agriculture in our farm. And Alanna especially, we would have a lot of shared ground with the scale of our operation as well as the mindset. Yeah, I think she was right on the money with a lot of what she said there. Her approach to having technology work on their operation, and risk management, and the risks that she wishes she would have taken if she had the chance. And just being open to, you're never going to be ready. Just go and take the risk, take the opportunity, and go and run with it, and you're going to figure it out. I think that's definitely what we need to do for our farm.

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MS: So, you're an Upstart then, and you hear Alanna is, I'll say the mentor is her category in the industry. So, when you hear her talk, do you say, oh, I've got to get home and talk to the family because we've got to go get more land? Does this really push you to take action?

BM: Yes. I know we need to already, so it was a confirmation of yeah, we're going in the right direction, everything needs to come together. Which it will. We're doing the thing, we're going in the right direction, this is working and it's going to work in the future.

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MS: The value in the validation.

BM: Oh, absolutely. And I can't remember where I heard it, but it's more important to be reminded than instructed many times.

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MS: Much like our other Top 50 winners, Brett is very humble. But he's an innovative and hard-working farmer in reality. I might consider myself a little bit of a tech nerd, but I think Brett's far ahead of me on the tech adoption. So, I thought I'd ask Brett to provide some great insights for us on tech adoption in practice as a producer.

BM: I really like to embrace new technology, maybe to a fault at times. And it's good to see colleges and industry investing in learning that so that they can be the ones that learn that. I've heard on another podcast of the second mouse gets the cheese. We need somebody to be that first mouse to try it, and test it, and make the mistakes so that when us, as producers, go and implement that on our farms, we can do it with a lot less risk. And especially in the technology sector, a lot of this stuff, it's not cheap. There's a lot of money invested, and we need to be able to get return on our investment of it.

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MS: You said you're an early adopter of the tech. What's your biggest tech fail? What did you buy that was such a disappointment? And we can edit it out if it's a company that we don't want to make feel sad.

BM: I've got a GPS system that I'll sell you because it just drives me crazy. I went a few years ago, I'm like, hey, we need a second GPS system. We have one, we need the second one. And I had the option of, well, we can get the same as we have, and there's tons of used ones on Kijiji, and we'll just get that and make it work. And I'm like, no, I need to take out a loan to get this anyway, so let's get a new one. It'll be nice, and we'll have warranty, and service, and it's been a headache for four years.

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MS: A farmer's journey.

BM: This year I finally got to the point where I don't care what I lose on this, I'm just selling it. I'm just sick of fighting with this thing.

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MS: Remember what Alanna and Joy said about adopting shiny new tech in a mindful way? Well, sometimes it's not always worth the investment. I think Brett has a real-world example of why it's critical to be very thorough on your decision-making when it comes to adopting tech.

Let's talk about the data side. We spent a lot of time on digitization of the industry. And when you hear the two of them, where do you sit on how we use data as a sector in general?

BM: As the ag sector?

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MS: Sure. Or you could look through the cattle lens and the grain, which you've got a finger in both.

BM: We're definitely very much interested. And as a mixed farm, it's kind of two paths that we're on. We try to integrate them as much as possible, but there is definitely two different sectors and two different mindsets in there. I think there's a lot of data that is collected. And I'm definitely guilty of it, we a lot of times collect a lot of data and have this mountain of data, and then have a little tiny pile of decision-making that actually comes out of it. One thing that I learned this summer is, somebody said, the only time we're going to run a test is if it's going to change our management, and it's going to influence and make us change the direction of where we're going. And I've really thought of that as like, yes, that's the data we need to collect. There's data for data's sake, then there's data for actually making decisions on your farm and being useful.

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MS: So, I hear this all the time, Brett, and I actually don't know how to delineate which one. We farm too, we've got the same, and so when you give me that advice, I'm like, how do I actually take action on that? Because I'm unsure which data is data just for data's sake.

BM: I think there's a little bit of data for data's sake you have to just start collecting to have a baseline. Like we were talking there about baseline testing on our operations. That's something that I'm doing. Some of the data I collect, will it be useful in the future? It might, it might not. You also can look back five years ago, oh man, I wish I would have sampled this, or took a picture of this, or whatever. So, you have to do some just to have that baseline of data and then go forward from there. And then I think it's a walk a mile, see a mile thing. Find out what is actually influencing your decision-making and then what is just time spent collecting data?

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MS: I think that's really good advice from Brett. It can be hard to determine what data you actually need until you start collecting the data. So, sometimes you just have to start tracking things and see where it takes you. Then you can always look back at your baseline and see if you're missing more data, or if you have the data you need. But it's the initial collection that's going to help you determine what your future data needs to be.

My last question for you is, come back to you've been identified as the Top 50 in the Upstart category. If you looked at our industry in 10 years or 20 years, what does it look like to you?

BM: Ten, twenty years. I'm maybe a little biased, but I'm a big believer in regenerative agriculture. I think that is going to be a big, big influence in the future, especially in the next 10 years. I think it's going to have a big influence on our industry and especially our relation with other industries and with the world at large. And we're feeding people in our communities and in our province, country, whatever, and I think the people that buy our products are going to demand that we're taking care of the ecosystem. Because we, as ag producers, I think the mindset is shifting from I'm a canola grower, or I'm a beef grower, or wheat grower, whatever, to we are stewards of the land. And you hear that tagline all the time, but we're going to see a lot more demand for us to be really holistically integrated with the world around us. So, it's not just that we're producing a wheat crop, or a calf crop, it's that we're integrating what we do with the land resources around us, the water resources around us. How does the decisions that we do on farm affect things downstream with our products and the actual stuff that we're selling and producing on our farm? What are the effects of that in the world?

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MS: Do you think agriculture is ready for that conversation?

BM: No. Maybe. Parts of it are, other parts are definitely not. It's tricky because there's a lot of people that are very, very innovative. It's a spectrum. It's the bell curve. There's the bleeding edge of the sword innovation, which I'm probably more towards on the blade, I think. And then there's the mass producer, and then the late adopter, same as everywhere. And I think it's going in that direction. We're starting to see that. We're going to see a lot of resistance from the big players. Whenever there's a shift in any industry, there's a lot of people that have made a lot of money doing something, and they're very comfortable in what they're doing, and you can't blame them for that. If you have a playbook, and this player works every time, you keep doing it until it doesn't. And when it doesn't, you're going to be a little bit annoyed that it doesn't work anymore. So, there is going to be changing times, but I'm excited for it, for sure. I think there's a lot of cool things that are happening in agriculture. And the technology, with the information that we have now, and the speed that we can share information and all of that, is just at record pace. Blindingly fast how quick we can adopt things, and learn things, and do new things on our farm. I'm very excited for the things that we can implement on our farm and on farms across Canada that will really, really change the shape of Canadian agriculture.

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MS: Thanks for joining us today, Brad. I really enjoyed our chat, and congrats on being one of the Top 50 in Canadian Agriculture.

BM: Thank you.

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MS: Well, that concludes our Agribition interviews. It's been a real treat for me to be in the same room as some of the most influential people in Canadian agriculture. Refreshingly, I think they all share a similar thing about innovation and their views on the future of agriculture. There's lots to take away from these conversations, so I've got a few thoughts for you. 1) Data collection and digitizing your records is the future of farming. Our guests all clearly agreed that using data to make decisions and drive behaviours is super important, and it's a gateway to profitability. We're seeing way more pressures to demonstrate and highlight the sustainability of our industry, and using data is a great anchor to do that. Ultimately, the technologies we adopt should seek to improve our productivity, profitability, and sustainability, and it's all anchored in data collection. 2) While digitizing data collection is definitely the future, let's be honest, robots are still not going to take over the world. I think there's a lot of hesitation when we think about tech adoption and some worry about jobs becoming obsolete. But let's face it, most of the technology we're looking at is actually not getting rid of jobs but making the jobs we do a little bit better and maybe even more enjoyable. So, as all our guests point out, we need to embrace the technology and note that the tools are just that, they're tools, they're not the end game. The idea that tech can enhance our operations and improve our daily work lives, I think that's what we should aspire to and be the anchor of our tech adoption. My final point is, while changes may seem daunting, thankfully there's lots of mentors and experts in the industry, people like Alanna and Joy, to help guide us through the process. So, if I could take anything away from today and celebrate these three people that are the most influential people in Canadian agriculture, is the future of farming is about collaboration just as much as it's about technology. So, let's face our challenges together and use mentors to help us advance our businesses. This is the one way to ensure that we have the best chance of success and future prosperity.

Well, that's it for today. I had a great time at Agribition this year. If you were unable to make it out, I hope this little podcast gives you a small taste of what that show has to offer. Check it out in the future. They happen every year in November in Regina, Saskatchewan. Thanks for listening, and until next time, dream, grow, and thrive. This podcast has been brought to you by AgExpert, farm management software designed for Canadian agriculture. Learn more at AgExpert.ca. The FCC Knowledge Podcast is a Farm Credit Canada production.

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