**Transcript**

June 20, 2025, 4:04PM

 **Todd Helmus** 0:04  
Can you walk me through the the forecasting work that you do?  
I'm just trying to understand from a methodological perspective.  
My guess is there is a a lot of different component parts to what has to happen to build these forecasting initiatives to develop the product.  
So I wonder if you can sort of walk us through that, that reach that research stream that that you guys do?

 **Anthony Vassalo** 0:29  
Yeah. So I mean at the the most we do a couple of different things, but the the thing that I think is most unique is that we're in many cases, if we're supporting Rand research or we're supporting some government agency, we're not actually writing, we're not doing rese.  
Reports we're conducting a research activity, so it's more similar to what the survey research group would do or the life panels would do, or or even like the, you know, the.

 **Todd Helmus** 0:55  
Yeah.

 **Anthony Vassalo** 0:58  
Delphi guys.  
Would do.  
So in that sense we we we do some workshops.  
We'll try to take a large topic.  
We run it through ARC which which I think Miriam has probably showed you.  
That helps us generate Oxford scenarios that we can then workshop with subject matter experts.

 **Todd Helmus** 1:19  
Oh wait, how do you generate these scenarios?

 **Anthony Vassalo** 1:19  
And.

 **Todd Helmus** 1:20  
Walk through that again.  
How do you generate the scenarios?

 **Anthony Vassalo** 1:24  
So we do it in in one or two ways and it just depends on when we bring in arc the the analyst research companion, the AI, the AI tool that we have.

 **Todd Helmus** 1:33  
OK.  
So you guys have an AI tool, OK?

 **Anthony Vassalo** 1:35  
Oh, I thought.

 **Todd Helmus** 1:36  
So walk me through.

 **Anthony Vassalo** 1:36  
Mary, I thought Mary would have walked you through that, OK.

 **Todd Helmus** 1:38  
I mean it's it's been a while.  
It's been.  
It's. I don't remember discussion of the AI tool.  
I remember working with the with this organization. You guys are contracting with to support this.

 **Anthony Vassalo** 1:50  
Yeah. Cultivate.  
Yeah. So yeah, so and this is something that if you're really interested in exploring it. Bridget Kane, who's on our team.

 **Todd Helmus** 1:52  
Yeah.  
Bridget Keane.

 **Anthony Vassalo** 2:01  
She's the AI person who works with cultivate.  
So she can actually show you how it works.

 **Todd Helmus** 2:05  
Awesome.

 **Anthony Vassalo** 2:07  
Fly it for you, give you a quick demo, all that kind of stuff.  
On on how it works. But basically we will take a large topic of some sort and we'll run it through.  
We'll take it into a workshop.  
There's two ways you can do it.  
One we can run it through our first and that will identify drivers and signals and from that generate scenarios which we can then workshop with subject matter experts, you know the the pros on that is this much faster.

 **Todd Helmus** 2:34  
Thank you.  
OK.

 **Anthony Vassalo** 2:40  
The the downside is you're you can anchor on the scenarios it generates.  
The other way to do it is you do the workshop first with subject matter experts and then at the end you run it through Ark and then see.  
If you missed anything, so we've done it both ways.

 **Todd Helmus** 2:54  
And large.

 **Anthony Vassalo** 2:55  
At at.  
It's all. Yeah, it's it's an LLM. You can. Well, I mean, it uses llm's. You can point it I think at any like right now I think it's at ChatGPT Bill talked about. They were trying to figure or they're working on bringing it into ranch at.

 **Todd Helmus** 2:59  
What? What?

 **Anthony Vassalo** 3:11  
Down the road. But it. Yeah, you can.  
You can essentially point it whatever you want in terms of the the, the, the llm's, but it it works off of.  
An LLM to produce the the output.  
And then it does.  
It can do.  
Red teaming it can do bias identification.  
They're they're adding stuff to it all the time.  
We've actually been keeping a list of things we want them to do to it.

 **Todd Helmus** 3:34  
Huh.

 **Anthony Vassalo** 3:37  
But Eric?  
Eric Peltz doesn't. He wants us to do it all at once because he wants a Rand version of it.  
So instead of asking them to change things for us, we're we're gonna go to them at some point and say, here's I don't know, $200,000 or something. Make all these changes and then that would become at some level Rand IP at least in Eric's mind.  
That's how that would work.  
So they they have been updating it but they have not been updating it based on our wishes yet.  
They've been updating it based on how they want to market it to other people.  
So so that essentially we would do that from that. We would then sit down and identify forecastable questions. We've got about 3 pages of different types of questions that the simplest question is, is a binary, yes, no, with an end date.  
So that you know, you know when it resolves.  
That's not very useful.

 **Todd Helmus** 4:29  
Yeah.  
Yeah.

 **Anthony Vassalo** 4:32  
So so like I said, we have all kinds of, you know, multinomial, rolling, other sorts of questions.  
Causal, unconditional questions that we can use that are more useful to a project or to a policymaker.  
The problem with those is they don't cleanly resolve a lot of times.  
And so you have to figure out, you know, how to get the forecasters involved, how to keep scoring your forecasters so you know, the best ones are blah, blah blah.  
So then we would.

 **Todd Helmus** 4:57  
I mean is that is that I remember it's it's I mean I'll just say as I remember it it's it's not.  
It's not as easy as maybe it it sounds at first watch because the questions are like we were developing questions for like the impact of Russian propaganda German elections.

 **Anthony Vassalo** 5:12  
Yeah.

 **Todd Helmus** 5:13  
I mean, it ended up being very complicated.  
Question as to how we formulate these issues?

 **Anthony Vassalo** 5:19  
Yeah, the the questions have to there's a tension.  
So most of the research up to now has been on the forecasters themselves on why some people are good at forecasting, you know, all that kind of stuff the forecasters want because they're scored on a relative Brier score, which is a combination of how accurate you were and.  
How early you made the call?  
They want something that's clearly defined, so when it resolves it's it's very clear.

 **Todd Helmus** 5:44  
Yeah.

 **Anthony Vassalo** 5:46  
And so getting a question that forecasters like.  
Is a giant pain in the \*\*\*.  
For policymakers, they often are researchers.  
They often don't need that level of clarity, like for instance, we just got into a back and forth on whether or not.  
You know, with the whether Israel and Iran have gone to war.  
And at one level was pretty simple, right?  
Yes, they have.  
And on another level, it's what's your definition of war?  
All that kind of BS. So. So you have to sort of play with the forecasting questions and play with the forecasters themselves.  
A little bit.  
The other thing that we've noticed that sort of effects that is that policymakers and researchers generally don't want to wait for five years or three years for a question to resolve, right? They want.  
They want what we would call a snapshot and maybe track it over time for a little bit.  
So that again the problem is that for the forecasters, they're really concerned about their accuracy scores, that sort of point in the realm for them.  
So you have to figure out how to get around that.  
Um.  
So then once we have the questions on the platform.  
We would work methodologically.  
We're working as a process where we're trying to combine foresight, which goes out five to 10 years with forecasting, which really goes from like tomorrow through five years. And the idea is that we're using the Arctool and other foresight methods to establish the scenarios and then we're working.

 **Todd Helmus** 7:04  
Thank you.

 **Anthony Vassalo** 7:13  
Backwards to forecastable questions that we can cluster around.

 **Todd Helmus** 7:16  
OK.

 **Anthony Vassalo** 7:17  
On a topic or a signal, and that would tell you which which world you're going down, which scenario is becoming more probable as you aggregate it back up.

 **Todd Helmus** 7:23  
So the scenarios so the arc is developing when you say these scenarios, these are sort of the outcomes like the thing that might happen in the future that the that the forecasters are assessing.

 **Anthony Vassalo** 7:34  
Yeah.  
It's it's. It's like the way you would see.

 **Todd Helmus** 7:38  
And then you will want these to be have somewhat some specificity, right?  
So these aren't just like broad.  
There's some detail that goes in.

 **Anthony Vassalo** 7:45  
Yeah, yeah, yeah.  
So an example like when we were in when I was just in South Korea for the Asian Leaders Conference, you know the the South Koreans were like, you know whether the alliance kind of stuff and they wanted to know about certain types of decisions that they might make.  
Over the next couple of years and my point to them was like you should take a step back and determine what like what scenario you think you're going on is is the current administration an anomaly? You know, the country goes nuts every 40-50 years.  
This is a little different because the President, you know.  
Normally you don't sort of elect the person that's that's leading the charge on that kind of stuff.

 **Todd Helmus** 8:16  
Isn't it?

 **Anthony Vassalo** 8:19  
We didn't elect Joe McCarthy President, for instance.  
But in this case we have and so like. Do you think then that this is something that that in a few years is going to resolve and then the country will get back to some sort of sense of normalcy in terms of its alliance commitments and the way?

 **Todd Helmus** 8:32  
Mm hmm.

 **Anthony Vassalo** 8:36  
It views overseas commitments that kind of stuff, or do you think that this actually is the new normal?

 **Todd Helmus** 8:40  
Yes.

 **Anthony Vassalo** 8:42  
And whereas you may get a damping down of the rhetoric, this is kind of the path we're going to be on because that would lead you to different types of of policy things. The other way that you would deal with extended deterrence or your own, whether South Korea.  
Should develop nukes or your relationship with China. All of that is different depending on kind of which scenario you think you're in and what we would do. Then having identified sort of broadly those are two different scenarios, what would.  
The the signals be that we would want to forecast again.  
They would start to tell you which world you're going down and that would allow you to optimize policy recommendations and decisions for that scenario that you think is becoming more probabilistic as you aggregate the question resolution up.  
So that's sort of how that works, if that makes sense.

 **Todd Helmus** 9:31  
OK. Yeah.

 **Anthony Vassalo** 9:32  
Yeah. So and and Miriam and Anka are working on a paper that clearly outlines. We just they just gave gave it.  
Both in Norway and in Sweden at different workshops we were we were working on with, with FOI and FFI.  
So we have a draft paper that that lays that out methodologically.  
And you know, and how that how we're combining the two methodologies?

 **Todd Helmus** 9:51  
OK.  
I'll follow with Miriam on that.

 **Anthony Vassalo** 9:54  
Yeah, if you probably marry.  
Mind that she can.  
She can let you know.  
And if you follow up with Bridget, she can show you how Ark works.  
So that's that.  
You need experts at the beginning.  
Beginning you need, you know, forecasters in the middle and then we take the data and and you need experts on the backside if if either someone working a research project or like for instance we did a project with state last fall where we supported their their policy risk.  
And opportunity plan, they started with like 20 scenarios they wanted to down select a three or four that they would conduct.  
Cross Department planning on and so we help them identify questions.  
That would.  
That would give them a sense probabilistically of which of those scenarios was more likely than others, so that they could decide to to focus on those.  
So again, it's like the research output is is essentially data that that we're conducting as a research activity.  
We do a first cut on it in the way that if you're familiar with the intelligence community the way like.  
A geocent analyst at NGA or a sigen analyst at NSA?  
We do a cut on that type of of intelligence and then provide it to an all source analyst at CIA or DIA or state to integrate it to the the broader context of what they're doing.

 **Todd Helmus** 11:09  
Mm hmm.

 **Anthony Vassalo** 11:15  
So we give the information to state, state and a bunch of other inputs from from the department, from the IC, from other places, and you know, the regional bureaus and they integrated that into and then they made their recommendation.  
We should focus on these three or four.  
Scenarios. So that's that's the way that that that works.  
So yeah, and if it's, if it's for your research project like yours, then essentially you know you're gonna get here's the output and you have to integrate it in a similar fashion into your your your research.

 **Todd Helmus** 11:48  
Yeah, I mean, like, yeah, I appreciate some exposure to that is for the information I'm sending.  
So that's really interesting.  
Do you see? I mean, out of curiosity, this is not part of our research.  
But I'm just curious to see the advancements technologies go.  
Do you see at some point being able to sort of create AI models of your forecasters, and then we'll let the AI?

 **Anthony Vassalo** 12:12  
So that's the next.

 **Todd Helmus** 12:12  
Do the predictions.

 **Anthony Vassalo** 12:13  
Yeah. So that's so right now.  
There's, there's been a lot of research and there's a lot of people that are trying to build AI models to forecast, and this was actually one of the topics that we worked in in Norway or Sweden, in Sweden with with, with FOI, because they have a huge fore.  
Platform called glimpse.  
So the issue becomes so right now.  
All of the AA models are about as good as they're a little bit better than random chance. If you can train them with a crowd.  
You can maybe get them up to kind of a crowd level.  
You can't get them up there.  
They're still like nowhere near where the Super forecasters are. What we want to explore with them, and I think this is where, if you were asking me where I would want to go besides, like, you know, fine tuning arc.  
There has to be a way to identify what you can use.  
The the You know the llm's the AI function for.

 **Todd Helmus** 13:14  
Ah.

 **Anthony Vassalo** 13:15  
Beyond what we're doing to increase your capacity?  
So the problem that we have now is everything has to run through a finite group of super forecasters or right, like we're bringing on X number of Rand forecasters.  
But it's still you're very limited.  
It chokes you down into how much they can handle and what I would like to see is is similar to your thing.  
Can we train an AI model on our best forecasters?  
You know what would that look like?  
You'd still want to, obviously. You know, you know, check it with your with your forecasters. But it would allow you to do a lot more.  
Or are there particular types of questions like technical questions or like whatever that the models are better at than others that we could use it for that?  
You know, I mean it's there has to be a way to integrate it. Otherwise you're never going to be able to scale this up.  
In like in a really big way.  
So. So yeah, we're really interested in that right now.  
The the level of the.  
The AI tools and models that are being used to forecast are are essentially basically DART throwing chimpanzee.  
It's just very random and that was the research through 2024, but that doesn't mean it can't get better, and it doesn't mean we can't. If we, you know, made a a significant push on how can we use this.

 **Todd Helmus** 14:19  
Yes.  
OK.

 **Anthony Vassalo** 14:31  
That we couldn't find ways, you know, so I floated the idea of can I go back through the different forecasting platforms?  
And look at how the Super forecasters on all the platforms have answered various types of questions because they they have. There's a common methodology. You can find it right.  
They identify base rates and reference classes and blah blah blah blah blah and a lot of it is is is searchable like you can get it and if we could do that plus you know add the data moving forward.  
You know, would you be able to create personas or or you know to build a tool that could train on that and then when you got to type of questions?  
That similar would you be able then to have it know enough that it could do a good job quickly of forecasting? I and I don't know.  
I'm not an AI expert, but but I I can't believe that there's not a way that we can integrate this into what we're doing.

 **Todd Helmus** 15:26  
I'm just curious like how much effort do these sport cansters put into put into these issues when you give them a a particular issue, they need a broadcast.  
I mean, to what extent are they doing sort of in depth research on that issue versus shooting based on their, you know, knowledge and I presume that these broadcasters are all like area experts like like, right, if you're like, I'm I'm guessing like say if it's a question about.

 **Anthony Vassalo** 15:44  
Yeah. So there's.  
A.  
No.

 **Todd Helmus** 15:51  
Terrorism expansion.  
Al Qaeda expansion in Africa.  
I at least like Africa, Al Qaeda people.

 **Anthony Vassalo** 15:59  
Now the research shows that experts are actually the worst. Like, if you look at, if you look at and there, there's a reason for this.

 **Todd Helmus** 16:00  
No. How are you?  
Oh.

 **Anthony Vassalo** 16:07  
But if you if you were to put people in groups, experts would be the worst random chance would be next.  
Wisdom of the crowd would be there, and then the Super forecast would be way up there.

 **Todd Helmus** 16:16  
You can't get over our own biases, huh?

 **Anthony Vassalo** 16:19  
That. No, that's what it is, right?  
So if you look at so, there's two broad explanations for why experts are so bad.

 **Todd Helmus** 16:25  
Oh, that's nothing.

 **Anthony Vassalo** 16:25  
One is in terms of, like Kahneman and Tversky. It's system one, system two thinking.

 **Todd Helmus** 16:29  
I'm gonna make some music too.  
It is still something regular.

 **Anthony Vassalo** 16:31  
So if if you ask an expert a question on something that they're an expert at, they will tend to just answer the question using system one thinking instead of thinking about this, something's going to happen in the future. I need to approach it in a completely differe.

 **Todd Helmus** 16:36  
And you will watch Eric.

 **Anthony Vassalo** 16:44  
Way.  
So if I were to ask a Russia expert a question on Russia future forecasting estimate of an IC language, they would do worse than, for instance, a China expert who would have a better sense of what methodological processing should follow to answer the question. They would also do.

 **Todd Helmus** 16:57  
I just want.  
I just want it. OK, OK.

 **Anthony Vassalo** 17:03  
Worse, if I ask them to write out all of the the steps you would take to answer this question and then give it to someone wandering around Pentagon City Mall.

 **Todd Helmus** 17:07  
Oh, OK.  
Oh wow.  
Oh, OK.

 **Anthony Vassalo** 17:10  
That person would do better because they would follow the steps, not just sort of shoot from the hip.

 **Todd Helmus** 17:13  
That's fair.

 **Anthony Vassalo** 17:14  
The shoot from the hip stuff comes from the experts.

 **Todd Helmus** 17:16  
Enough. I was really.

 **Anthony Vassalo** 17:17  
The other problem that the yeah, the other right.

 **Todd Helmus** 17:18  
Yeah, that's that's what I would do.

 **Anthony Vassalo** 17:20  
And the other problem.  
The experts have is they tend to be tied to what in the intelligence community we call an analytic line, where there's an academic position that they've taken and it's hard to get off of that.

 **Todd Helmus** 17:30  
I never knew why she's like that.

 **Anthony Vassalo** 17:31  
Now the the flip side is the analytic line is generally right where it has problems identifying discontinuity, so.

 **Todd Helmus** 17:37  
But you don't buy this.  
That's it.  
Yeah, he's just saying that I don't feel like that.

 **Anthony Vassalo** 17:40  
But if you think like within the intelligence community, it's not like you have a position, it's your position has been filtered, you know it goes into the creation of your, your team, your branch, your group, eventually CI as position and eventually the intelligence community's position. So it.

 **Todd Helmus** 17:41  
It's a \*\*\*\*\*\* terrible.  
But somebody tried to get him.  
To get out.  
Yes.

 **Anthony Vassalo** 17:57  
Becomes very sort of corporate and to get it off of that, you know to say you disagree. It's not like you have one iconoclassic analyst that marches into the Oval Office and says here's what we think.

 **Todd Helmus** 18:04  
Especially if I open.

 **Anthony Vassalo** 18:08  
It's not that easy.

 **Todd Helmus** 18:08  
OK, we are not here.

 **Anthony Vassalo** 18:08  
So and I think, you know, in academics you see the same thing.  
I mean, they stake their academic reputation on a position.  
It's hard to get them off of it, even when presented with new information.  
The the final thing is that there is a defined methodology that the Super forecasters use that we train people training the RAN forecasters on it.

 **Todd Helmus** 18:24  
Are there people at Rand that you're enlisting to forecast?

 **Anthony Vassalo** 18:27  
And and it's very different than the.

 **Todd Helmus** 18:32  
These errand analysts that.

 **Anthony Vassalo** 18:32  
Yeah, we're training like right now.  
We're training like 200 people.

 **Todd Helmus** 18:36  
Yes.

 **Anthony Vassalo** 18:36  
We're we're gonna down select to our top 30 or 40 and then we'll run and we'll we'll use those to put on problems because we have to pay them their ran rate and then the others, we will try to keep forecasting by running internal tournaments with small cash.

 **Todd Helmus** 18:44  
Due to attacking, but I like I don't see how that actually is going to be a problem, but I do like.

 **Anthony Vassalo** 18:51  
Prizes or whatever.  
So, but yeah, no, Jason wanted a he wanted a pool of Rand flow casters.

 **Todd Helmus** 18:54  
That it still, I think it's close to where.  
I mean, that's the only like I have.

 **Anthony Vassalo** 18:58  
So we we put out a call, we had 200.

 **Todd Helmus** 19:01  
Yeah, I might have very soon.

 **Anthony Vassalo** 19:01  
And 12 to 14 people sign up.  
And we're in the process of doing that now. But the things that the research shows make people a better forecasters are our training, which we're doing teaming, which we're doing mentoring.

 **Todd Helmus** 19:05  
I've always been watching interesting.  
Like.  
I don't even talk to somebody.

 **Anthony Vassalo** 19:16  
We've brought in six forecasters from the outside and made a Miranda adjunct, and they're leading these teams and mentoring them and then practice. You know, you have to do it a lot. The more you do it, the better you get because there is, there isn't this whole defin.  
Methodology, right?  
You start outside in.

 **Todd Helmus** 19:31  
And I'll tell you what though, like.

 **Anthony Vassalo** 19:33  
There's all the, you know, you identify reference classes.  
Base rates. You know you have to become very comfortable with probabilistic thinking.

 **Todd Helmus** 19:38  
You got it plus.

 **Anthony Vassalo** 19:39  
So you're just defaulting to zero, fifty, 100, you know, kind of stuff.  
So it's a very sensitive to biases. They have conversations internally with their teams where they, you know, discuss rationales and this kind of stuff. And although they fork out separately, but but there is a kind of a team function where they can discuss with each other what they.

 **Todd Helmus** 19:46  
I got what I imagined was a.

 **Anthony Vassalo** 19:59  
Think so?  
Yeah, and that's all in the research, so.

 **Todd Helmus** 20:03  
Oh yeah, there's a lot of herbal.  
What's the labor requirement for these OK.

 **Anthony Vassalo** 20:06  
What we want to see.

 **Todd Helmus** 20:09  
Go ahead, go ahead.

 **Anthony Vassalo** 20:10  
No, I said.  
What we want to see is, are there ways that we can?  
You know, are there particular subjects, for instance?

 **Todd Helmus** 20:16  
19.  
Let's not say Father.

 **Anthony Vassalo** 20:20  
Where you do need some level of expertise or experts are better at forecasting than they are just sort of in normal stuff. So are are going in position as we want to look at the really technical questions that we forecasted on some technical questions. They've actually done pretty.

 **Todd Helmus** 20:22  
For a while I was doing just because he was getting.  
He was like probably the perfect size.

 **Anthony Vassalo** 20:34  
Well, much better than I would have thought.  
But you have to do a lot of prep on the front sides. We have to meet with the researchers and we we have to meet with the pro forecasters and then talk through.  
You know, sort of the problem set where you might want to look. What meditations are that kind of thing?  
They need a lot more prep work on the front side than we would do if it's just a geopolitical question that, you know, I read the Economist, I can go find the research myself. The the Super forecasters themselves are not like random people. You would meet walking around.  
Crystal City, they're they're highly educated.

 **Todd Helmus** 21:05  
I'm.

 **Anthony Vassalo** 21:05  
They tend to have multiple degrees, a lot of them have backgrounds in in hard sciences and data science.

 **Todd Helmus** 21:09  
I'm gonna go. It's rampant.

 **Anthony Vassalo** 21:12  
They're just, they're, like, built differently.  
When you talk to them, they're they can range from sort of like Dustin Hoffman's character Rain Man to like a Pro Po poker player, you know, but the the common thing is they're very comfortable with probabilistic thinking and they don't get stuck on a particular.

 **Todd Helmus** 21:16  
Very much who should have followed me?  
Listen.

 **Anthony Vassalo** 21:31  
You know when they see new information, they incorporate it.

 **Todd Helmus** 21:31  
OK, sure.

 **Anthony Vassalo** 21:33  
They don't.  
They don't get stuck on on in one particular place so.

 **Todd Helmus** 21:36  
OK.

 **Anthony Vassalo** 21:39  
You you had a question?

 **Todd Helmus** 21:40  
What's the? Yeah, what's the labor?  
What's the late like in a particular scenario that you work on?  
What's the labor requirement for the on the forecaster size and how much effort time do they cut in?

 **Anthony Vassalo** 21:51  
Yeah, it it varies.  
The the first forecast is the hardest and it depends on how familiar they are with with places they need to go to start finding stuff. It it you know it can be anywhere from two or three hours to two or three days, depending on how into the rese.

 **Todd Helmus** 21:57  
You ready to get it?  
It's it's actually \*\*\*\*\*\*\* despair.

 **Anthony Vassalo** 22:09  
They are and and and that kind of thing. We're not giving them that many, you know, days upfront.

 **Todd Helmus** 22:15  
After speaking with.

 **Anthony Vassalo** 22:16  
You know we're we're because we're doing this big thing to downsize.

 **Todd Helmus** 22:19  
If you're going to be investments or different.

 **Anthony Vassalo** 22:22  
And then we'll, we're just gonna have to see how we, how we manage it moving forward.  
But if unconstrained, like when you talk to the Super forecaster, they may spend a couple of days looking at it.

 **Todd Helmus** 22:29  
You ready?

 **Anthony Vassalo** 22:33  
But we've we've applied a constraint to them in terms of how much they can actually charge, so it doesn't get out of control.

 **Todd Helmus** 22:38  
I'm so sorry.  
Is that the most expensive part of this process? Is paying the forecaster?

 **Anthony Vassalo** 22:44  
Oh, on the Rand side, like on the public platform, we pay the the, the Super forecasters that we have about $250 a month.

 **Todd Helmus** 22:45  
Hey I hope.  
I get.

 **Anthony Vassalo** 22:54  
Most of them are doing it because they find it interesting and it's about it's about the public bragging rights and right. Yeah, yeah, yeah.

 **Todd Helmus** 22:57  
No, that's nothing.

 **Anthony Vassalo** 23:02  
Now the other.  
The other two main platforms, Metaculous and good judgment.  
The merit?  
The two other American platforms are some European ones.  
They pay.  
They identify a smaller pool of of you know, super forecasters.  
To put on a problem set and then they will pay them based on on what they're charging for a question.

 **Todd Helmus** 23:16  
I'm sorry your true, OK.  
I'll say.

 **Anthony Vassalo** 23:22  
So if they're charging like $8000 for a question they they pull a slice of that off for maybe like 10 super forecasters, that they're gonna have answer it.

 **Todd Helmus** 23:24  
I know I really appreciate that.  
So.

 **Anthony Vassalo** 23:31  
We we haven't been doing that.  
We inherited the platform that was being built for the intelligence community and the way that they had been doing it was like $250 a month.  
So we just kept that.  
At some point, we're gonna have to raise it the the Rand forecasters.

 **Todd Helmus** 23:43  
Let me proceed.

 **Anthony Vassalo** 23:45  
We have to pay a ran rate.  
And that's why we really have to manage it.

 **Todd Helmus** 23:47  
Yeah, that's expensive. That's real money.

 **Anthony Vassalo** 23:50  
Oh, yeah, yeah, we can't like.  
That's why I want to down select to like my best like fortyish wherever there's a clear cut line and who's good, who's not and the the mentors can already see. I mean, they're they're already starting to get a clear delineation.

 **Todd Helmus** 23:56  
One of those jogger workers was.

 **Anthony Vassalo** 24:04  
We're giving them.  
We have an aptitude test that we're we're so we're running a essentially a an experiment where we're giving them this app to test. It's been developed.

 **Todd Helmus** 24:09  
Question.

 **Anthony Vassalo** 24:14  
And then we're gonna see on the backside whether it actually did.  
Identify who's going to come into the backside as the best forecasters.  
There's a common set of like 20 or 30 questions that we're having them answer that are going to resolve fairly quickly and and there at the end of that, we'll be able to identify who the best forecasters are and then we'll cut down to what we can sort.

 **Todd Helmus** 24:27  
Oh yeah.  
So you're like kinda like you have your own Drexel.  
I didn't have my phone number.

 **Anthony Vassalo** 24:37  
Of afford, which I think is about 30 or 40.

 **Todd Helmus** 24:39  
That's.

 **Anthony Vassalo** 24:39  
And then, like I said, the rest we're going to run internal tournaments and say, you know, forecast on this question, whoever does best gets.

 **Todd Helmus** 24:45  
Yes, whenever I'm gone.

 **Anthony Vassalo** 24:46  
$1000 something like that.  
Which is much cheaper than paying a bunch of foreclosures.

 **Todd Helmus** 24:51  
Yeah, well, it seems like like going back to the AI to protest.  
I mean, if it's a matter of paying like 250 bucks for a forecaster, I mean it seems like the the the the value in listing AI to replace them doesn't like not saving not much money.

 **Anthony Vassalo** 25:09  
Its capacity.  
Like if if I can get AI to answer yeah, if I can get a if I can get AI to answer 100. A hundred questions in an hour that would take, you know, like a week and I couldn't even do 100 questions, right. I mean there.

 **Todd Helmus** 25:13  
Just a few more just to do more guns.  
I.

 **Anthony Vassalo** 25:27  
No way.  
I don't have enough forecasters on my platform to do that much.

 **Todd Helmus** 25:29  
Yes.

 **Anthony Vassalo** 25:32  
That is the capacity problem.  
It's not even the capability, but right now the human forecasters, the best human forecasters, are way better.  
Than than the AM roles.  
But but it's not scalable like you can't like as we envision the the level of support you know.

 **Todd Helmus** 25:49  
Yeah.

 **Anthony Vassalo** 25:51  
22 You know different offices and and that kind of thing.  
Not even County Rand research, but just across the government.  
You know, we have to come up with a way to scale it.  
Or you're always gonna have this choke point, you know, with your super forecasters.

 **Todd Helmus** 26:07  
Yeah, there was so many of them and they're hard to grow, I imagine.

 **Anthony Vassalo** 26:12  
I mean, we're growing on the problem we have.  
So I'm I'm looking at a couple different ways to get more super forecasters.

 **Todd Helmus** 26:18  
No. Forever.

 **Anthony Vassalo** 26:18  
One is, is the Brits used to have a program called Cosmic Bizarre?  
They had a number of super forecasters that were in that program.  
And ideally they're going to give us access.  
They'll they'll let them forecast on our platform that was run by MI6 and then.  
The the Norwegians and the Scandinavians both run programs and they've identified who their super forecasters are.

 **Todd Helmus** 26:40  
Yeah, something this is a fun.

 **Anthony Vassalo** 26:42  
I want to bring them onto our platform.  
You know, and then to the degree that we can identify even aptitude. Like if I can give new Rand hires and aptitude test or if I can go to a college and and say who might be interested in this, give an aptitude test and just figure out who.

 **Todd Helmus** 26:48  
I.  
But something should be easy.  
Up there.

 **Anthony Vassalo** 26:57  
I think they might be.  
That would let me focus on on adding a more focused capacity rather than casting a real wide net. But ultimately that's always gonna be a choke point unless we can find something like, you know, either an AI enabling tool.  
Or, you know, actually be able to use AI to augment in in ways that would that would increase the capacity.

 **Todd Helmus** 27:22  
Yeah. OK. So, so it's really interesting, so, OK.  
So you're already enlisting large language models to help develop these scenarios.  
You mentioned also that there's a a part of this process in like a.  
Would you say like a working workshop or work group or TTX? What? What was that?

 **Anthony Vassalo** 27:41  
Yeah, we do.  
We we do a we do a workshop that and that's where we bring the humans in with the that we bring subject matter experts in.  
You need subject matter experts to, you know, kind of define the problem, work through the through the the scenario generation process, augmenting it with the the you know with ARK and then you need it on the backside after you've forecast to tell you like to to aggregate the.

 **Todd Helmus** 27:56  
What?  
Nice talking.  
To you.  
Sorry.

 **Anthony Vassalo** 28:08  
The.  
The output.  
From your questions back up into something meaningful.  
Yeah, it's not helpful just to know that like this went from 32% to 38 percent or whatever.  
There's a level of analysis that goes in about like, so you can identify the. So what? What does this mean for my larger question? So that's the two places where you need actual subject matter experts in the middle. I just need really good forecasters. But on both sides.  
You definitely need.  
Subject matter experts and on the front side.

 **Todd Helmus** 28:42  
OK.  
Well, that's heartening.

 **Anthony Vassalo** 28:44  
Yeah. Yeah. On the and on the front side, like I said with that's where we use arc as an as an enabling tool.  
But you have to, yeah, because the forecasters, they're not going to be able to tell you what it means if you're asking a suite of 15 questions to try to identify, you know, which signals and drivers are becoming active, they tell me which scenario.  
And therefore, from that scenario, what decisions might I make? You're getting way past just simple forecasting.  
And that that you need the subject matter experts.

 **Todd Helmus** 29:14  
All right. So so it sounds like what you're saying is that the long form intent is the forecasting itself.

 **Anthony Vassalo** 29:20  
Yeah.

 **Todd Helmus** 29:22  
I imagine that will require some probably advancements in the.  
Ability of AI to.

 **Anthony Vassalo** 29:30  
Yeah, I mean, we would love to.

 **Todd Helmus** 29:31  
Effectively and accurately do these forecasts.

 **Anthony Vassalo** 29:32  
We would love to do something with, I mean the the Swedes are are looking at working on this. So one of the things we've talked about is, is there a way we can do a joint project with them to try to see if we can we can you?  
Know figure out how to do this.

 **Todd Helmus** 29:45  
Oh, I think I agree.

 **Anthony Vassalo** 29:45  
With Sweden's FPI so so, that would be like that would be the number one priority, the number two priority is we'd be continuing to to modify ARC to make it better.

 **Todd Helmus** 29:48  
No.  
Please.  
Trying to be good.  
I'll be good.  
I was looking for you.  
I was listening.  
You want to say that.

 **Anthony Vassalo** 29:57  
That's a little bit easier because.

 **Todd Helmus** 29:57  
But then how would you want to make it better?

 **Anthony Vassalo** 30:00  
Bridget has a whole list of things we've got from Rand researchers that are using it.

 **Todd Helmus** 30:01  
Oh, it seems like communication.  
I'll talk to them.

 **Anthony Vassalo** 30:06  
We just haven't given it to them because, like I said, Eric wants to do this all at once so that when they modify it, it's a Rand version.

 **Todd Helmus** 30:11  
She's not happy.

 **Anthony Vassalo** 30:13  
You know, we get.  
We get the good version of the F35 and then if they want to market to somebody else, it's not that version.

 **Todd Helmus** 30:16  
Oh \*\*\*\*.

 **Anthony Vassalo** 30:19  
And since we'll be paying for the actual upgrades, so I've been holding off.

 **Todd Helmus** 30:19  
I don't. I think it's a problem.  
That's a OK.  
I'll hit Bridget.  
What's Bridget's last name again?

 **Anthony Vassalo** 30:28  
Kane K.  
\*\*\*.

 **Todd Helmus** 30:31  
OK.  
So another question is like so we've done an assessment.

 **Anthony Vassalo** 30:34  
Miriam can also help you with that, since you have, since you know Miriam, she she. She's the other person we have who can really fly our, you know, on instruments at night.

 **Todd Helmus** 30:42  
Hi. Yep.

 **Anthony Vassalo** 30:43  
Bridget's Moore on the technical side, Miriam's more in the use case side, but they're both good.

 **Todd Helmus** 30:47  
OK.  
I am.  
I'll talk to him.  
How so?  
We've done an assessment like pull the data for the last five years of rainfall to rank and stack most prominent research methods. You guys are new.

 **Anthony Vassalo** 31:00  
Yeah.

 **Todd Helmus** 31:01  
To Rand.  
So I'm just, I'm just curious if you could sort of describe your growth potential as.  
A key, sort of methodologically tool employed by Rand Research.  
Interest.  
And what trajectory are you at right now given when you started where you're at now to where you project, you'll be in terms of growth?

 **Anthony Vassalo** 31:24  
Yeah, I mean.  
Yeah, we're nine months in.  
We've been up for like 9 months.  
We've probably done like 1/2 a dozen projects.  
We're still, I think, with the Rand researchers, you know, in the feeling out stage, they have to become more comfortable with methodology.  
That's another benefit we think we're gonna get out of the big. Like, we're gonna train a bunch of people to forecast. There are a number of senior researchers.

 **Todd Helmus** 31:45  
Actually.  
No, they'll want to use you.

 **Anthony Vassalo** 31:49  
Yeah, yeah, yeah.  
We're also.

 **Todd Helmus** 31:52  
I mean, I will say from my perspective, like I was just saying from my perspective like like I think I was suspect of it too when you guys first started.

 **Anthony Vassalo** 31:53  
We put our.

 **Todd Helmus** 32:01  
So I do think there's like like it takes like exposure to be able to understand and appreciate what the any new methodology particularly this one.

 **Anthony Vassalo** 32:03  
Yeah.  
Yeah.  
Yeah.  
Yeah, absolutely.  
And we're, and this one's a little. It's also difficult because the going in proposition is that experts are bad at this, which is a hard, you know, sort of sell right up front.

 **Todd Helmus** 32:20  
It hurts.  
It hurts.

 **Anthony Vassalo** 32:22  
Yeah, it hurts. Yeah.  
So one of the things that we're doing, we're doing something similar to what the China Research Center did is we just put out a call for proposals.

 **Todd Helmus** 32:29  
Good evening.

 **Anthony Vassalo** 32:30  
So I talked to open philanthropy and and once we get all of the paper proposals in, I'm gonna go to them. Say, here's our one to end list.

 **Todd Helmus** 32:32  
So I mean, I'm pushing.

 **Anthony Vassalo** 32:38  
Which ones are you willing to fund?  
And so they would be a much smaller papers, but that again will give us, you know that.  
And most of them we asked for things that would be interesting methodologically and across the divisions.  
We just.  
I just got off the phone before I was talking to you with.  
Maine and New Hampshire's healthcare. So they want us to start forecasting for them.  
They're particularly concerned with like their overarching topic is how is AI gonna change healthcare models?

 **Todd Helmus** 33:05  
That will be when everybody goes out into the water, yeah.

 **Anthony Vassalo** 33:09  
So I'm gonna go reach out to Rand health.  
We'll sort of look about like, how would we do this?  
How would this work, blah blah blah?

 **Todd Helmus** 33:13  
Personal.  
OK.

 **Anthony Vassalo** 33:16  
We have got work.  
I would put this into the forecasting communities, kind of the support thing with Singapore with their four seven people.

 **Todd Helmus** 33:24  
It is good for you as well.

 **Anthony Vassalo** 33:29  
Norway, Sweden, the UK.

 **Todd Helmus** 33:29  
Bubble.  
That is attributed.

 **Anthony Vassalo** 33:34  
I'm gonna go meet with the OB and I next week.  
And see if they will fund.  
To support the Nic and DHSS and T.  
So that's a lot of it, though I would put, not necessarily like there's I put it in two pots, right.

 **Todd Helmus** 33:45  
You're you're missing like one callback.  
Like you're really doing the right thing here, but.

 **Anthony Vassalo** 33:50  
One is support to Rand Research and the other is this sort of research activity that we're doing for somebody.

 **Todd Helmus** 33:53  
I don't.

 **Anthony Vassalo** 33:58  
Where we're just generating, you know, data for the government, like we're not gonna write reports for the the Nic. We're gonna give them data based on their questions that they can use.

 **Todd Helmus** 33:58  
You might have a dog here.

 **Anthony Vassalo** 34:07  
Same thing for like for like main and New Hampshire health. Whatever it is like, you know, we would work with them on what the questions would be and how what scenarios would be in that kind of stuff. But it's feeding some larger process that they're in charge of.

 **Todd Helmus** 34:07  
Yeah.

 **Anthony Vassalo** 34:20  
Not us.  
That's different than.  
You know, than classic land research.

 **Todd Helmus** 34:27  
Yeah. Do you have, do you have a sense of any projections on what what type of?  
Financial value type of financial level of work. You guys can elicit for that direct support.

 **Anthony Vassalo** 34:39  
So the direct support what we've been, what we've talked to people about is $350,000 a year for a subscription. So and that includes like some training. But from us that includes like 4 workshops that includes you know, blah, blah blah and that's that.  
What we told Singapore, that's what we told.  
I just told Maine health.  
That's what I'm gonna tell the ODNI.  
We we had talked to on the open source enterprise in the intelligence community.  
They were actually ready to fund and then they got told they can't fund anything.

 **Todd Helmus** 35:11  
So but.

 **Anthony Vassalo** 35:11  
So so like right now like support on that from the federal government is as you know, sort of weird.

 **Todd Helmus** 35:16  
So that's why.  
I don't.

 **Anthony Vassalo** 35:21  
But.  
Like we'll have to see, but I think you know, basically we're talking about 350,000.  
We're talking about the South Koreans also, so we'll see where that comes, but.

 **Todd Helmus** 35:32  
Have a chance.

 **Anthony Vassalo** 35:36  
You know, ultimately we need to generate about $2,000,000 a year from all revenue sources to be revenue neutral. Half of that is the platform and the other half is labor.

 **Todd Helmus** 35:36  
The elbow.  
Must've shipped in my lap.  
Walk now.  
What?

 **Anthony Vassalo** 35:49  
So.  
And that's kind of how we've looked at the pricing model for it, like how many of these do I need to put together in order to to sort of become revenue neutral. The other big, honestly, the other big place that we're going for money, our foundations you know.

 **Todd Helmus** 35:54  
I just need to.  
OK.

 **Anthony Vassalo** 36:03  
If we can come up with a project and a foundation that's willing to.  
To give us money. Then we're gonna go pitch the foundation and and try to work that.

 **Todd Helmus** 36:09  
Yeah.

 **Anthony Vassalo** 36:12  
So we'll see.

 **Todd Helmus** 36:19  
Yeah, I'm thinking sponsor of ours.

 **Anthony Vassalo** 36:25  
Now, to support Iran Research Project is is much less expensive.

 **Todd Helmus** 36:28  
2nd.

 **Anthony Vassalo** 36:29  
You know that we're sort of billing like, you know, I think that the most of them have been in, like in the $15,000 range. I mean like pretty non now part of that is we've been doing a lot of it.

 **Todd Helmus** 36:35  
Thank you.  
To to get A to get a couple questions answered to get like several questions answered about 15 grand.

 **Anthony Vassalo** 36:42  
For. Yeah. Yeah. That. Yeah, that's. Yeah, that's not that expensive.  
And that's if you look at like the industry standard is like 3005 thousand, $8000 per question depending on how many super forecasters you put on it.  
So we've sort of said, OK.  
Well, we'll we'll like, we'll we'll support you like 10 to 15,000.  
A lot of these have been smaller projects for Tasman Meselson. I think the most that we've ever charged anybody with something like 65 or 70 Pro Rand Research project and that was more complicated.

 **Todd Helmus** 37:08  
You know, we got engaged so very soon.  
Oh, your colleague, Brian. Hey, Brian.

 **Brian Mills** 37:18  
Sorry about that.

 **Todd Helmus** 37:20  
Yeah, no worries.  
So I'm curious.  
So that's interesting.  
So I got to think about this because we're doing a project for, I'll just say I'll just get off topic now and just say it.  
So we're doing a project for C TAV army installation.  
Vincenza that Overseas Army office in Africa.

 **Anthony Vassalo** 37:32  
Yeah.

 **Todd Helmus** 37:35  
So we're doing basically kind of Chinese influence.

 **Anthony Vassalo** 37:35  
Yeah.

 **Todd Helmus** 37:38  
For them in Africa.  
And how to counter that influence?  
But I could easily imagine some potential questions on that topic that could be forecastable and and I think it might be interesting, especially if you can shape it in a way that helped them align their operations, right.

 **Anthony Vassalo** 37:47  
Sure.  
Yeah.

 **Todd Helmus** 37:59  
I mean the question is, is AB or C gonna happen?  
And depending what those happens, then we might have to do different things now or invest differently.  
Then I think that could be.

 **Anthony Vassalo** 38:08  
Yeah, I mean, we did a we did a DARPA project where they basically said here are here are 8 technologies.

 **Todd Helmus** 38:16  
Like, do you like to go for suppression?

 **Anthony Vassalo** 38:17  
Identify for us which ones are most likely to come to fruition, whether we invest or not at the end of five years, and which ones would require our investment to come to fruition at the end of five years.  
So that was similar in the sense that you're trying to identify where to put investments like optimize your investment portfolio. And so I mean, yeah, we can do things like that.  
It's we also were able to say, well, like we don't have a good sense right now of data right now to know exactly what.

 **Todd Helmus** 38:43  
Why are you so?

 **Anthony Vassalo** 38:45  
The cost and the way that.  
That SRG does have been done, or the life panels do so, and right now the the more money that I can bring in from foundations, the more you know, the less I need to charge Rand people until I have a good sense of what it costs. So we.

 **Todd Helmus** 38:56  
Studio.  
City, California.

 **Anthony Vassalo** 39:02  
We're basically saying if if you have a project we'll we'll figure out a way to support it.

 **Todd Helmus** 39:08  
Yeah.  
OK.  
If we wanted to do something like that, Miriam would be a good point of contact.

 **Anthony Vassalo** 39:19  
I would so you. This is an Africa issue.

 **Todd Helmus** 39:20  
OK.  
Yeah.

 **Anthony Vassalo** 39:25  
So Miriam's doing Russia and Europe, we actually haven't go to go to Marie.  
Go to Marie Marie Jones.  
She's the Co director, but she's also like working in the Africa and the Western Hemisphere stuff just because we haven't really set it up yet, we are doing.

 **Todd Helmus** 39:32  
OK.

 **Anthony Vassalo** 39:42  
We're we're talking about doing a project with Mina 2025, which we're gonna go try to get money for.

 **Todd Helmus** 39:45  
Just for a minute.

 **Anthony Vassalo** 39:49  
And so that's a Middle East, North Africa. Yeah, it's Middle East, North Africa 2050 actually.

 **Todd Helmus** 39:51  
Mina Mina.

 **Anthony Vassalo** 39:55  
Actually. And they're a group that's registered out of the UK that have a bunch of, you know, funders from the Gulf.  
There's some non crazy Israelis.

 **Todd Helmus** 40:05  
Yes.

 **Anthony Vassalo** 40:07  
There's, you know, us people as well.

 **Todd Helmus** 40:08  
So.

 **Anthony Vassalo** 40:09  
So they came to us and asked if we would work with them.  
So at some point we'll try to get foundation funding to support whatever it is they want.

 **Todd Helmus** 40:14  
I'm going to try to.

 **Anthony Vassalo** 40:16  
But that's a North Africa thing.  
One of the things the question was on the platform, it can be of utility to multiple people.

 **Todd Helmus** 40:18  
Eat tonight.

 **Anthony Vassalo** 40:23  
You know, so we we could look at that as well.

 **Todd Helmus** 40:24  
OK.  
All right.  
Well, I'll reach out to that.

 **Anthony Vassalo** 40:31  
Yeah. Reach out to Marie and and and ask her about it and and we can see where to go from there.

 **Todd Helmus** 40:32  
And think about.  
OK.  
We're sort of at the tail end of the project and wanted to sort of counting days. They need to guard to write the report.  
So might not work now, but also might be something we could get to. So OK.

 **Anthony Vassalo** 40:50  
Yeah, we can.  
Like we can do a snapshot. One of the things that came out of the the Swedish research, which was interesting, is so the the the initial research that Jason was in charge of at IARPA, the ACE project.  
Was, you know, was like a three-year, blah blah blah.

 **Todd Helmus** 41:06  
And not.

 **Anthony Vassalo** 41:09  
What? What Sweden just did was replicate it, but they weren't having them track questions over time.  
They were just doing like a snapshot and then seeing and they weren't letting them upgrade.

 **Todd Helmus** 41:14  
I don't know.

 **Anthony Vassalo** 41:18  
And So what they found was that it still holds like you have, you know, random chance experts crowd super forecasters, even if I never get to update it.

 **Todd Helmus** 41:19  
We all.  
Just like.

 **Anthony Vassalo** 41:31  
Even if you just ask for like, what do I think right now about X?

 **Todd Helmus** 41:32  
I actually have one final.

 **Anthony Vassalo** 41:36  
It still holds in terms of the, the graduation and then what you see is if you track it over time.

 **Todd Helmus** 41:42  
Not quite in the tracking involved, probably.

 **Anthony Vassalo** 41:42  
The Super forecasters will start to like really spike up about 90 days out.  
And the regular crowd will spike up about 30 days out when things become pretty clear that something's going to happen, it turns out resolves.  
But the the thing that was interesting for us out of that, that's useful.

 **Todd Helmus** 41:57  
Thank you.

 **Anthony Vassalo** 41:58  
Is that a lot of the projects we could actually do just a one time snapshot. And in terms of the you know statistically would hold as if we had tracked it over time, at least the you know the relative rankings.

 **Todd Helmus** 42:06  
OK.

 **Anthony Vassalo** 42:12  
So.  
But yeah, anything that that, you know you wanted to do, if it's an Africa project, just talk to Miriam or Marie.

 **Todd Helmus** 42:21  
OK.  
All right, awesome.

 **Anthony Vassalo** 42:23  
Yeah.

 **Todd Helmus** 42:25  
All right, I think.  
I think that's most of my questions.  
Really interesting line of work you guys are doing.  
So anyway, I really appreciate you taking the time and I'll I'll send you a PPT for your time and thank you.

 **Anthony Vassalo** 42:36  
Yeah, no problem.  
Yeah, no problem. All right.  
Thanks a lot.

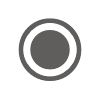
 **Todd Helmus** 42:44  
All right.

 **Anthony Vassalo** 42:45  
Bye.

 **Todd Helmus** 42:45  
See ya.  
Hey, Brian. I'll give you a call.  
09.  
Hello.

 **Brian Mills** 42:53  
Hey Shepard, caller.

 **Todd Helmus** 42:56  
So now we can stay here.  
Let me just turn off the transcription.  
Transcriptions gotten better at Rand.

 **Todd Helmus** stopped transcription