Transcript

00:00:00 Veena McCoole

Hello and welcome to the Oxford Internet Institute podcast, part of the University of Oxford. In each episode, we look at issues and developments in the digital world that matter to us all. Today we're joined by Doctor Fabian Braesemann and Professor Paul X McCarthy.

00:00:16 Veena McCoole

Fabian is a departmental research lecturer in AI and work at the OII. His research focuses on the science of success.

00:00:25 Veena McCoole

He uses data science methods to quantify the determinants of success in different fields of work.

00:00:31 Veena McCoole

Paul is a CEO, computational Social science research leader and author. He founded the League of Scholars and is also adjunct professor at the University of NSW in Sydney, as well as an industry fellow at the UTS Data Science Institute and an honorary fellow at Western Sydney University. I'm Veena McCoole.

00:00:52 Veena McCoole

Communications manager at the OII. Welcome to the podcast, Fabian and Paul, thank you so much for joining us.

00:00:59 Paul X McCarthy

Thanks for.

00:00:59

Hello.

00:01:00 Veena McCoole

Well, it would be great to start with.

00:01:03 Veena McCoole

What prompted?

00:01:03 Veena McCoole

To research the impact of founder personalities on startup success through the science of Startups initiative.

00:01:13 Paul X McCarthy

With them.

00:01:14 Paul X McCarthy

Can related questions for about a decade looking at what drives the success of high growth firms in a previous railway work for CSIRO, Australia's science agency and we were looking at?

00:01:29 Paul X McCarthy

High growth firms known as gazelles, you know these these firms that call.

00:01:36 Paul X McCarthy

And we recognise that these are responsible for.

00:01:41 Paul X McCarthy

Most new net jobs, so there's a huge driver, startups and high growth firms are very important economically.

00:01:49 Paul X McCarthy

But at the same time, we recognise that there's a very high failure rate, so most new.

00:01:56 Paul X McCarthy

Startups and file. And so we're interested in trying to understand what makes them succeed. There's also some other background research. We did a number of years ago looking at personality and and how it relates to occupational success.

00:02:14 Paul X McCarthy

And it's provided sort of a background story to this, this, this current work we've been working on, I should say, we've been working on this on this project.

00:02:24 Paul X McCarthy

For about four years now. So.

00:02:26 Paul X McCarthy

Developing various aspects.

00:02:28 Paul X McCarthy

So that and so the previous literature in this area looks at a lot of external factors like industry, location and funding, but it's tended to overlook overlook.

00:02:41 Paul X McCarthy

Team centric factors like the personality of the Founders now Hunch was that that's a really important factor and it may be the most important factor. And so we wanted to put that to the test in a quantitative fashion.

00:02:53 Paul X McCarthy

So that's sort of where we got to where we were and I came across Fabian and some of his colleagues at Oxford that were doing a lot of work in the label market and we really.

00:03:05 Paul X McCarthy

Saw on on that sort of quantitative approach and the use of machine learning and data science to try and tackle some of these questions and explore them in a kind of an economics framework. And so that's sort of we hear it off pretty straight away. And then we started working in this area.

00:03:21 Veena McCoole

Brilliant. And Fabian, how do you define a successful startup in the context of your work?

00:03:28 Speaker 3

Thank you. Meaningful. The question you have following up on what Paul just said, success is a abstract metric and abstract measure to look at in general in various aspects of life. As everyone of us can tell be its success in sport, be it success.

00:03:44 Speaker 3

In romantic life, be it success in a business environment is all quite fuzzy. To measure this whole thing. So.

00:03:51 Speaker 3

Do.

00:03:51 Speaker 3

Define it then in the business context.

00:03:54 Speaker 3

There is various metrics you could look at when we think of a company, obviously we have to think of a bigger company that is maybe listed on the Stock Exchange. We

would think of maybe the stock market value or how does it perform. We could think of profits or revenue and all these kinds of financial metrics.

00:03:54

Yes.

00:04:12 Speaker 3

With start-ups, most of these data points are not available, so we have to go for something simpler, something straightforward and something that is uniquely measured.

00:04:20 Speaker 3

So what we've looked at is a combination of acquisition or IPO. So we define a company startup company as being successful. If it either had an IPO, if it acquired a company or was acquired, we are obviously very well aware this is not necessarily always.

00:04:39 Speaker 3

The best magic of success and then we are ignoring many, many other aspects of success as well. Obviously a company that can bootstrap itself without any venture capital funding and is profitable in the long run, this is.

00:04:52 Speaker 3

A successful.

00:04:52 Speaker 3

Company. However, the reason we went for that is mostly a data limitation on these platforms that we looked at to study startup success. There's a couple of these platforms out there, Pitchbook Crunch base and others. Oftentimes the company's registered and then it stays on that platform forever.

00:05:12 Speaker 3

And an event like IPO or acquisition will definitely be registered. That's well known. It's something that it makes news within the startup world. So we would certainly have that metric. So if it's out there.

00:05:23 Speaker 3

It would be recorded. However, other things are not necessarily recorded. Most importantly, failure is not necessarily on there.

00:05:29 Speaker 3

In the company went down because one of these company are registered. They are not necessarily going away from these platforms.

00:05:37 Speaker 3

And there's.

00:05:38 Speaker 3

Other metrics of success within the startup world. Oftentimes it is being looked at whether companies are able to.

00:05:45 Speaker 3

Form a successful business model that is a value proposition or some kind of pitch deck, and the very.

00:05:50 Speaker 3

Stage or towards?

00:05:54 Speaker 3

The longer run different venture capital funding rounds. However, this is more promise of future success than actual success, and This is why we went for that clear cut accepted metric.

00:06:08 Veena McCoole

OK, so acknowledging that exits acquisitions, IP OS are one marker of success that's easiest to kind of track rather than that being a sole determinant of success. Paul, going back to you, I'm interested in what you shared earlier about.

00:06:24 Veena McCoole

Your feeling that the personality traits of successful founding teams were often overlooked in research? How does personality impact startup success and what kind of traits should one look for in a future Co?

00:06:39 Veena McCoole

I'm curious if there's a specific kind of personality that maybe we see examples of in popular culture that might also be ideal.

00:06:46 Paul X McCarthy

Yeah. So we looked at the personality features of 21,000 startups worldwide. Now we use crunch base as a source, which is the largest and most definitive source of startup data.

00:07:02 Paul X McCarthy

In the world.

00:07:04 Paul X McCarthy

And what we did is we took the.

00:07:07 Paul X McCarthy

Twitter strings of the Twitter or.

00:07:12 Paul X McCarthy

Of the the founders of those companies where they were posting publicly and we use computational linguistics to infer the personality traits of those that were active on on, on Twitter.

00:07:25 Paul X McCarthy

This is not new science. It's quite a an established methodology and with a large number of tweets, if you're a CEO or a Co founder of a company and you're posting a lot publicly, you can get a pretty good kind of 30 dimensional profile in in using the Big 5 Personality framework, which is the.

00:07:45 Paul X McCarthy

And robust personality framework and then positive psychology says.

00:07:51 Paul X McCarthy

And so when we did this, we looked at all of these companies. We found first, the first finding was that Co founders of startups are very different to successful employees.

00:08:07 Paul X McCarthy

Leveraging data from a previous study where we looked at employees across thousands of different occupations.

00:08:13 Paul X McCarthy

We took 120 of those occupations in a whole variety of industries, and we compared successful people in those roles to entrepreneurs, and we found that personalise were remarkably different.

00:08:27 Paul X McCarthy

So much so that we could train a predictor to distinguish or assort the successful employees from the successful entrepreneurs with over 80% accuracy.

00:08:38 Paul X McCarthy

And the personality feature data alone.

00:08:42 Paul X McCarthy

But then when we drilled down a bit further, we found that there wasn't one.

00:08:47 Paul X McCarthy

Profile if you like, or one set of personality features that disting that characterised successful startup founders. Instead, there were six there were six different types.

00:08:59 Paul X McCarthy

But there were some features that were common to all and that were that were the key to 1010 features.

00:09:09 Paul X McCarthy

Were statistically significant and they included adventurousness. So that's a feature of openness.

00:09:17 Paul X McCarthy

Low modesty, in other words, a form of confidence and high activity levels for energy. Now I'm not exuberance.

00:09:27 Paul X McCarthy

When asked, I do understand that there's, you know, when I presented these findings to a colleague, they sort of said half jokingly. So you found the kind of personality formula of successful startup founders.

00:09:42 Paul X McCarthy

Isn't that the? Isn't that the sort of formula for narcissism or for you medium mania, that sort of thing?

00:09:48 Paul X McCarthy

And I think what we realised is that there are some of those features, for example, low modesty, are this high degree of self-confidence.

00:09:59 Paul X McCarthy

But it's in tandem with a high degree of trust. For example, at the same time they they have a high degree of trust, which means they trust others, which is not a common feature of narcissists. So it's it's someone who has confidence that is also working very collaboratively and is able to delegate or authority, which is so important.

00:10:18 Paul X McCarthy

In a setup.

00:10:21 Paul X McCarthy

So further going further than that, we found that there are also different combinations within teams of personalities too. So we found that there were complementary complementarities between the six different types, so.

00:10:36 Paul X McCarthy

Many successful startup teams include what we call developers, which are created technical geniuses alongside charismatic leaders. They're often they'll see, you know, performer, CEO role.

00:10:49 Paul X McCarthy

And we're starting to realise now that these combinations of different personality types within the foundation team could also relate to different types of start-ups. So some start-ups are more technical, some have more a business model focus and some are trying to.

00:11:05 Paul X McCarthy

Innovate or disrupt an entire industry so they have different types of types of combinations.

00:11:13 Veena McCoole

Really interesting to hear how there are differences in ideal employees versus ideal founders.

00:11:21 Veena McCoole

Fabian, what specific analytics do you use to predict success in your research?

00:11:26 Speaker 3

Yeah. Thank you very much for the questions. So as Paul just pointed out, there's a whole multitude of factors that are all playing out together within the the.

00:11:36 Speaker 3

The different roles, the different personalities, the sector of the company is working in all of that is playing a role. What we try to do is we try to bring it together, we call it the ensemble theory of success. So we came up with one statistical model that tries to capture all these different data points, but.

00:11:54 Speaker 3

What was very important for us is that we only considered information that was available when the company was founded.

00:12:00 Speaker 3

Because we wanted to mimic the situation that we are, let's say, a very, very early stage investor, we invest on the day the companies found it. So there's no information whatsoever about how they are doing. And this was important for us because otherwise we would have implicitly.

00:12:18 Speaker 3

Taken into consideration, some of the data point that would have only come about as the company proceeds. Obviously it is quite clear that the fact whether venture capital Company might have invested.

00:12:29 Speaker 3

Or there was some Angel investment that all of this is a strong predictor of success. People believe in the company people invest in the company and then they might get access to different networks. So we ignore all of that. And if we were to take the analogy.

00:12:35 Speaker 3

In.

00:12:45 Speaker 3

Human life. We predicted life expectancy.

00:12:50 Speaker 3

On the day this baby was born, so we only looked at the company by the day of its foundation, and we tried to predict.

00:12:57 Speaker 3

Would happen.

00:12:59 Speaker 3

In the future, so will the company become successful or not? And obviously another factor in the startup world is that not all industries, not all countries, have necessarily the same startup ecosystem or are that much driven by venture capital oriented exit metrics. So there's some countries.

00:13:19 Speaker 3

The world.

00:13:19 Speaker 3

Where there is just more venture capital available, so this might be the more mature market if we think of the US Silicon Valley. Most importantly obviously. So in these kind of areas and these kind of markets, you can expect that there is already.

00:13:32 Speaker 3

More of a focus towards exits and the same goes for different industry. There's those industries where there's a lot of VC money needed, so those will also be the ones where we have more exit. We took into consideration is the country where the company was founded.

00:13:47 Speaker 3

The industry.

00:13:48 Speaker 3

In which it was active as well as the time when the company was funded to better understand the business cycle we're looking at because obviously company work was founded in the 90s, looked at a very different business environment than a company that was founded in.

00:14:02 Speaker 3

In the in the year 2015 or something like that. So all of these control sectors were in there. But then most importantly, we took into consideration the founder factors that Paul just mentioned. So we looked at the number of founders. Obviously, the idea being that the more founders you have.

00:14:17 Speaker 3

The better. Hopefully he could address the different skills that you need the different requirements that he would have in a start up, but on top of all of that, we also included the personality traits and what we found is that indeed.

00:14:32 Speaker 3

Even though we control.

00:14:33 Speaker 3

Everything else personality still plays a role.

00:14:37 Speaker 3

And in what way does it play a role?

00:14:40 Speaker 3

It is not that if you have more founders that are all the same personality that they will perform better, but rather if you have different personality teams. So if the three of us were to start a company, you mean I would be type, AI would be type B and Pro would be type C that would be ideal for our startup company and actually.

00:14:57 Speaker 3

What came?

00:14:58 Speaker 3

Of all of this is that our.

00:15:00 Speaker 3

It's not that bad in predicting start up success. Obviously it's not perfect because there's so many things that play into that. But compared to the baseline model, our prediction model outperformed bad by over 200%. To give you one example.

00:15:15 Speaker 3

If we were to draw.

00:15:17 Speaker 3

100 eventually, successful companies just randomly from all the startup companies in our data set. As Paul already said, we looked at more than 21,000 companies in total. So we were to pick 100 random.

00:15:31 Speaker 3

Successful companies without any metrics to it. The prediction model that is the industry standard would find 15 out of those 100, while our model would find 36 out of 100. So definitely a significant.

00:15:45 Speaker 3

Improvement. And if you think about it, what kind of simple model it is in terms of the data points, we looked at all being available by the day of Company Foundation. I think this is quite staggering and quite astonishing that personality still plays a role to such a big extent.

00:16:02 Veena McCoole

Yeah, that's fascinating. I'm now curious about the intangible factors. Fabian talked a lot about the things that we can measure and information that's out there after a company has been founded.

00:16:15 Veena McCoole

But Paul, how about intangible factors that are a little harder to quantify? I'm thinking about things like innovation and creativity.

00:16:24 Paul X McCarthy

Yeah, innovation and creativity are key, obviously, and we found I think that many of these things through our previous research and we looked at occupations, success and personality.

00:16:39 Paul X McCarthy

And we looked at 100,000 people and in in 3000 different occupations. And we found that it was, there's an incredible correlation between the personality features of people in the same job and their personality features.

00:16:56 Paul X McCarthy

And some I saw that when we first got the results, we thought it was a mistake. I I thought, OK, I thought there must have been a mistake. And we looked at, for example, the world's top tennis players and the world's top software developers.

00:17:10 Paul X McCarthy

About 200 of each. And we found that the tennis players were all very similar to one another.

00:17:18 Paul X McCarthy

In their personality features.

00:17:21 Paul X McCarthy

And but very unlike the software developers and the software developers for quite similar to one another. And one of the things that software developers share with scientists and indeed artists, is that they're very high on the dimension, the personality dimension of openness.

00:17:36 Paul X McCarthy

That means they're willing to explore and contemplate new ideas. They're open to new experiences.

00:17:42 Paul X McCarthy

And that's kind of like makes sense intuitively when you think about the, you know, innovation sort of side of creativity side because being in a startup is very much like being in an improvisational theatre trip. You know, it's very, very dynamic.

00:17:57 Paul X McCarthy

And in fact, this idea, this feature of adventurousness.

00:18:01 Paul X McCarthy

It sounds like there's a risk aspect which there is. I mean, it is about appetite for, for.

00:18:07 Paul X McCarthy

But when you when you drill into it, it's really a preference for novelty as well. So we have these.

00:18:16 Paul X McCarthy

Unite preferences. I sort of think about personality as being a bit like our operating system. It's a bit like a personal operating system and it's the lens through which we kind of see the world and the way in which we prefer to engage with the world.

00:18:31 Paul X McCarthy

Is no necessarily right or wrong. You know personality features. It's just a way of kind of.

00:18:36 Paul X McCarthy

I'm saying the world an adventurousness so. So some people are will will prefer to do the same thing.

00:18:44 Paul X McCarthy

Repeatedly and master and I have a preference for mastery and and repetition, and you and you see this with elite athletes. So if you want to be a one of the world's top tennis players, for example, you need to be prepared to do the same thing day in, day out and perfect that perfect.

00:19:01 Paul X McCarthy

Whereas in an entrepreneurship and this applies to a lot of the creative fields like art and.

00:19:09 Paul X McCarthy

And science as well.

00:19:12 Paul X McCarthy

We have a preference for doing not doing the same thing twice. I mean so much so that I've seen software developers who will spend a whole week trying to automate something rather than do it twice. You know, it could have taken 20 minutes that it would take a week to write to.

00:19:26 Paul X McCarthy

Road. So there's this real it's it's, you know, this tendency to look for new terrain and.

00:19:36 Paul X McCarthy

And so yeah, so that's some of the some of the sort of intangible things that we see. I think the adventurous thing adventurousness thing too. We've noted there's a correlation between real world adventure and a lot of startups, Ce OS and founders.

00:19:51 Paul X McCarthy

So Richard Branson, for example, very famously is, you know, Inter adventure sports and but there's a lot of other contemporary founders, the founders of Canva, they're very successful graphic design but.

00:20:06 Paul X McCarthy

From Australia.

00:20:08 Paul X McCarthy

A famous for their kite surfing, the safety culture founder Luke and he is on our advisory group is a keen rally driver.

00:20:19 Paul X McCarthy

And so on.

00:20:20 Veena McCoole

Wow, really interesting to hear about all those other intangibles and different qualities outside of the standard personality metrics.

00:20:30 Veena McCoole

Fabian, I wonder if you have any insights from your research about what makes startups unsuccessful or why companies fail.

00:20:39 Speaker 3

Thanks a lot, Vina. This is the natural mirror. I think the mirror side of what we have been talking so far about. So we've been talking a lot about success factor be it on the personal side or be it.

00:20:52 Speaker 3

Side and obviously we all know most start-ups fail. Most start-ups company are not successful. Again you would be surprised how difficult it is to find numbers to that statement even though everyone knows it and everyone is saying things like.

00:21:07 Speaker 3

70% sorry, 75% of all start-ups fail and 90% of all products fail. It is really hard to find numbers to that and I think this is also pointing us to the limitation we already talked about it very briefly. So why have we not explicitly explicitly model that?

00:21:23 Speaker 3

On the data front it.

00:21:24 Speaker 3

Really hard to get that data on failure.

00:21:28 Speaker 3

I think failure is also more difficult to conceptualise in we talked.

00:21:33 Speaker 3

Success metrics.

00:21:34 Speaker 3

You look at an exit of profitability or whatever that might be, but failure is more difficult to measure and one reason why it's so difficult to measure.

00:21:44 Speaker 3

Is because failure, so the opposite of success.

00:21:49 Speaker 3

Oftentimes is actually the pre requirement for later success, so I would also not want to study it in, like OK, here are the successful.

00:21:59 Speaker 3

As he on the successful companies and here all the failures because we don't know, maybe it's actually, but that failure will lead to later success. There's really interesting research on that which studied the dynamics between failure and success in different disciplines.

00:22:14 Speaker 3

That part we had to do with entrepreneurship. So 1 angle of that was on startup foundations. So senior entrepreneurs that would start the first company and the second company and so on until eventually they were successful, they looked into researchers that would go for grant applications for research support.

00:22:32 Speaker 3

And the third group was terrorist groups and trying to.

00:22:37 Speaker 3

Commit one big terrorist attack and what they showed is that from the second trial onwards in all these different aspects, good or bad, you can already distinguish eventual winners. Eventual successful groups of people.

00:22:53 Speaker 3

From those who will not be successful. So there seems to be a certain dynamic that once you failed.

00:22:59 Speaker 3

If you then go.

00:23:00 Speaker 3

It again. So if you try a second time.

00:23:03 Speaker 3

Things will start to look differently, and this is one reason why we haven't looked into failure as the opposite.

00:23:08 Speaker 3

Of success yet, so I personally also considered as possibly the pre requirement for later success as everyone can properly tell from our own individual life and in the start up work. This is quite natural, right? You start with your first idea. That first idea might not be as mature as you thought or you might have just not had such a good understanding of how the startup ecosystem the startup.

00:23:29 Speaker 3

It was like.

00:23:30 Speaker 3

And then you abandoned that idea at some point, and you start again, maybe with a better team where you have better personality combinations, as Paul pointed out. And then the whole thing starts to take off. Paul, do you think on that story?

00:23:41 Paul X McCarthy

Absolutely.

00:23:44 Paul X McCarthy

Yeah. No, absolutely. Yeah, I think that's right. There's there's two things here, isn't there 1 is that it's it's really hard to say when something is. It's it's easy to say when

something is being successful because we've got those clear external extrinsic measures, if you like.

00:23:59 Paul X McCarthy

But to say something is filed it it's kind of like there's no such thing as bad poetry. You just ran out of time, you.

00:24:07 Paul X McCarthy

And but I think there's also another thing that attracts me to the to the success approach and that's kind of like.

00:24:14 Paul X McCarthy

We're working within this.

00:24:17 Paul X McCarthy

Area of positive psychology and where one of our key co-authors in this.

00:24:25 Paul X McCarthy

Area Peggy.

00:24:26 Paul X McCarthy

And has worked with Martin Seligman and some of the founders of the positive psychology movement, and that basically turned psychology on its head. So for the last 100 years, I think it's been looking at, you know, dysfunction fail, failure and trauma and trying to understand that to to, you know, better people's lives.

00:24:45 Paul X McCarthy

But about 20/20/20 to 30 years ago, there was a bunch of people who got together and said, well, why don't look at it from a different perspective and and try and understand.

00:24:55 Paul X McCarthy

One of the factors that are associated with, you know, harmonious relationships with happy people and you know, people are escape these sort of.

00:25:07 Paul X McCarthy

Difficulties and what can we learn from that? And I sort of think this is the science is there's an analogy here with startups.

00:25:16 Paul X McCarthy

I'm a big fan of Tolstoy and the I that sort of idea that Anna Karenina principle that you know.

00:25:24 Paul X McCarthy

There's a similarity between happy families, but.

00:25:27 Paul X McCarthy

You know, dysfunction comes in many flavours and I think that's the same with startups too you can.

00:25:34 Paul X McCarthy

There are things you can learn by understanding failure, and usually that's best learned through your own experience. And you see that with.

00:25:44 Paul X McCarthy

Founders that fail and then later succeed, but I think there's also a lot to be learned for by studying the very few people who manage to get through and create these incredible companies. So that's sort of our approach.

00:25:56 Veena McCoole

It's the broader sort of start up ecosystem. How do your research findings affect the likes of venture capitalists and investors? Paul, maybe we can start with you.

00:26:08 Paul X McCarthy

Yeah. Well, I guess venture capitalists are in a high risk, high return business in a portfolio game. So they've they've got a portfolio of companies, some of which they they want to get very outsized returns and the majority of which they know.

00:26:23 Paul X McCarthy

Will be likely unsuccessful. They might lose their money, so they're looking for.

00:26:31 Paul X McCarthy

Really big outcomes. It's not like traditional business investing or loan, you know, like traditional bank loans where.

00:26:38 Paul X McCarthy

It's more about the surety that you're that the lines are going to be repaired. You're looking for something special. These kind of out of the park things, so I think.

00:26:49 Paul X McCarthy

This idea that that a significant factor has been overlooked or.

00:26:56 Paul X McCarthy

More likely, I think that the most successful venture capital investors are already taking personality into account through their through their own know how and.

00:27:07 Paul X McCarthy

And experience that it's not sort of, you know, explicitly there.

00:27:11 Veena McCoole

And Fabian, now that we've talked about how this applies to the broader ecosystem, so VCs and investors, how failure can be kind of difficult to define in concrete terms.

00:27:26 Veena McCoole

What are the gaps that have emerged here? So what haven't you yet explored through your research that you're interested in finding out more about when it comes to what makes startups flourish?

00:27:37 Speaker 3

Yes, this is a really good question. So obviously our analysis as Paul pointed out has been a two year research project with which was published in October 2023 and since then we have established what is called the science of start-ups initiative. The research project here at the Oxford Internet Institute in collaboration with Paul and his peers from Australia.

00:27:58 Speaker 3

Set ourselves an ambitious agenda to really start filling some of the gaps. Some of the question mark that our.

00:28:06 Speaker 3

Pointed towards.

00:28:08 Speaker 3

As I said a bit earlier, so we really only looked at prediction of companies from the day they were founded until the very end. So the kind of human life analogy from birth to death, and we ignore the whole life span of everything that happened in between.

00:28:23

And this.

00:28:24 Speaker 3

Is really pointing towards the gap we are.

00:28:25 Speaker 3

Here.

00:28:26 Speaker 3

Everything that is happening in the meantime is an open question. Still, obviously there's a lot of research out there on V Cs on start-ups.

00:28:34 Speaker 3

Oftentimes from an entrepreneurial or from a managerial angle, but not that much from the research angle. We're looking at it. That is from the computational social science. It's all from the data science angle. So really trying to do all of that in a quantitative and large scale basis.

00:28:50 Speaker 3

So number of follow up project, we are working on are those. So on one hand we are trying to understand what is the effect of incubate. So often startups go through some sort of structured programme, be it an accelerator, an incubator, AVC or anything else that could happen. There's lots of interventions. It's not only funding being provided.

00:29:09 Speaker 3

Like the nourishing and flourishing, and believe the education and.

00:29:14 Speaker 3

Raising of that kid.

00:29:16 Speaker 3

Which is the the.

00:29:17 Speaker 3

Stage company, but everything that is that is being provided and.

00:29:20 Speaker 3

Not.

00:29:21 Speaker 3

Clear yet what the effect of these different metrics are? Also, there might be feedback effects between all of those, and this is pointing us to the second important research question we are having.

00:29:32 Speaker 3

Namely, the effect of the ecosystem itself. So there is.

00:29:35 Speaker 3

Usually you wouldn't talk of.

00:29:36 Speaker 3

Local ecosystems on the city level, you might have Boston, Berlin, Bangalore.

00:29:41 Speaker 3

Different places, and they all bring in their own DNA, their own fingerprint.

00:29:47 Speaker 3

And it is not yet understood. First of all, how do these different ecosystems actually differ? We're not just talking in the number of startup companies or the amount of venture capital funding being available, but all the different roles and events that are taking place.

00:30:02 Speaker 3

Often times you can imagine some of these places have really good higher education.

00:30:08 Speaker 3

But at the same time, not all of them.

00:30:09 Speaker 3

Have such a big tech ecosystem, or have that many tech startups coming out of it in London, for example, you have the city, so you have really good access to financial capital. But does this necessarily mean that we will have as many tech companies as in other places? So there's various factors including all the feedback and what we're trying to do is bring all that about. So first of all mapping.

00:30:31 Speaker 3

Trying to understand how the fingerprints actually differ and then based on these factors on top of what we already did before trying to predict startups such.

00:30:39 Speaker 3

At a large scale, to provide really actionable insights for policymakers and managers of Starbucks systems to understand what are the buttons that they need to press in order to bring about more startup success?

00:30:53 Veena McCoole

I love what you mentioned there about ecosystems and taking into account the broader considerations associated with the environments and the incubators in which startups.

00:31:03 Veena McCoole

Well, it would be good to finish with you, to understand what's on the horizon for this research project in the coming year. How do you plan to build on your work thus far in the science of start-ups project?

00:31:17 Paul X McCarthy

We see the similarly valuable lessons that we've learnt. You know, in this in the start startup space here that can be applied in a variety of different contexts.

00:31:28 Paul X McCarthy

So there's sort of 3/3 areas in particular that we're we're actively exploring 1 is, are there other features that the company level in particular gender and cultural diversity, you know within the team.

00:31:43 Paul X McCarthy

You know how? How does that play out in terms of success?

00:31:49 Paul X McCarthy

Especially women in startups, you know, women in startups have had a long history of.

00:31:55 Paul X McCarthy

Discrimination in terms of, you know, funding for women, Co founded startups. That's changing very rapidly and it's it would be really interesting to to understand what success looks.

00:32:10 Paul X McCarthy

For Women, Co founded companies.

00:32:14 Paul X McCarthy

We're also looking at the corporate context. You know, we our hypothesis is that.

00:32:21 Paul X McCarthy

They're they're in the same way that we found a kind of a typology of Co founders.

00:32:26 Paul X McCarthy

Companies with six different setup company Type Founders, we think that will be a similar thing for the CC.

00:32:32 Paul X McCarthy

Rate it will be really interesting to sort of see, you know when we get to do that work work what what the typology of.

00:32:41 Paul X McCarthy

C-Suite sort of executives are and, and I suspect what you'll find here is there's possibly.

00:32:47 Paul X McCarthy

A different type of CEO for the hour, if you like, so that at different times different stages of organisational growth might call for different types of leadership. And lastly, and this is a project we're just, I'm delighted to say it's about.

00:33:04 Paul X McCarthy

Of it soon will we have a prenatal soon.

00:33:07 Paul X McCarthy

We're looking at the at the largest scale we're going up to the economy wide level.

00:33:12 Paul X McCarthy

We're exploring this kind of sunlight counter intuitive and perhaps some outrageous idea of exploring personality diversity at a national level. So.

00:33:24 Paul X McCarthy

We've come up with an index.

00:33:28 Paul X McCarthy

Using personality data from the world's largest gold standard personality survey, it's a survey of about 700,000 people worldwide that's been done over the last.

00:33:42 Paul X McCarthy

3 or 4 decades and.

00:33:46 Paul X McCarthy

Quite generously, Doctor John Johnson at Penn State University in the US is custodian of this data. He's been gathering this data from countries all around the world.

00:33:58 Paul X McCarthy

30 or 40 years is is generously shared that with us and we have done this analysis and we've developed.

00:34:05 Paul X McCarthy

***** and we're working with Professor Richard Holden, who is a senior economist here in Australia and we've exploring how this personality diversity relate to national income and national income growth. So GDP and GDP growth.

00:34:22 Paul X McCarthy

And we're seeing some very interesting early results, which shows that there's very clear relationship, very clear relationships between personality diversity and and a country's economic.

00:34:34 Paul X McCarthy

Success and and this kind of an intuitive logic here. You could also take the startup studying and say well, there's certain roles within a startup, but when being an economy, you can imagine there's a there's a broader range, but you're still going to need a variety of different roles which are going to be suited to people with different.

00:34:51 Paul X McCarthy

Outlooks and personalities, so that's pretty exciting. So that's that's sort of one of the things we'll work in.

00:34:57 Veena McCoole

Sounds like a lot of exciting progress to come. Both of you. Thank you so much for your time today. It's been fascinating to explore the world of startup success with you, and thank you to our listeners for tuning into this episode of the OII podcast. If you've enjoyed it, please leave us a review and share the link to this episode with your network.

00:35:15 Veena McCoole

We'll be back soon with more conversations about.

00:35:17 Veena McCoole

Digital world. Take care.