How the best innovation insights come from a sample size of one person

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Speakers:

Nick Skillicorn – Innovation and Creativity Expert and Host of Innovation & Creativity Summit

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Expert Interview transcript:

Nick Skillicorn: Hello, everyone and welcome to another expert interview at the Innovation & Creativity Summit 2017. I'm very happy to have Taddy Hall on the line today. Taddy is an innovation expert, the principle and leader of strategic innovation at the Cambridge Group and also one of the co-author of multiple books of Clayton Christensen, the most recent being Competing Against Luck.

Taddy, it's wonderful having you here.

Taddy Hall: Thanks for having me, Nick. It's an honor to be part of your program.

Nick Skillicorn: No problem. So, for people who don't know about you or the work that you do, could you just give us a brief background as to how you got interested in working in innovation?

Taddy Hall: Probably like most people, it's not a plan. You stumble into it. Right out of college, out of university, I worked in venture capital and private equity for a number of years. Then I return to business school. It just so happened that I was in a very first section of Harvard that Clay Christensen taught, and that was — I'd like to say it was five years ago, but it was more like 25 years ago. So, that formed a bond that has persisted and it has been one of the great gifts of my life, to work with him.

But on my own after business school, I went down to South America for five years. I worked as an entrepreneur down there. I was CEO of a company. We invested and ran a number of other operating companies. After three years in Chile, I spent several years in Argentina doing private equity and venture capital investing.

I came back to the US and ran several businesses that were venture-backed before joining Nielsen and the Cambridge Group which is owned by Nielsen.

So, my background is really that of an operator and in building growth businesses. And then on the side, I have this relationship with Clay that really has allowed us to take some of the





rock material and scrapes and cuts that we collected in the real world and trying them – look at them through other lenses and make sense of them.

And so, the academic work and work with Clay has really produced a nice complement to my more entrepreneurial fieldwork.

Nick Skillicorn: And today, we're going to be talking about what sort of things make successful innovations in companies. And also, what prevents innovation from happening in companies.

Yeah. We have a quick chat before we started recording. And one very interesting thing you want to highlight is around how companies sort of view what causes innovation. What do you mean by that?

Taddy Hall: Yeah, that's interesting. So, my work today and for the last five or six years has all been around trying to help senior executives ignite growth in their companies, succeed at innovation, create new successful growth businesses. And in that work, I find myself immerse in groups of senior leaders. And one of the questions I often ask them is, "OK, if you guys are responsible for innovation, responsible for growth and experts at it, OK, so what causes successful innovation?"

And it's a question I sort of carry around in my backpack for many years. And what's interesting is not the diversity of answers that you get but how few people have actually thought about that question at all. Very few people actually wrestle with what causes success. And I think the explanation for that is that it's some conscious or unconscious level that you believe in innovation success is subject to laws of chance and risk and a bit of magic, well then, you're not going to waste on a fruitless iteration of scarce brain capacity on this imponderable question.

And because of that, because we believe at some level that innovation is sort of random or unpredictable, we build processes that are based on correlation. We harvest vast troves of data and we stuff it into spreadsheets and run regressions and other analytics looking for patterns in a data. But when we look for patterns, we're essentially looking for correlations. And correlations are an alternative when causality isn't available to us.

And so, we built processes that are based on correlation on the assumption that a causal understanding of innovation is impossible. And what we found through our work is that's not true. There actually is a causal mechanism that explains why people purchase and use a particular product or brand in a given circumstance, and that's really the reason behind the book and at the core of Jobs theory. That there actually is a causal explanation which we can harness and build our innovation processes based on what actually causes success and failure.

Nick Skillicorn: I'd love to understand a bit more what you mean behind that because I think a lot of people if you ask them what causes an innovation to be successful, their answer would



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be, "Well, it's better. It's better than the last version you put out. It's better that what the competition has." And they've got this very point of view that because we believe something is higher quality or better or cheaper it means that it's going to be successful. What's your view on that?

Taddy Hall: Yeah. Differentiation is not a criteria for innovation's success. It's a bit of a red herring. What causes a person to purchase a particular product or service and this applies whether it's in a business to business setting or a consumer setting, what causes someone to pull a product in their lives is the desire for progress. They're trying to make progress. They're trying to create desired experience. They're trying to resolve some trade-offs, some struggling circumstance.

It's that particular desire for progress that causes people to take action. And so the point there is that what causes a person to pull a product or service in their life is a job to be done. They have a job to be done in their lives. They're trying to make progress in their lives. And that's what causes them to pull up something into their life.

The fact that a product may have particular bells and whistles or features and functionality is not in and of itself relevant at all. What matters is in that moment, in that particular circumstance, when I'm in a meeting and it's 4:00 o'clock in the afternoon and I'm kind of falling asleep and I need a little hit me up to get me through the rest of the day, I might have a soda or a coffee or a candy bar or an energy bar.

I might get up and take a walk around the office and try and wake up. I might go bug a colleague. I might open my computer and pretend that I'm taking notes but I'm actually taking a little bit of an internet break and take a checking in on Facebook or something else. I might lie on to the floor and take a nap if I'm really bold or skip out of the office and go to the gym.

But the point is that all of those things, they're all competitors for ways in that circumstance that I might find the energy to get me through the day. And too often, back to your point, competitors frame themselves in, "Well, I'm in the carbonated softdrink business so I need to produce a better carbonated softdrink than the next guy. Or I'm in the coffee business so I've got to make better coffee."

And the point is, is that's not the relevant unit of analysis. The relevant, the essential unit of analysis or innovation work isn't the product or product attributes, it's not the consumer. It's not me. It's not Taddy Hall, 5'10", living in a suburbs of New York City, father of two daughters, married, owner of his house, graduate of college. It's not those characteristics of me or the product that explains why I purchase and use a given product.

It's that in that moment I have the need for progress. I need to look alert in this meeting and so I look around the world and, "Gosh! What might help me do this?" And I tick off the options like going to the gym would be great but it's not that convenient in this moment.





Taking a nap sounds awesome but geez, I think I might get fired if I crawl under the table and take a nap. I think what I'm actually going to do is I'm going to flip open my computer and kind of take 5-minute break and zip around and check in to things, maybe send a note or a message or two. And that will wake me up.

And so the point is, is that it's the circumstance as the essential unit of innovation. And too few innovators actually realize that. And as a consequence, they build their innovation processes built on the troves of data and the tireless hunt for correlations will somehow substitute a causal understanding of why people do what they do on a specific circumstance.

Nick Skillicorn: I mean it sounds a bit if I may be so bold to say, it sounds a bit windily because there's this history of people when you're developing a new product, you're meant to go out there and think of who is our customer avatar. And as you said, you for example, a 5'10", owns a house, educated, wife, children, that's one type of person.

Taddy Hall: Yeah.

Nick Skillicorn: So, is this essentially flipping this concept of avatars on its head? Because you're saying ...

Taddy Hall: Yeah, it is. It is. So avatar is sort of the 21st notion of what in 20th century people called personas. And the point is – and one thing I often caution my clients on, there's a big difference between a persona and a person. And an avatar or a persona too often in the hands of a marketer turns into an empty shell and we stuff it full of whatever meaning it conveniently available to us. And we end up with a giraffallu that actually doesn't exist in nature.

The sample size at which innovation insights are discovered is a sample size of one. Stories, stories provide the data behind the numbers. Numerical data does not exist in nature. God did not create data on day 1 through 7 or any of the subsequent days. All data is the product of highly selective and subjective filtering done by human beings based on what we decide matters.

And as a consequence, we develop theories that are not always accurate. Looks like most things that fly have feathers. Maybe having feathers is what causes flight. I'll strap a bunch of them on my arm and jump off a cathedral. That never ended well, right? Daniel Bernoulli comes along and says, "Hey guys, stop it. This is a bad idea." He helped us understand this principle called Lift whereby air passing over a foil creates a pressure differential and allows us to go forward from there and build amazing machines. It's just the same.

We need to immerse ourselves in those struggles in people's lives where we fine on doing unexpected things. Clay has a sign in his office at Harvard Business School that says, "Anomalies wanted." We need to go out into the world and look for anomalies. We need to look for people doing surprising things, struggling in their lives.



Innovation in cat litter focused on improving the owner control or on limiting the extent in which the cat litter track around the house. One of the researchers at Nestle Purina found that wow, a lot of people struggle when they go to store and get that very heavy box off the shelf and into their car and struggle to get it to their houses. And once they immerse themselves in that circumstance and say, "What if we introduce a lightweight litter to deal with this struggle, all these struggles associated with the weight of litter?"

And there was a tremendously successful product because they immersed themselves in that struggle in which someone was trying to make some progress to get this product home and it was tremendously difficult. But the industry never looked at it that way. They're always looking at through the lens of product attributes, performance, specs, how am I doing versus the other cat litters out there rather than the circumstance in which people were living their lives.

And I can give endless stories about tremendously successful new products that were all based on an understanding of a person in a place struggling to make progress in their lives.

Nick Skillicorn: And I think we'd love to hear more examples. I think the prospect that a lot of managers will give though is if someone comes to them with an innovation and evidence that's of a sample size of one, they'll say, "Well, this isn't reliable. Can you back this up with anything?"

Taddy Hall: Yeah.

Nick Skillicorn: So I know that you speak with managers who give you exactly this sort of pushback on a daily basis. How do you talk to them about that?

Taddy Hall: Absolutely. So that's a great question, Nick. And what we find is in the case of these breakthrough successes. It's really two things that convince senior management teams at Procter & Gamble or at Kimberly-Clark or at PepsiCo or at Nestle or Unilever to invest large sums of money to develop a new brand or develop a new technology or create a new business model. Those investments are not taken lightly by these managers.

As a consequence, usually two things are present. It's a story, a compelling story of a consumer and a circumstance struggling because that's where the meaning exists to say, "Yeah, that makes sense to me. I can see that person's struggling in the grocery store with the way litter." And there's a business case. And there's a business case.

So when the researchers at Kimberly-Clark went to the executive committee saying, "Yes, I know that we have the world-leading industry leading brand in adult undergarments called Depend, nonetheless, we think there's a huge population of non-consumption out there." And they were able to detail the story of tens of millions of people who suffer from bladder control issues but who have decided, "I am not wearing diapers and I am simply not going to





shop that category. I would rather stay home. I would rather not go to the theatre, not go on trips, not go to my grandchildren's sport games and performances rather than suffer the humiliation of some public accident or walk around in diapers that make me feel infantile." And so they simply weren't shopping the category.

And when the researchers realized at the corre-narrative level that there was an opportunity to give these people half their lives back, that was a phrase that Kimberly-Clark used, and there was a business case that if we could transform this category and then take on the stigma of this is adult diapers and just transform it into this is just another great pair of underwear and you want to try this underwear even if you don't need to that there was a tremendous business opportunity to be built.

And it's stories like those of bold innovative companies recognizing needs and struggles in consumers' lives and having the confidence based on those specific individual stories of people struggling to make progress as well as a business case that says, "Hey, there are lots of people out who are like this." And that gets to other issues about how we size these opportunities, et cetera.

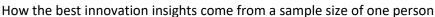
But it begins with a humility and an empathy and a willingness to go out into the world and look at the people – look at human behavior and rather than judge that behavior and say, "That's really weird. That's weird to take orange juice and Mountain Dew and put them together to make a breakfast drink." And rather than dismiss that as sort of weird behavior of kind of a freaky fringe of the millennial population, the researchers at PepsiCo said, "That's funny."

What's going on there? Why are these guys mixing – not doing orange juice together? And when they immersed themselves in understanding the transition that these people were trying to make from being asleep to being at work and that they really didn't like the bitter taste of coffee and this somehow is helping them make a suitable morning beverage, once they understood that, they were able to create a new product and a new brand.

Mountain Dew kickstart, that is neither our traditional softdrink nor an energy drink that is now a \$2 billion franchise that's high margin and incremental to their energy drink and carbonated softdrink business. That's based on a very granular insight of these people doing this unexpected behavior in the morning as well as a business case that says, "You know what? There's a lot of folks out there who are trying to make this transition from sleep to a high performance at school or work and actually don't like a lot of the available options."

So that's the essence of my message. And that's what insights look like. Innovation insights look like stories. Great innovators are overwhelmingly fantastic storytellers.

Nick Skillicorn: And is this what you mean by the Jobs theory, the Jobs To-Be-Done theory? What exactly is the definition of that?





Taddy Hall: Two things. A job to be done is the progress that a person seeks in a specific circumstance. That's what a job is. You can unpack the job. It's not just functional. Obviously, there are functional dimensions to the job but there are always powerful emotional dimensions. Think of my Kimberly-Clark Depend example. And social dimensions. By social I mean how will I be perceived by others? Very important in almost all of the innovations that we write about in research and talk about. And that's very important in the business case too.

It's amazing to me. I was working with a software company yesterday, at how quick software developers are to reduce their solutions and the needs of customers to some combination of engineering attributes and economic attributes.

The reality is, is that almost all of these circumstances in which people are hiring software to solve problems, they are powerful emotional issues as well. Like is this going to work? Is my boss going to think I'm an idiot for buying this? What if I don't understand how to use it? There are all kinds of emotional anxieties that push against making switching behavior.

But to your question, the core of Jobs theory is a deep understanding of an individual in a circumstance struggling to make progress. The circumstance is the essential unit of innovation work and it's the core of Jobs theory.

Nick Skillicorn: And is the innovation just the production of a product which solves that job to be done or as I understand it, is it more creating an innovation that the person sees will solve that job to be done? Because there's this notion of perception which is part of innovation as well.

Taddy Hall: Yeah. And if I understand your question correctly, I think one of the things that jobs does very powerfully is that it transforms the very limited traditional definition of sort of what business are we in and what's the category, because in almost all cases, one of our biggest competitors as innovators is non-consumption. Not only is it isn't the product on the shelf next to ours or a product in similar attributes and claims, it's just like, "You know what? None of this makes sense to me. And I don't understand how to use this technology. And I don't want to feel like an idiot every time I try and fumble my way through it. And so, I would rather just do nothing."

Nick Skillicorn: Even if you can afford it.

Taddy Hall: Yeah. Price is rarely the issue. Price is usually a proxy for something else. And you ask consumers, "Why did you buy this or that?" They'll often say, "Well, it costs more. It costs less." It's just because that's easily available information and they want to be able to answer our question. Often, they don't know. Why did you buy the Lexus car? I don't know. I mean you make up an answer because you don't really know why you bought the Lexus not the Jaguar or the Honda. Maybe it's because your neighbour bought something and you want to impress him or who knows what.



But most of the time, we don't actually – we don't know why we do what we do. But we can always describe our behavior and that's the key. If we can deeply immerse ourselves, interrogate the behavior of consumers, we can actually learn a lot about what they are trying to accomplish by their current behavior.

I did an interview a couple of weeks ago on a Facebook Live platform for Harvard Business Review and I was talking about my extreme consumption of ice cream. I'm a super consumer of ice cream, probably 5 to 10 times as much.

And I was making the case that having ice cream for breakfast is entirely normal. And I was being interrogated by one of my colleagues about this behavior. And in the dynamic of him interviewing me, interrogating me about eating ice cream, I came to a much deeper understanding about my own behavior and why I did it. And also frankly, how normal I've decided that having breakfast — having ice cream for breakfast actually is.

Nick Skillicorn: I think everyone wishes that they could get away with being like that. One thing I do want ...

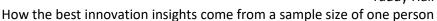
Taddy Hall: I can convince you of it.

Nick Skillicorn: One thing I'd like to ask you about though, going back to these high tech companies that you're working with because one of the bigger trends that I see is they want these consumer insights to find out what's happening. And one of the big answers which seems to be growing not just in Silicon Valley but in finance and everything is if we get enough data and we throw it at a smart enough machine, the machine will produce answers that we as humans can't even contemplate.

So, what's your view on this artificial intelligence neural network way of getting insights? What's your view on that?

Taddy Hall: I think it's terrific. But we have to remember that the algorithms are only as good as the code the human beings write behind it. And that as much as granular as we can get in the correlations and hypothesis that those numerical data help us construct, they aren't actually able to reveal the why of behavior. They can very constructively help us ask really good questions, why is that going on, why is this happening, why are people using this software we design for businesses, why are they using it at home, what's going on there?

But what the data can't reveal to us is meaning. They said as I say often to the client is the structure of meaning is narrative. The way that you and I communicate and share experiences, the way I talk to my daughters and share values that are important to our family, the structure and the way that our brains make connections internally is based on metaphor and story building.





And so, at its core, when we're seeking for the why of human behavior not just the rich description of human behavior but the why of behavior, we need that underlying narrative structure. Many of my clients who have vast troves of data from all different sources have become masters of description but quite fallible and limited in their powers of prediction. They really don't know why something causes something.

But they can tell you with great confidence that this person in that location and buy through that channel on this kind of a day is more likely to buy chocolate than vanilla. But they can't tell you why that is the case so that you don't know why. Someone asked me. It's very difficult and this is where it gets — that is important, how do I actually improve a product? What's the dimension of benefit that is relevant to that circumstance in which someone is trying to make progress? It's very unclear if you don't know the progress they're trying to make. What do I improve?

And so as a consequence, what happens? We resort to accepted performance metrics and parameters of the product itself. We say, "How do I make this thing faster? How do I make it zippier? How do I make it cooler? Fun? How do I make it chocolatier? How do I make it more convenient?"

So we just dive in on the pond, guys. Or we say, "Hey, wait a minute. There's a growing Latino population. Let's do something special for them." Or, "Hey, we've got an indoor version to an outdoor. We've got a beginner model. Let's do a professional model." But we do all of that focus on product, features and functionality, or customer characteristics.

But we do those exercises and costly activities at the expense of understanding the truly predictive unit of innovation analysis which is the circumstance in which a person weighs alternatives, makes trade-offs and tries to make progress in their personal and professional lives. To be successful innovators, we must immerse ourselves in that granular messy model of human life and try and understand how can we help people make progress.

Nick Skillicorn: Taddy, it has been absolutely fascinating speaking with you. I think a lot of people have really changed their perspective on how they think about innovation listening to this. We're coming up to the end of the interview. But one thing I wanted to ask you is, if you've got one top or one actionable insight that people can try out over a very short period of time like an afternoon or a week, what would you recommend they try out?

Taddy Hall: A colleague of mine, Eddie Yoon, wrote a wonderful book that came out in December called *Superconsumers*. And what he has been able to identify across all kinds of industries and categories is there's a tier of consumers that not only generate the most volume for you but they're also enthusiastic and engaged with your brand or product category. And those people we found are not freaks. By and large, they just have found kind of like the professional golfer that needs just the right club to make a shot. These people have found multiple jobs for your product or your brand to perform.



And so, the one tip or suggestion is go out and find three or four of you very best customer. In depth interrogation about the circumstance in which they purchase your product and the circumstances in which the actually use your product. And deeply understand what motivated them at the very beginning to purchase for the first time. What was the struggle that propelled them to say, "You know what? I got to get some help. I need a better way to solve this."

And they started looking around. And what were all the things that they considered before they latch on to you? And now that they purchased you and they found all these valuable ways, what are all those jobs? Because what we found is these super consumers if you will, they leave breadcrumbs that we can pick up as innovators and say, "Wow! This user found all these exciting ways to use our product. They don't just use hotdogs for grilling in the backyard. They use them for teenagers when they come home from school and need some quick meal before they're going off to their next activity. Moms aren't crazy about the nutritional profile of hotdogs so maybe if we improve that a little bit and then market it as allangus pure beef hotdog to moms as healthy food their teens, maybe we could unlock a big growth opportunity."

And so, specific example but by interviewing our super consumers and identifying the portfolio of jobs to be done for which they hire our product, we can use those insights about their behavior to innovate in ways that can dramatically increase our business amongst the large population of non-consumers that are out there.

Our most compelling innovation opportunities are rarely by waging a toe-to-toe trench warfare with our ostensible look-a-like competitors. Rather, our biggest growth of opportunities are by creating new markets, expanding markets by focusing on nonconsumption.

Nick Skillicorn: Absolutely great advice there. Taddy, we're going to get links down below the video to your website. Can you just let people know what they can find there?

Taddy Hall: Sure. They can find access to our other articles, books that we've written, other videos and talks that myself and my colleagues at the Cambridge Group have done, and certainly if anyone wants to reach out and contact me directly, I'm always interested in sharing people's experience and ideas.

Nick Skillicorn: Taddy, it has been wonderful having wonderful having you. I'm so glad you're part of the summit and I look forward to speaking again with you soon.

Taddy Hall: Thanks, Nick. And thanks everybody for tuning in. And thanks for allowing me to be part of such an exciting program.