

Episode 15 CATA / Suzanne Grant / transcript

Thierry Harris: Hey folks, Thierry Harris here. Today on Market Hunt we are flying at 10,000 feet over Canada. We're looking down below.

[Plane flying by]

Wheww! That one was a close one.

Well, looking down I see there's a lot of people, there's also a lot of companies, universities, accelerators, Venture capital firms, banks, lawyers, accountants, scientists, consultants, government officials, engineers. Wait! What's that? It's very hard to define, but it looks like a Canadian technology Ecosystem. Did you know Canadian technology actually has a bit of a brand? We are known for our world class scientists! But how are we at commercializing this technology? Let's go find someone who can talk to us a bit more about it!

[intro song music]

Nick Quain: Entrepreneurship is hard, you need to have support there.

Andrew Casey: We fundamentally have to learn how to live our lives differently. We can't keep going the way we have.

Thierry: We risk falling behind in terms of the quality of our economy and the quality of the outputs that we're putting out into the world.

Marie-Eve Ducharme: Actually we were wrong, [chuckles] that's an incredible market.

Rune Kongshaug: I fall in love, easily.

Thierry: We're coming up with some pretty interesting ideas here.

Andrew Casey: We've solved everything,

Thierry: [chuckles] We've solved it all.

[end intro song music]

[beginning of promo]

Narrator: And now a message from our sponsor, *IE-KnowledgeHub*. IE-KnowledgeHub is a website *dedicated* to promoting learning and exchanges on international entrepreneurship. Watch Video Case Studies, listen to podcasts and much more!

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le-KnowledgeHub focuses on *innovation ecosystems* and firms who *commercialize* their technologies in international markets.

Let's listen in to a Video Case Study featuring [Bitaccess](#).

Moe Adham: We think of the entire ATM industry and the entire cash industry to be our competitor. And we are trying to see how much of that industry we can revolutionize and disrupt.

Narrator: That's Moe Adham. CEO of Bitaccess. BitAccess provides kiosks that allow people to buy and sell bitcoins. You can put in your bitcoin and cash out.

Moe Adham: Our initial objectives was quite simple. We want to build the best bitcoin atm company in the world. And make bitcoin accessible and safe for every person on the planet.

Narrator: Bitaccess received funding from [Y Combinator](#), an accelerator based out of Mountain View California that provided them seed money and expertise to get their company off the ground.

Moe Adham: The Y Combinator staff was very interested to find out what you didn't want to tell them. If you had a demo and you wanted to show it to Y Combinator, they don't want to see it. If you tell Y Combinator that you have a lot of revenue they don't want to hear about it. They want to hear about what might go wrong, and they want to make sure that you guys know what you are getting yourselves into.

Narrator: How did being in Silicon Valley shape the BitAccess team? Find out more at the end of the show. To checkout the [Bitaccess Video Case Study](#), visit [ie hyphen knowledgehub.ca](http://ie-hyphen.knowledgehub.ca)

[End of promo]

Thierry: How do we accelerate and export the adoption of Canadian emerging technologies and intellectual property? Believe it or not there are actual organizations out there thinking about these issues! Today on Market Hunt, we are joined by [Canadian Advanced Technology Alliance](#) CEO [Suzanne Grant](#). CATA was started over 50 years ago and for 32 years was headed up by [John Reid](#) before he suddenly passed in June of 2019. John's vision was to make Canada the World's premier innovation hub and increase its competitiveness on the world stage. The new CEO Suzanne Grant, has generated an updated vision for CATA, preaching cross sector collaboration and soliciting government support for commercializing technology developed in the country. She's had her work cut out for her with the pandemic.

Suzanne Grant :

During COVID the companies were at risk of losing their talent and intellectual property.

We still have a lot of work to do, we still as a country, under capitalize our businesses. We have so much capacity for talent in this country. We have ambitious players. There's 13,000 technology companies that have been established for over eight years and contribute \$188 billion to the Canadian economy.

Thierry Harris: That's one third of Canada's export budget.

The 13 thousand companies employ 760,000 people with annual payroll of close to \$35B. When you include downstream jobs, these established innovators are responsible for 4 million jobs.

In March 2020 CATA members became alarmed that SR&ED or SRED tax refundable credits were being frozen. The frozen 200 million in SR&ED claims added more uncertainty to the economic chaos. Canada had one of the highest job losses rates among rich western countries during this period.

Tech companies, which were leading hiring rates before the pandemic, could determine the speed of Canada's recovery.

CATA successfully lobbied the Federal government to unfreeze the \$200 million in SR&ED credits. They also asked for something called a [Resilience and Rebound](#) fund to provide interest free, partially forgivable loans to innovative companies who have previously worked on SR&ED credits.

Suzanne Grant: This is kind of really a scary idea when you look at the impact of COVID. We're definitely losing talent and intellectual property, but also there's new

investments into intellectual properties and quantum and different things. Whatever we can do to encourage new starts, we've got to be doing that because that's the beginning of the funnel, right? Then, our mid-tier that their support for them to grow and to pivot. Very often, companies don't grow because they're lacking liquidity, investment. Technology companies struggle.

Thierry Harris: This isn't a good sign for Canada who is relying on these technology companies for a speedy and sustainable recovery. To produce an economy that is sustainable and to have a recovery and build back better, Canadian technology companies need to invest in fundamental research and development in order to create these innovative products, to help solve urgent needs in health sciences, climate change, data management, IT security, Electronics and also in social mission to build smarter cities or create affordable housing. The bottom line is, companies need to make investments in order to be competitive.

Suzanne Grant: The investments are sometimes very heavy. They're very expensive sometimes and at the end of the day, when you're doing new things, you can't predict exactly what's going to work, so that's also a challenge. We need to be investing in all sorts of parts of that innovation continuum from seeding new starts.

Thierry Harris: The new starts are in addition to transforming Canadian businesses who need to digitize their models in order to be competitive in an innovation economy.

Suzanne Grant : Our financial models are still brick and mortar. That's another obstacle to our technology companies growing faster. We absolutely do need to focus on growth companies as well, but it's not one despite the other. It's quite a formula with a lot of unknowns. I don't have the crystal ball but I think we can get a better look at that if we can do a better job of capturing the data and [Statcan](#) is just wonderful and a new finance minister who understands the importance of technology and business and that data, hopefully, that will give us a better lens.

Thierry Harris: Grant believes that there needs to be an education piece to provide our leaders with the right tools to make decisions that will favour the growth, development and commercialization of technologies produced by Canadian companies. Regarding tax credits going to Canadian companies, we need to evaluate the outputs of these investments, in terms of exporting and building value.

Suzanne Grant : CATA really fits in quite a horizontal space. We serve the companies that are established. They already have product-market fit, but they still have a research component to them. They're science and technology centric. They're still feeding through [National Research Council](#) through the universities or doing their own in-house research and development.

So we have BureauX.O to really have a look at what it's going to take to help leaders be prepared for the future. As well as education to help leaders of Canada at the Federal, provincial and municipal levels to change our outlook and decision making given more and more unknowns.

Our goal is to shrink the gap, so overall for Canada to be more competitive. Our mandate, what we're really trying to do is close the gap between the government level investment put into technologies, intellectual property and innovation, and the outputs.

Thierry Harris: This struggle will have a real impact on things far beyond the economy, and Canada's competitiveness on a global market. Grant elaborates.

Suzanne Grant: Technology is driving everything. It's driving our defence, it's driving our economy, it's part of our lives. How do we integrate that? Nobody can actually predict which technology is going to really take off and be the predominant competitive technology. That makes it really challenging. Diversification of technology remains really important.

Thierry Harris: In order to successfully commercialize and hence innovate these technologies, Canada first needs to understand the innovation continuum from the university lab, to a commercial product in the market.

Suzanne Grant: Look at innovation as a continuum. It starts with an idea that might be in the lab, that might be an incremental idea of how to improve a process. That research or intellectual property or good idea, in order for that to actually become innovation, it has to get to the point where it serves other innovative thinkers and somebody catches on to it and takes it to another level or it actually reaches those that can benefit from it most.

Thierry Harris: If technology companies need to be compassionate towards the end user, they still have to act more like sharks to disrupt markets to adopt their technology.

Suzanne Grant: You have your ideation incubation phase, then the companies look for product market fit. Okay, this is a good idea but does anybody care and will they buy it? That will either mean investment from bootstrapping or by selling the idea or through getting external investment. Then we then to market adoption, can we get into multiple marketplaces and will this fly? When people can actually use those ideas, new technologies, new products, new services to their potential, now we're talking about innovation.

Thierry Harris: It's one thing to talk about innovation, but it's a whole other thing to measure it. And in Canada, we can be doing a better job at measuring how our innovation outputs are being created and how these outputs are having an impact on the greater economy. Grant elaborates.

Suzanne Grant: One of the challenges is we don't measure that very often, right? When you look at economic reports, very rarely do you see a sector called technology because technology is like the energy that runs through your veins.

I think we underestimate just the capacity that we have collectively as a nation to go beyond talking about an innovation strategy and really look at what that can do economically for our country. Our innovators they need to actually go out and grab the commercial market before somebody else that's bigger comes in does the same thing.

What that means is a better return of investment for Canadians, stronger economy and a better quality of life. We've got a really privileged quality of life in Canada and to maintain that, we need to be on the cutting edge and in the technology race. This is the economy of the future and we cannot rest on our laurels.

Thierry Harris: Government can and should play a role here. The outcome might determine the prosperity of the nation.

Suzanne Grant: We need to be a little bit more organized. There needs to be some structures and frameworks that allow us to come together.

Business actually grows very quickly and quietly. So very often, I don't even think the government has a complete picture of what that looks like.

Thierry Harris: The innovation ecosystem seems to be a cloudy one. Grant tries to break it down for us.

Suzanne Grant : It starts at University Centers, you've got funding in grants through [Mitacs](#) for university students to work with industry. This is a really great program because industry gets the cutting edge of technology and our master's students get real-life experience.

And then we have a number of universities and research institutes, you have what's called incubators.

Then we have I believe, oh, my goodness, I think there's the worst last time I counted [150 accelerators](#) across the country that's probably grown. They're pretty much government grant dependent to operate and then topped up by sponsorship.

Then you have, you have vertical expert organizations like the [Canadian Microsystems](#), they look at all things, hardware types of technologies.

If you want to actually map the ecosystem over that innovation continuum, what I would talk about is these city-based or town based accelerators and the rather regional, then we have a number of what are called [superclusters](#).

They're industry-specific clusters, where they bring together industry and small technology partners, that's a relatively new program that hasn't quite matured yet. That crosses the country.

Then we have another organization called [TECHNATION](#), and what they primarily do is work with larger multinationals and together with the government. We're supporting them on an initiative right now for procurement as well to try to ease the way, update modernize the way procurement is done in the government.

Then we have the [Council of Canadian innovators](#). What they do is they have 130 or 150 members who are those rocket ships. Those high potential companies to reach that big company status, like the Shopifys of the world. That type of company.

Thierry Harris : I think it's really important that we just lay that map out and that we can actually appreciate it because if we don't know what we have and we can't measure it, then what are we all doing here? You know what I mean? It's really important that we have that big picture focus and try to understand how we can enhance the ecosystem in order to optimize it. It takes multinationals, it takes government, it takes university programs, it takes programs such as the Mitac or the SR&ED program in Canada, that's fantastic in terms of enabling R&D to be a part of the DNA of these companies.

I think that if Canadians can retain that spirit of invention and marry that with a spirit of commercializing these inventions, we're going to be on the right track because as we've seen with the Council, which Jim Balsillie is a big proponent of that recently sent [a letter to Prime Minister Trudeau](#), saying, hey, let's shake the tree a little bit over here and let's make sure that we're not missing the boat because the rest of the world is moving rapidly. We risk falling behind in terms of the quality of our economy and the quality of the outputs that we're putting out into the world to other countries. Because frankly, human capital is something that can move around from different regulatory districts.

It's not about trees and digging things out of the ground, it's about smart minds who are coming together with business people who are then creating companies that are servicing not only Canadians but global markets. And we need an economy that's up to snuff to be competitive in this new era.

To help Canada remain competitive, CATA is focusing on the following:

Suzanne Grant: All things smart, all things connected. It moves from sensors to the cloud, includes 5G, includes security, big data, deep learning, artificial intelligence. How we connect everything in our world, we use data, and we get smarter about how we can approach everything from maintenance to predict challenges in different business sectors and in our social constructs as well. Then we have another focus on health and one on clean energy. I think it's really important going back to that solve for human, that everything we do is for people or society to make it better. There are technologies that disrupt and sometimes they give technology a bad name.

I like the word that you use, was it enhance?

Thierry Harris: Yes.

Suzanne Grant: How can technology enhance our quality of life? We've got a lot of world problems to work on. We've got local problems. I think COVID has taught us that we need to approach everything with brains, brawn and heart. We need to be courageous and bold. We need to be very introspective and smart and use the intellect and the ideas that people have and we need to approach this as well with compassion. Otherwise, what are we doing?

Thierry Harris: The point is that we're trying to do some good for everybody. I really think, Suzanne, that you've talked to a few of the movers and shakers recently who are doing some innovative social innovations as well within the indigenous community and some of the really fundamental infrastructure pieces that we need to sort of network our economy, and make sure that we are not having any gaps between the have and the have nots.

I think that that's refreshing and that we should have more of those conversations. You're mentioning in today's world, how can community leaders and educators prepare for a world where the technology haven't even been invented yet. How can we teach for that chaotic disruption that's coming? How can we prepare people for that? What have you seen in your experience that might help ecosystems or hubs, as they call them, or clusters be ready for that mission which is to prepare the next generation of human capital to be ready for jobs that haven't been invented yet with technologies that haven't been also commercialized yet?

Suzanne Grant: Although we can't tell the future and what's going to be adopted, if you actually attend a startup festival or go into the labs of universities, what's interesting is most technologies take quite some time to actually get to what's called technology readiness levels. If you're in touch with and you know what's happening in the labs of your research centers and universities, you know what's coming.

The challenges are so much of it and how to simplify it and to predict what's going to have impact. I think as we go forward, and as we go forward we need to change the way we think where we're more agile and flexible to solve- You know that old expression in your math class, solve for X.

As technology moves, our whole social fabric is going to move as well. There's a lot of similarities between how an artist looks at design thinking and how an engineer approaches Agile.

I think we just need a lot of imagination. We can't go deep into our silos. That's why solving for human is always been a mantra of mine. We have to remind people who's going to live with this technology, how's it going to impact our lives? We need a more panoramic high-level vision with some real experts that can help inform us simply about the black boxes that we need to think about.

We don't need to think about how things work but we have to think about what the impact of those new discoveries and inventions and innovations will be. There's a lot of innovating for us to do for our societies. Canada's got a pretty good political structure. It's not perfect, there is no perfect structure but there's work to be done. There's so much work to be done. It goes way beyond technology. Where technology can help us do it, great. How can we get the greatest thinkers across our nation connected to the global greatest thinkers to really pull together and help knit up brighter future for Canada? We've got those people.

You'd be surprised at how many of those tech leaders are really philosophers of our times. They are thinking about how technologies are going to change how we live together. And we've got so much work to do. I think there's 120 million people thrown into poverty in COVID. We got to be sharing and we still need to be bold. It's a beautiful experiment.

Thierry Harris: So that's it for our show today folks. Suzanne and I talked a lot about how Canada is looking at ourselves in the mirror and what we are seeing looking back at us. Perhaps the key here is to understand how we perceive ourselves and once we diagnose that, we can start to apply the proper treatments needed to favour sustainable, profitable technologies, which are by definition, innovative.

Narrator: And now a final word from our sponsor, the IE-KnowledgeHub. IE-Knowledge Hub is a website dedicated to promoting learning and exchanges on international entrepreneurship.

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Let's pickup where we left off for Bitaccess, a Bitcoin ATM company. They've just received some seed funding from Y Combinator.

Justin Kan: When I talked to them in the interview, I was really impressed with you know their vision for it and how they articulated what the consumer demand was, and what they had, the progress that they had made so far. that they actually had iterated their hardware multiple times in just a few months of starting it. And that was really impressive to me. We like to fund people that are relentless. We like to fund hackers. And I thought, these guys are smart guys who are you know going to stick with this, so we should definitely fund them.

Narrator: That's [Justin Kan](#), creator of [Twitch TV](#) and former partner at Y Combinator. Justin saw the potential in the Bitaccess team and decided to give them a shot. The company temporarily moved to California for 3 months while developing their hardware and software applications.

Moe Adham: Being accepted into Y combinator has done a lot of help us. I mean you have 85 other startups all trying to become the next big thing. And that's really magical because you are meeting some of the smartest people in the world all in one room. And it's very very rare that you get that kind of opportunity.

Narrator: Although they got funding from Y combinator, Bitaccess had many challenges ahead. The founding team stayed realistic about what they were getting into.

Moe Adham: We are about thirty miles from where google, facebook and twitter all started. And when you are so close to them you kind of see that there is a million carcasses of startups that didn't get that big. And it really grounds you, it lets you know that you are not special. that this is virtually impossible and you are more than likely going to fail.

Narrator: You've been listening to segments of the BitAccess case study, available on ie-Knowledgehub. To learn more about BitAccess's journey, watch their full case for free at ie hyphen knowledge hub dot ca.

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