Alright, everyone, it's 10:00 AM uh, Sydney time,

so we will make a start of it.

I hope you had a nice weekend.

Uh, today we're gonna hit the ground running.

We've got a good one for you.

In fact, uh, we're chatting with Brad Cooper.

He's the CEO of Cog State. CGS is the ticket code here.

We've spoken to Brad a couple of times before,

but the most recent one was early 2024.

So this is well and truly overdue.

Uh, a lot has happened since then, perhaps not least

of which is a share price, which is pretty much doubled now.

You don't put too much emphasis on short-term market

movements, but I guess the relevance here is that

that's been underpinned by a really solid improvement in

the, in the so-called fundamentals.

So revenue up something in the order of 30%,

and we've seen net profit triple,

and that net margin, in fact, uh,

was already pretty good at 10%.

Now, now we're over 20%. So that's, that's interesting.

Um, and I guess the purpose of today is just try

and get a better sense of, well, how is that delivered and,

and what might we expect in the, in the coming years ahead.

So, um, that's the goal.

Uh, if you are new to the business, we will spend a bit

of time just going over the basics and,

and looking at the 40,000, uh, foot view.

Um, I'll let Brad flesh it out a little bit.

But essentially this is neuroscience technology.

You're, you're talking here about a, a company that develops

and markets cognitive testing software.

So it's the kind of kit that replaces very costly

and not very good paper kind of cognitive tests,

which believe it or not, is still in use in the year 2025

and replaces it with something that's, you know,

much more scalable, cost effective, um,

consistent, et cetera.

So this is, uh, a product

that's really pitched towards healthcare professionals

and particular, uh, pharmaceutical companies

that are looking to sort of validate, uh, drugs and,

and do all that important kind of testing.

Um, and it's a, it's a business that for, uh,

cog State actually delivered

around 50 million in revenues last year.

So, um, there's a lot to get into.

Uh, before I welcome Brad, just remember, uh,

if you do have any questions, it's always great if you can

submit them via Slido.

Uh, I'll make sure I put them to Brad

and, uh, please remember, none of this is financial advice.

Okay. It's all said and done. Brad. Good to see you again.

Good to see you. And

as a quick help clarification, I'm Brad O'Connor.

Brad Cooper, I think was some early two thousands oh,

entrepreneur that I think went down in a, a,

a, a blaze of glory.

But, um, I could be misremembering that. How

Did I do that?

That's okay. Do you

Know, do you know what that is?

This is, this is a life, uh, example

of not relying too much on ai.

That's, that's what this is.

I'm so sorry. I'm so sorry about that. That's

Okay. No, it's true.

Um,

Gosh, this is a great start.

Let's, let's try and salvage this with,

I'll throw it to you, Brad.

How would you describe the business?

Someone who's never come across Cog State before? Yeah,

Yeah, So I

think that there are a couple of aspects

to our business, but I think mainly

what we're talking about at the moment is

what the work we do in clinical trials.

And I think the best way to understand

what Cog State does is

to describe the problem that we're trying to solve.

And then, you know, we can dig into what the solution is.

So if you are, so part of the problem with, um,

the measurement of cognition

or the measurement of endpoints in clinic, in,

in central nervous system diseases generally,

is there's a high degree of subjectivity

to those assessments that we use.

And mostly these assessments have been developed over time by clinicians who are sitting opposite one patient and they're measuring that one patient and they're trying to as ascertain what's happening inside the head of that patient.

Right? And then the problem we get is we take those assessments that are designed for n equals one, and then we try and take them global and say, n equals many now, and, and, and assume that we're gonna get the same outcome when we're just measuring one person when we're measuring thousands of people.

So if you dug a phase three Alzheimer's disease trial, imagine you've got three and a half thousand patients, you're gonna do the, this assessment or this trial in 20 countries, maybe that's 30 languages maybe

You've got 200 clinical trial sites worldwide, and imagine you've got two or three doctors at each of those clinical trial sites who are gonna be administering these tests in, in, into this clinical trial.

to recruit those thousands of patients.

So suddenly now you've got, you know, 600 doctors speaking 30 languages administering these subjective assessments to three and a half thousand patients.

And you want all of that to be done in exactly the same way.

So the only thing that is different

between our placebo group

and our treatment group is whether you're

on drug or not, right?

Yeah. Right. So you get these degree of subjectivity in

that, and what you get is then noise in that data

and what noise does know.

So our business is really signal over noise.

If we can reduce noise in that data.

we increase signal strength.

If we increase signal strength, the likelihood

of getting a true reading of whether the drug works

or not is increased.

And therefore, obviously the, from a pharma company point

of view, the likelihood that the drug, you know, succeeds in

that trial and either goes through to the next stage

or goes, you know, gets approval from the regulator

to go into market is enhanced.

So, so that's the problem that we're managing. Yeah.

And we do that with, in a range of different ways.

So, we'll either, so we started our origin story

as you suggested, Andrew is around, um, the development

of digital assessments of cognition, right?

And that's one way of removing that data of this,

that error is just saying, well,

what if we just used a better test?

Right? So that's one aspect of it,

but the reality of it is, as you suggest, you know, a lot

of these endpoints are still these standard neuropsych assessments.

And so the rest of our business really comes down to can we bring digital solutions to improve the administration of something that is inherently difficult to achieve, right?

So, we'll, um, we'll,

we'll apply scientific expertise in terms of

the design of the trial.

So can we at least design the trial so

that the endpoints are used are less error pro, right.

Or that they're easier to administer.

We'll do training for the doctors.

So those, using that example for those 600 doctors,

let's certify them before they go into, into this trial

that they know exactly

how they're being asked to administer that.

Um, let's review those assessments.

So let's do algorithmic monitoring of that data to look

for outliers and understand whether these,

we think this error being made,

but also let's do a human review.

So let's watch a recording of that person doing

that assessment, especially the first time they do it and say, Hey Andrew, you made a little mistake here.

Let's not do that again next time,

because that's gonna mess up our data.

Right? Yeah. And then the sort of, you know,

statistical analysis and reporting.

So all of that, you know, cog state does, you know,

so the combination of both technology

and services all designed

to reduce error from those clinical trials.

Yep. Yeah. It's, it's one of those things.

I think if you are new to the business

and you give it a peripheral look, you think, well,

online testing's been around for a while.

You take something that was on paper,

you make it a multiple choice through a web interface,

you know, where's the competitive edge in that?

And I think what you're getting there just sort

of shows you sort of the IP and, um, investment

and refinement that sort of goes into all of this

to get something that not only is just online for the sake

of being online, but is,

but is online in a way that can be, um, pointed to

and be scientifically, uh, valid.

Um, one of the interesting things I always find,

particularly in the medical space,

and we do, we do chat to a number

of companies in this space, is

that the first hurdle is getting a product that has

that scientific validation.

And that's a huge, huge challenge.

But then you almost have a bigger challenge in overcoming

the social barriers and norms in the industry itself.

It's like, you know, Brad can rock up with the best kit

of all times, but if no one's ever used it before,

and gosh, we've been doing this for a hundred years, it, it feels as though that that social aspect of it has really, there's been a crossing of the chasm for cog state in, in recent times where it's gone from, oh yeah, this looks like an, a better way of doing this too, is like, no, it's also, that is true,

but it's also being more widely accepted and validated and seen as that.

Am I barking up the wrong tree there? Or is there a No, no, a hundred, a hundred percent.

I think I, I think as there's a few things that are happening outside of cog state that we, we sort of lean into.

So the first is that, you know, an understanding, particularly from the large pharma companies that, um, that you can, you know, if you apply expertise to this, that you can, um, you know, really alter the outcome of it. And so, you know, to, again, to use the extreme example to make the point, so if you,

if you look at phase three Alzheimer's disease trial, right? So the example I used

before, you know, the total cost

of the pharma company running that it's gonna be closer to a billion dollars and half a billion dollars, right?

With a B, um, right.

The extraordinarily,

extraordinarily expensive trials to run.

And that's just the trial part of it.

One trial that's one phase three trial, right? Right.

Like, you know, that's the kind

of numbers you're talking about.

Yeah. The cost of co state services in, you know, doing all

that endpoint data quality thing maybe is 30

to \$40 million out of that \$1 billion.

Right? So, and this is your primary endpoint.

This is the thing that a regulator's looking at to say,

does this work or not?

Right? And so the co that the relative cost is

so small compared to everything else

that the pharma companies really leaning into the thing of,

no, no, no, I want real expertise in this.

Right. I can afford to spend this, is, this is not where,

this is not the place where I save my money.

Yeah. And so there's us

and probably two other companies

who are really leaning into this being, you know,

we call it inch wide mile deep.

We we're, we are very focused around what we do,

but we are really good

and we spend a lot of time, a lot of money,

and we've got really good resources, um,

and expertise around what it is that we do.

And so there's an element of just not overspending on that.

And so, you know, so you do see, um,

more generic solutions that would, might be appropriate in,

in other trials, um, that do come up the, you know,

the largest CROs, um, do have some sort of genetic

generic plugins that they can apply,

but sort of deal with these sort of issues, um, in,

in a generic sense,

but not, you know, around the specialty application.

So I think that's the first point.

The second point is that I think, you know, uh, the,

as we've tried to commercialize cog state, one of the things

that we've been held up against is, you know,

we're relatively small organization even relative to,

you know, to the, the,

those other two competitors that I talked about.

Um, we are the smaller of, of the three.

And so the, the knock on us has always been, Betty,

you're really big enough to handle on my

global phase three trial.

You know? Um, and I think that the fact that we were

so instrumental, the running of all of Lilly's, um,

Alzheimer's disease program, we, you know, we ran

that successful, um, uh, phase three program for umab,

which subsequently went on to get approval, um, you know,

here in Australia in the US and, you know,

and other places internationally.

And there's one of the first two disease modifying therapies

for Alzheimer's and was an enormous trial.

Yeah. You know, really points to our ability

to manage these global trials.

And I think that commercial validation is really, you know,

and if you look back at, you know,

what's changed over the last sort of say three years,

I think that's the biggest thing.

It's not the, you know,

and we've developed as a business as well Sure.

But it's that that acceptance

that we can run those really big trials has been the

significant change in our business. Yeah. Yep.

It, it's a point I bring up with so many

of our guests too, you know, just at, at that sort of cusp

of having done the, you know, development of the product

and now trying to sell it,

just getting over those social barriers are so Yeah.

Difficult, but, but it,

what's interesting from an investment point of view is

that there tends to be a momentum in that kind of stuff

where it's sort of Yeah.

Rightly or wrongly from the view of the customer, it's seen

as, well, cog state is, goes from this small cap a SX sort

of thing to like, no, it's completely legitimate.

And look, we've got all these reference cases and sites

and it just, it just de-risks

the whole thing, which is fascinating. Yeah. Um,

And if you think about a, you know, a farmer exec, right?

Yeah. Their, their job's not to take risks. No, no. Right.

They, they, they're paid to reduce error in,

in their decision making.

Right? Yeah. You know, maybe in phase two A,

you can take a few risks and phase

three just don't mess it up.

There's an expensive program,

don't break anything. Yeah. Yeah.

I'm always reminded of the line, no one, no one got fired

for hiring IBM or, or something to that effect.

Yeah. Yeah. Hundred percent. Yeah.

It's that kind of phenomenon. Yeah.

Um, so, so when, when we look at the business today, um,

as I said, a huge amount of r

and d sort of gone into sort of product development, uh,

and that is a process that that never ends.

But when, when you sort of look at the suite of products

that you guys have got, uh, are we shifting, um,

less away from that r and d sort of focus

and more to the sort

of rollout execution side of things Now?

Is that a fair comment?

Um, I'd actually suggest it's the exact opposite. Oh,

Really? Okay.

Yeah. Um, it's really, it's a really interesting time.

So fundamentally, we think, um,

clinical trials, um, are changing in front of us

and that that is going

to accelerate over the next sort of three to five years.

And so the, I think, you know, in, in all aspects of,

of any business Now the question is, you know,

what is the impact of technology

and AI particularly, um, around that business

and how's it going to change that business?

Either, is it gonna produce new competitors?

Is it gonna produce, you know, um, efficiencies for

that business, new products

or all of, you know, all all of those things.

And, um, you know, so the first thing that we are seeing is,

I mean, and remembering

that pharmaceutical industry relatively stayed

and conservative in terms

of decision making, we just talked about that.

Mm-hmm. Um, but

where you're seeing technology applied already is around,

um, data analytics.

Um, and, and, you know, and, um, and,

and the analysis of data, um, is, is really, uh,

is really important in terms of the way you use technology.

So if you look at cog state business, you know,

what you can see even just at a, uh, at, at a sort

of glance at, at our businesses, our staff numbers, um,

you know, at COVID time we were around 200

or a bit, over 200 employees we're down to 160 employees.

We were doing 30 million of revenue then,

and we're doing 50 million of revenue now.

So the business is, you know, I is up substantially.

Um, but we're doing that with less people.

What, how are we doing that is, you know, essentially a lot

of our business has been coming automated in terms of

what we're doing, particularly around data analysis.

Mm-hmm. Um, and our expectation is that, that

that clinical trials are substantially going

to change over the course of the next three years.

Um, and we sort of, when we talk to people and I talk to people, I say three to five because if you say, you know, one to three or freaks people out.

Yeah. Um, but you know, honestly, we think it's probably, you know, one to three, but we say three to five, just so you know.

So everyone calms down a little bit.

Um, but this is happening quicker than I think most people appreciate.

Um, and, you know, so the, the question for us is, you know, what does that look like?

And so when we're talking about AI here, it's not really large language model stuff.

It's more small model stuff.

And so the question, you know, for our executive team is what does that look like in terms of what are we doing, um, to either produce efficiencies in terms of the way that we service our customers or to change our product offering, um, to customers? Hmm. And so I'll, I'll give you an example of, of what that looks like in terms of r and d spend for us. So imagine we are running an Alzheimer's disease trial, and Andrew, you are a patient and I'm a doctor, and I'm sitting here, and this is honestly often how it's done.

It's a telehealth type assessment sometimes,

but it might be an in-person assessment.

Mm-hmm. Um, in every situation,

I'll have a tablet computer in front of me

where I'll be running through the questions

and, you know, so, because largely these, um,

these endpoints are questionnaire type,

you know, it's a question and answer.

I'm gonna ask you a series of questions,

and through that I'm gonna try

and ascertain what your memory's like, you know, you know,

uh, how clearly you are thinking, how you can sort

of problem solve and aspects like that.

So different aspects of the way that you are thinking.

All right. So I'll go through that.

And cog state will have designed, um, whilst we don't own

the electronic data capture system, so we can talk about,

we should talk about that later, um,

we'll have designed those forms, um,

and we have this sort of, you know, this buzz staying of,

you know, um, that, um,

the good design is data quality, right.

That you, you know, so by designing your forms

and your technology better, you actually remove the,

the risk of error occurring in the first place, which is

what you're trying to do anyway.

Um, so say we're doing that assessment, right.

They'll also, that,

that have a computer will also be taking an audio

recording of the whole thing.

Right? Then I finished that assessment, we upload that

to the cloud on a, on a sort

of sampling strategy.

We'll have a percentage of those recordings reviewed

by another expert clinician really looking

to see if I made a mistake not to see, you know,

it's not really looking at what the patient's doing,

it's looking at what the doctor's doing.

Right. 'cause that's our job is to remove error. Yep.

Um, and so, and,

and so the, the human who's even more expensive than me will

be sitting there and reviewing this, looking for error.

And so say that assessment's an hour long,

you've got a second doctor sitting

and reviewing that for another hour.

Now we find quite a bit of error that way,

and it's a good way, but it's really expensive.

Mm. Because we, you're paying, you know, you're paying

for two doctors, right.

So, but what we've now got is thousands of these recordings.

And so what we've done is to build a model, um,

build an AI model where we can now,

and we'll be releasing this next month.

Um, we can now apply the AI to that, um, uploaded file

to look for that error

and identify which errors have been made.

Now, initially we think that'll be then directed to a human.

So the AO will say,

here's the five errors that have been made.

And the human will do a review of that. So Yeah.

Even at its first thing that's take going from say,

an hourlong review to maybe it's a 10 minute review.

Yeah. But ultimately we think the AI will be able

to just do this review,

and then you'll take that second human outta the loop.

Mm-hmm. Which means that you go from saying,

do doing say 20% sampling strategy

to let's just review a hundred percent,

but we'll just find the error as is occurring.

Ultimately, where we think you'll get you where you want

to get to is because when we are finding error,

it's after the fact.

And all I'm trying to do is say, let's not make

that error again a second time.

But that's already in the data set.

So we've already got that noise in the data.

In an ideal world, we find the error in real time

and we prevent it from happening in the first place.

Yeah. Ultimately, so what does the North Star look like?

What if we just had doctors who didn't make error,

who could do this in 30 countries?

You know? Well that's your, you know,

your AI avatar administration of these assessments

with no error in it, where you've trained the Al

to actually administer the assessment

in different languages, in different cultures to interact

with the patient as if it was a real person things,

but by reducing error.

Yeah. Right. That sounds like it's sci-fi, I guarantee you.

We're not far, we're not that far from that. Yeah. Yeah.

Yeah. We're living in the future.

Um, so, so within that context, you know, when,

when we look at, um, you know,

because Cog State, you know, has got, has, you know,

has over the last few years developed really, you know,

strong cash flows.

We've got a good cash balance.

We've got the ability to invest in different things.

We've looked at a number

of different investments over the last couple years,

and every time we look at these things, we go,

are we paying a premium

and playing goodwill here to solve a problem

that won't exist in three years time?

Hmm. Or, you know, to essentially to fight the last war.

Yeah. Right. And trying to think of a,

rather than looking at those kind of things,

where is this industry going?

What are the types of products that we can build

that lean into this future of clinical trials?

And really that comes back to an assessment of what are the

bespoke or proprietary data sets that we have

that we could train models on.

Right. That, that, that, that really

take cog state from doing what it was previously to

what the future of clinical trials is,

and how do we set ourselves up on that bleeding edge

of clinical trials and, you know, digital disruption.

And whilst that sounds quite different to the development

of, you know, computerized tests of cognition mm-hmm.

We look at it as like, that's just digital disruption of,

of an analog process.

Yeah. And, and that's what we're continuing to do.

It's just the technology is changing. Yeah. Yeah.

I, I'm gonna repeat another point

that I make all the time.

It feels lately. Uh,

'cause as I'm sure you appreciate,

Brad AI is the new black on the market and mm-hmm.

You see a lot of, um, I, I'll call 'em Affinity plays

and like, Hey, look, we're using ai.

Which, which is okay, good for you.

But I think what you hit on there was something

that's really interesting and,

and it's, it's reinforces my prejudice

and maybe I like it just from the confirmation bias point

of view, but, but anyone can use ai.

I've used AI this morning, uh, not, not that effectively

as it turns out, but,

but what separates what, what, what am I trying to say?

It's only a competitive advantage if you can exploit

that in a way that others can't.

Yeah. And, and what you are saying there is, it's just sort

of like, well, yeah, we can train up these models,

but it's the proprietary data sets that gives you the edge

as opposed to like, you give me a billion dollars

and someone says, right, Andrew, go

and spin up a competitor to Cog State.

Here's all the money in the world.

Well, I can build some tech

and I can do all of that kind of stuff.

but I won't have the data set

and it will take me a while to sort of gather it.

Am I, am I barking up the right tree there?

Yeah, a hundred percent. So what, what we are doing

as a management team is thinking around Yeah.

'cause one of the, the, uh,

and I think fair criticism with Cog State is that, you know,

or has been, um, you know, nice little business

where your mode, right.

What's the stop me from doing that other than, you know,

maybe the market's just not big enough to warrant me doing

that investment, which is also a knock on the business if,

you know, if your tans aren't big enough anyway.

Right? Yeah. Um,

and I think, you know, so as a management team,

what we've been really focused on is, um, you know,

when we think about what the future of clinical trials is,

I, we don't think this is large language models

where you scrape the web

and, you know, you develop,

there'll be some aspects

that'll be, you know, that will be helpful.

Um, but it's the small model stuff where you say,

but here's the proprietary data set that actually allows us

to, you know, it goes from that, that sort

of more generic product to something that again, is,

falls into this inch wide mile deep.

We are just gonna be really good at this and have, you know,

and, and, and build out technology solutions

that are really specific

to this one solution, but they're just much better.

Yeah. And, and that one thing,

and if we can be, you know, if we can be the best at

that one thing, you know, then the question becomes is,

you know, so okay, so you can build a motor around,

you know, you start to build a motor around that

'cause you have access to these proprietary data sets

and maybe there's, you know,

certainly our competitors would have access

to similar data sets.

But then, but, you know,

but if you are in a competitive environment of three,

that's, that's not a terrible environment to be in.

Yeah. Yeah. Um, and then the question is,

but you know, so you in a market that's growing

or shrinking, you know, and, and, and our view,

and I think this is actually relatively well accepted now,

is that central nervous system disease r

and d spend is just increasing.

And, you know, and it's projected to be

after oncology, the second largest area of r and d spend in the coming years.

Right. Um, you know,

and so if we can, if,

if we can be leading the technology charge in

that growing market, then, you know,

and from a, you know, for us,

what's a relatively small base, I think gives us lots of,

you know, upside and growth potential there.

I I love that you, you gotta skate to where the,

the puck is gonna be, as Wayne Gretzky would say.

Um, yeah. So, so, uh, I'm interested in, in where

the source of that confidence is

because there's, when, when you, when you frame it up

as you have, it's kind of like, yes, it just seems like a,

a lovely setup for, for ai.

But h how, how far have you progressed down that line

to know that well, not only is it a good,

it feels like a good idea, but we are,

we are confident it's a good idea

and that we can eventually sort of, you know,

signifi either significantly reduce the human

component or replace it all together.

Yeah. I, I think that, so there's a couple of things

that we've done internally that have really changed our, um,

both our confidence

and our ability to, you know, to, to leverage off that.

So the first is, it's almost coming up on two years now,

we changed our, uh, our technology strategy.

So we've had, um, up until a couple of years ago,

we had a fully in-house software development team.

Mm. Um, so both based in Australia and the us

and then we looked at it and,

and did that sort of critical analysis of ourselves

and said, is it realistic to think that inside, you know,

150, 200 whatever the cog state team is,

that we are gonna have the world leading, you know, Al i

engineers that are gonna help us really, you know, think

through not just what the commercial problem is,

but what the technology solution is.

Yeah. And, you know, there was no way

that we could possibly answer that.

Like, you know, even if, even if we stood back

and said, we can afford pay more than anyone

else, which clearly we can't.

But even if you imagine that hypothetical, you know,

how are we getting into the cold state?

I mean, what's, what's the big draw that, you know, says, I,

you know, I don't wanna work for open AI,

or I don't wanna work for Anthropic.

I think, you know, cog state's, the team for me, um,

you know, it just, that's just an unrealistic assessment.

And so we went through a, um, we went

through a full search process to understand

how we might put together, uh,

both a combined insourced outsourced, um, team

that would allow us to, you know, really leverage

what we believed would happen in clinical trials.

And so we, we, um, ended up choosing

and partnering with this company called UST.

Mm-hmm. So UST are headquartered out of Los Angeles, um,

but they're international, about 30,000 employees globally.

So they're enormous. Um, a lot of those employers out

of India, um, enormous engineering team out there.

Um, but they're working with, you know,

with the big technology players,

the big pharmaceutical companies, the big banks.

Right. They're so, so this is their model of, you know, we,

we're not gonna take over your whole thing,

we are just gonna enhance what you do.

Mm-hmm. Right. So we've, um, we've stood up,

so we've got two internal teams within Cog State,

and then we've stood up two sprint teams within UST.

And then on top of that,

what we do is leverage their thought leadership.

So they've got an AI team, um, you know,

they've got a data analytics team.

And what we do is we pick

and choose different, you know, different people to come in.

And so we are running these essentially a 12 weekly

innovation cycle, um, that we've been running, um,

for a couple of years now, where we sit down

as a commercial team

and executive team, we, we examine, you know,

what are the problems we are solving?

How are we solving that currently? Right.

What are our competitors doing?

What do we think an optimal solution?

You know, and sort of as you suggest

before, where's the puck heading

as opposed to where is it today?

Mm-hmm. Um, and, and we've,

and we've been able to think through that.

And so, you know, building out, for example,

an avatar patient

and avatar caregiver, the doctors can practice on

and to, you know, to display, um, you know, their sort of,

their expertise and their mastery of the assessments

that they're gonna have to conduct so

that they can convince the pharma companies that they're,

you know, they're ready to run these kind of trials is one

of the things that we've built.

And if you think about that, the mirror image

of building out the avatar patient is the avatar physician.

It's, you know, it's the same data set Yeah.

That you're leveraging off to do that.

Um, you know, and so it's that constant sort of thought

around, you know, what do we have, how do we make it better?

And some of that's just in internal things like, you know,

like tools to, around the scheduling of appointments,

you know, for, for our consulting clinicians

or, um, you know, an R-F-I-R-F-P tool.

So we get, we get these

RFIs all the time from big pharma companies who are going

through a vendor selection process,

and they, the responses end up being toured 300 pages.

They wanna see all your SOPs, all your, like,

it's really detailed stuff.

And we do probably four or five of those a year,

but they've taken, you know, they'd take, you know,

a couple hundred man hours

to put each one of those together.

Um, so we've now, but we've done a heap of them.

So now we've built a model

where the AI will do the first draft of that,

and then it goes into a review process.

Mm-hmm. So it's not all what's our new product?

Some of it's just how do we just get better at managing our

own business by leveraging stuff we've

done over the last 20 years? Yeah.

Yeah. Um, so the naturals, I guess follow up from that is,

um, I mean, you can't help

but notice looking at the recent results.

I mean, it's gushing free cash flow,

balance sheets in good shape board's, obviously happy to,

to issue a maiden dividend,

which is always a nice milestone to sort of reach.

And, and at the same time you're sort of saying, well,

actually no, we're gonna lean more into the r and d.

So it, it feels like that you're able to do that,

but in a far more, uh, capital efficient way than

what may have been possible in the past.

Yeah. Yeah. I think, I think when you think about

what we're doing, um,

because it's not, um, hardware based r

and d, you know, it's relatively low cost.

And, um,

and I think also, you know, leveraging off the expertise

of company, you know, a company like UST,

it's a really efficient

and cost effective way of building out

what we do, what we have.

And of course, we are not having to go

and recreate, um, you know, data sets, right.

That we are leveraging off that, you know, that work

that's been done over the last sort of 20 years that,

you know, that, uh, enables us to do that.

So yeah, the, the, the,

the constant question from our board is,

are you running fast enough?

Are you spending enough on r and d?

Can we do more, like, you know, you, we've got, you know,

36 million of cash at 30 June, 36 million us, which is what,

55 Aussie or something like that of net cash.

Um, and that's

after spending 5 million us on share

buyback in the last 12 months.

Right. Um, you know, so there's plenty of cash there.

Like, you know, if you spent an extra

10, would you go faster?

And it's, it's, you know, we as a management team,

we would suggest we're running as fast

as we can on these things.

And, and that there's also, you know,

there's risks you take in terms of, you know,

you're anticipating where the market's gonna go

or where the puck's gonna go as you suggest, um, yeah,

you are taking some degree of risk there.

So you do wanna Yeah.

Have a, you know, some sort of hand break on that to say,

you know, we want

to do something at a relatively affordable cost,

put it in front of some customers

and say, do you really like this?

If so, how do we make it better?

Um, rather than us thinking we know all the solutions.

II, I would put it to you that a a, a core, um,

importance to any entrepreneurial venture is, is

rapid experimentation.

Yeah. Rapid, but measured experiment. Yeah.

It, how else do you, the point of the market

Is, right? Yeah.

Is the test this classic thing, right? Yeah.

So do you have product market fit?

You know, what does that look like?

And the only way you really tell

that is are people willing to pay for

It? A hundred percent. I mean, that's

the beauty of the market.

Let's, let's not go into an Adam Smith. Um, yeah, sure.

Fanboy, but I mean, a hundred percent.

I a hundred percent agree with you.

This might be a good time talking about partnerships.

Do you wanna talk us a bit through the metadata?

Um, yeah, yeah. Partnership.

Yeah. So this, this is a really important one.

And again, this is all relatively new

and doesn't really reflect in the 25 numbers.

We're hoping it's gonna reflect in the 26 numbers. Yeah.

Um, so let's, let's just set it up.

So I let said

before, you know, I gave that example

of I'm giving the assessment, I've got

that tablet computer in front of me,

and I said, we don't own the electronic data capture system.

So we partner with different companies who do that, right?

So predominantly we've partnered

with a company called Clinical Link has been the,

the company we've worked most with,

but there's a whole bunch of others.

There's Spread, there's uif, there's Y Prime, we work

with all of these companies,

and we are largely agnostic as

to which data capture system we work with.

Metadata is just another one of those in that sense. Mm-hmm.

The difference with metadata is they're the 800

pound gorilla in the room.

So metadata are the largest providers

of these electronic data capture systems.

They, um, they were previously NASDAQ listed.

Um, they were acquired in 2019, um,

by a French company to so systems, um, for

around \$5 billion.

Um, metadata do something in the order of about one

and a half billion dollars of revenue a year,

all in this clinical trial space, right?

So they'll claim to have something like 80%

market share on oncology.

Um, so they, you know,

so they're the big player in this space,

but they've never worked in central nervous system disease.

And so the obvious question is why not? Right?

So, and I think to understand that you've gotta understand

that metadata are a, a pure technology play.

And so they're valued as a SaaS business.

And for anyone who's been lucky enough

to run a SaaS business, what you'll understand is

that you don't want your revenue profile sed

by dirty services revenue.

Right. You need to keep that pure sa nature to it,

if I'm gonna keep this ridiculous valuation

that people are affording me, right?

Right. And

so if you wanna move into central nervous system disease,

you've gotta do this kind of work that we do.

Yeah. Right? So metadata just said, that's all too hard,

we're just gonna leave it to the little specialty companies.

And also, if we look at the total r

and d spend, it's not like

that's an enormous part of the market.

Well, that's changing, right?

So there's two aspects

that are changing from their point of view.

They're getting to market dominance in other areas.

So where do you get growth when you're the dominant

player, right?

And then CNS is growing at a rate that's now

almost impossible to ignore.

So from their point of view, how do we move into central

nervous system disease?

And so to do that, what they've done is partner

with Cog State, so we're, we are gonna help them,

they're still gonna do just their pure technology play,

but we are gonna wrap around all the types of services

that you need, the design of the forms that go into the,

you know, how they present and their electronic data capture

system and those kind of things such

that they can now push into CNS disease.

And so for us, what, you know, from a, as a management team,

what we look at as a business that we think is in good shape

and the financial model stacking up, you know, we've got,

you know, sort of 60% gross margins, 30% ebitda,

25% EBIT margin.

So the business is looking in good shape.

The real question is how do you add scale to that now?

Mm-hmm. Right? And if you add scale,

do you get even further leverage over opex?

Mm-hmm. And, you know,

and so for us, it's really looking at

that metadata partnership and the,

and just their breadth, um, in terms of the, the, um,

uh, the, the customer base and, you know, and,

and their exposure to the market.

Um, that'll, that we are looking to leverage off to

increase our market share.

Oh, I love it. I love it.

Um, what I'm gonna do, actually, Brad, is I'm gonna throw

to some viewer questions now,

because if I don't, we're gonna run out

of time and, and time is Sure.

Time is rapidly running out.

Um, I'm just gonna go top to bottom, everyone.

So just remember you can vote on these questions if you

prefer me to ask one over the other,

uh, first one from Michael.

Um, the types of trials cog state is winning have shifted a

greater mix of smaller and more diverse studies

with quicker revenue recognition.

The metadata partnership may be

contributing to this trend as well.

Is it fair to say the business has become less lumpy

compared with a few years ago?

Uh, look, I think so certainly we've seen

that it shift in the 25 year.

Um, interestingly, I, I think, uh,

I don't know whether people are like this or not,

but you know, it may shift back a little bit in 26.

So we've got visibility to, you know,

some larger opportunities in 26.

We, you know, um,

and some sort of phase three Alzheimer's things coming

through, that'll mean that, you know, I think you,

you do see that lumpiness,

but I think, you know, what we're, what we're seeking

to do is really, um, obviously expand beyond, you know, the,

these inherent, um, uh, a concentration in cog state,

you know, around Alzheimer's disease.

Um, and then because we've got concentration in Alzheimer's,

you've got customer concentration as well

because, you know, that really leads to the big spenders in

that, in that space.

And so obviously what we want to do is expand.

So expand indication, expand sort of outside

of Alzheimer's disease.

And I think we've been successful in doing

that in the 25 year.

Um, I think what'll be interesting is, you know, sort of

what are those sales bookings

that those sales contracts look like in 26?

And I think the other aspect there is that whilst we've seen

that good revenue growth, I think

to the extent there's a knock on the business.

we haven't seen that growth in sales contracts.

Um, you know, so if you go back to the 22 year,

we had 82 million

of sales contracts over sort of 40 million of revenue.

And then since that the, for the last three financial years,

23, 24,

and 25, our total sales contracts have actually

been less than total revenue.

Um, so we are looking for that to reverse in the 26th year

to get, get back into that real growth phase in terms

of sales contracts.

And part of that will come from some of these big studies,

which kind of reverses that question for Michael.

But, you know, I think that's it.

It's inherent in what we do.

Yep. Yep. Nice. Um, uh, next one.

Roche recently began recruiting

for a pre-screening study called Traveler

to help identify potential patients

for future Alzheimer's disease trials.

Do you see studies like this as a strong signal

of large farmers' commitment to con

to continued investment in Alzheimer's drug development?

Who's that question from? That's a

remarkably insightful question.

It's, uh, it's Michael.

Well done. Michael. Yeah. Um, so the Rose traveler study.

Yeah. So, um, so we are working on that.

Um, we, um, um, yeah, so I'll, I'll sort

of hedge my words carefully here in terms of

what I can say publicly versus what I can't say, but yeah.

So our digital assessments are being used there as a way of

identifying people in the community

who may benefit from clinical trials.

One of the big issues around clinical trials,

and this is changing, um, in terms of Alzheimer's trials,

is the ability to find people in the community

and to separate them into the right sort

of cohort of patients.

Um, and so,

and so Roche has been quite active in terms of trying

to use the combination of blood-based biomarkers as well

as digital assessments to, um, to push into the community

and find really, you know, what does that cohort

of patients look like.

Mm-hmm.

We've got some smart cookies in here, Brad,

Apparently, Yeah.

Um, You can just hit me up afterward.

If you're looking for a new job,

You go, that's high phrase.

Indeed. Um,

here's one from Sue Cog State stepped up its investor

relations activities recently.

Mm-hmm.

Um, have we allowed us swear on this podcast? You

Sure are. Anything goes

Because, because largely we've been a bit s**t at it, um, up until now.

Um, and look, I think the, so that's the joke answer, but no, in all seriousness, I mean, we've always, I've always had the view of, um, and probably misguided of that.

You can spend too much on investor relations if your business isn't ready to talk about.

And, you know, and, and, and then certainly had enough a, a little bit of a view of, um, if you just print good enough numbers, the market will will get there eventually.

Now I'll accept that that's not always true and that you do need to market these things, um, more so than just go and print some numbers.

Um, but we all, you know,

but we feel like the business is getting to a size and a scale that it now makes sense to talk about it.

You know, I think we would be, we would openly say that yeah, cogs Search's been listed since 2004.

Mm. Um, you know,

and listed when it had, you know,

less than \$150,000 of revenue.

Like it just shouldn't have happened,

but it does in this sort of public market, public VC market that we have here in Australia.

Yeah. Um, but we would suggest that it's now at a stage that you would otherwise maybe consider listing it, um, you know, either now or in the next couple of years.

And so it's probably, you know, really only starting to get to a stage where, you know, it warrants talking about, and, and there's more than just a niche group of, you know, rusted on people who would really be interested in hearing about.

Yeah. Yeah. Um, that makes perfect sense.

Although I, look, I, for one, um, wouldn't dissuade you of your original, uh, perceptions of it.

Not, not that I'm saying you should not do investor relations, but we, we do come across a lot of companies who focus too much on investor relations and not enough on the business.

So, I mean, there's, there's a balancing act, right? Yeah.

Yeah. Um,

Yeah. I, I will.

Um.

so just whilst we're talking about investor relations, um, just do a little plug for our shareholder day.

We are running on the 7th of November. Oh, yes.

So there's an in-person day in Melbourne.

So we are going to have the COO of Medidata.

Joe Schmidt's gonna come out in person to talk about who is medidata, why are they interested in CNS, why they partnered with Cog State.

Um, we've also got an ex, um, executive from ELO Lilly, um, who'll be coming out in person.

Uh, she was one of the co-sponsors of the decision to appoint Cog State as the provider

and Lily, um, she'll talk about, you know,

why they chose Lily, uh, why they chose Cog State,

what it is that Cog State does to, you know,

help them in their trials and things like that.

So if they, and,

and really this is about this sort of understanding of,

'cause we're still trying to get over a little bit

of our origin story of Cog State.

They're the people with the computer tests, right.

I'm like, well, we are,

but it's, you know, that's what we were in 2004.

We're, we're guite a bit more than that now.

So let's sort of describe to people what it is we do.

Yeah. Great. Great.

Um, I'm gonna ask this question, um,

but in in advance, I know

that there's not much you can say, but I'll do it anyway.

Um, do you think Medidata would ever consider

acquiring cogstate?

And if so, what would they be looking for?

Maybe? I mean, I think it's, um, it's a good question

and I think, and, and it's a logical question, um, we're, I,

I think the first thing I'd say to that is

that cog state's really well positioned defensively, um,

so much stock held around the boardroom table

and with sort of, you know, friends of cog state as it were.

Um, that, you know, any approach would have

to be a friendly approach, um, as a board

and a management team, we're open to, um, you know, m and a if that is in, if, if that's the best way

to create shareholder value.

Yeah. Um, and you know,

and we would consider any sort of bid like

that on its merits, um, in terms of whether that's something

that medidata would do, I can't really talk to that.

And that, and, and also I think that, you know,

there's a trap that you can fall into.

I mean, we've had these discussions internally

and you, you really gotta be careful not

to run a business for sale.

I think, you know, and,

and what we would say at the moment is that, you know,

we're just getting started on this, um, on this Al journey.

We think there's, you know,

C-N-S-R-D spend is just increasing.

We see, you know,

substantial growth in our business as it is.

Mm-hmm. And what you don't want to be is the guy

who sold the business just before it really took off. Yeah.

Right. The guy who left the Beatles

before they made it. Right. Yeah,

Exactly. Right.

I mean, I think you've, you've, you know, um,

so we've, we've gotta manage that.

We've gotta manage that fee. Agreed.

Kind of, you know, paradigm around what's the,

what's in the best interest of our shareholders

and you know, and maybe one day that'll be an acquisition between the us we've gotta align so much in terms of, you know, the acquirer's gotta be interested.

The market generally has to be Right.

You know, the re the recipient company price

Has to be Right. Right. Like,

you know, yeah. All

Of those things have to play out.

Yeah. A hundred percent.

It's almost old fashioned these days, Brad, to sort of suggest that you might want to run a business for the sake of the business itself, rather than, the only reason you start a business is to pave the way for a lucrative exit for insiders Like it something to be said.

I think we, we corporate,
the corporate world may have lost its way a little bit
when, when the Yeah.

The car goes before the horse, you know? Yeah. No, But if, if you're running a good business that's creating value and you can then, you know, and you can exit that at a, at a substantial premium for your shareholders, that's great. Sure.

Yeah. Yeah. Right. But equally,
But as long as, my point is that, as long as
that's not the only point, I'm just gonna, Dr.

I'm gonna, I'm gonna put lipstick all over this pig just 'cause they're gonna look really great and then I'm gonna sail off into the sun set

and it just, I only mention it 'cause it's so common.

Yeah. The question we've got as an exec team is

how do you go from, you know,

so we're at 53 million US of, of revenue.

How do we go to a hundred US of revenue?

And how quickly you can do that, you know, how do we, um,

how do we increase, continue to invest in technology?

So we move from, you know, at the moment, 24% of our revenue

or license fees, we'd like to see that move up

to something like 30% of revenue at license fees.

If you're at that kind of level, is your 61% margin,

can you get that to maybe 65?

Yeah. Right. And then

what does your leverage over opex look like?

You know, so can you get that 30% EBITDA margin up to 40%,

um, or something like that.

Right. They're the questions that we are focused on if,

if somebody thinks that's valuable and they want to come

and make us an offer that great. Yeah.

Yeah. Fantastic. Excellent answer.

Um, what's the update, oh, this is from Sue as well.

What's the update on Cog state's GP slash consumer app?

Can you expand on the competition in the US

direct to patient space?

I've noted that Cog Drisk is getting mainstream media

attention in Australia.

Yeah, so I think it's a really good question, Sue, and I,

and I, I'm gonna disappoint you

and say, I don't really know what the answer is here.

So we, we partnered with aci, um, we

to take our computerized cognitive assessments

to primary care physicians in the US and globally.

Um, the reality is I think that didn't work so well.

I think partly because the, you know, the prescription

of Alzheimer's drugs is not really a primary care

physician thing at the moment.

It's a specialist clinician thing.

And so, you know, we had a solution

for a different part of the market.

Um, so we've essentially brought back the IP there.

Well, we've brought it back in the sense

of receiving less in terms of future payments.

We didn't give back any cash, um,

which gives us back our ip.

Um, but it then also puts the pressure on the management

team of what you're gonna do with that.

Mm-hmm. Um, and you know,

and I don't really know the answer to that.

Um, you know, we've had conversations about whether,

you know, is this a, is it a tool for gps?

Is it in fact a tool for consumers?

Like, you know, would, should we be offering,

because we could today put a cognitive assessment on your

phone, Andrew, and you could sit at home and do a cog

and we could say, you, this is how you could compare

to your, you know, age-based peers.

And if you've done it more than once, this is

how you compared to the previous results you did.

We could do that today. We've got the technology

and we've got the science that could do that.

Mm-hmm. The question is what do we do with that?

Um, you know, so what do you

as a consumer do with that information?

And the second thing is, how do we monetize that?

You know, is that we're gonna ask you pay a dollar every

time you do an assessment, and are we gonna really launch a

direct to consumer campaign?

Um, is that what that looks like?

Um, and then one of the things we've been thinking about and

and that's really influenced by the amount

of work we've been doing around AI

and proprietary data sets is what, what if we partnered

with, you know, the Alzheimer association

or with a payer system, right?

Maybe what if we went to the US

and we partnered with Kaiser Permanente

and said, we'll, white label this for you.

Get all your, all, all your members

to do a cognitive assessment as part

of their annual sort of process.

Feed that into your, um, electronic medical records

and we'll give you all that for free.

If we can have access to this database, that allows us

to then think about how do we provide insights for you?

How do we help you to better manage the care

of your patients long term to reduce, you know, to,

to focus more

around healthcare rather than, you know, sick care.

Right. Which is what the healthcare system does at the

moment is manage people who are sick.

What if we, what if we flipped that

and gave you information that allowed you

to manage their health

and to prevent them from getting sick?

And what would that do in terms

of reducing your overall costs?

Mm-hmm. You know, and this is no, like,

I'm making all this up.

I'm just spitballing. I'm not

saying that's what we're gonna do.

Yeah. I'm just saying that we don't really

know what the answer is.

And partly that's because we don't

really know what the solution is.

Our expectation is that Alzheimer's disease

treatment will move from current dementia patients to people

who are pre dementia.

Right. And then you're, you're moving from people who are 70

or 80-year-old with dementia to 50 year olds who, you know,

are no longer in the US in the Medicare system,

but they're covered by employer sponsored

healthcare and things like that.

And you're, and you're trying to move them from

someone who's going to get sick in the next 10 years

to let's stop you from getting sick in the first place.

And then within that context,

what's our role in facilitating that better healthcare?

I dunno the answers to those questions.

Yeah. Yeah. I mean, part of the experimentation, I suppose

that, that will occur.

Um, yeah. Great answer.

Um, uh, we, you, you touched on, uh, competition earlier,

Brad, there's a one from Cleo on that.

Um, are there any competitors

who go head to head with Cog State?

So you, you said there's two other major ones there. Mm-hmm.

Uh, in, in, in the particular context here in the sense

of the user picks one or the other.

Uh, if, if there is a direct competitor, who are they

and what share

of the global market have they got compared to Cog State?

So I guess just a general question on

who are the other players and

what's the market split look like?

Yeah, so, so there's, as I said, there's really two in

that clinical trial space.

So one's called Sign Health and the other is called clario.

Um, and they both have,

they're both larger companies in Costone.

Uh, they both have a much broader offering than we do, so

that, you know, we are, we are much

more niche than they are.

They're, they've, they've got a broader focus all around clinical trials.

Um, but, you know,

but as I say, broader than we are, um, you know, so we would suggest that we are probably the smallest player out of the three in that space.

And part of that is to do with our niche focus,

but part of it is we are just smaller

and, you know, perhaps a little newer.

Um, they're both, um, PE owned, um, both in America.

Um, you know, there,

there's been talk over the last 12 months that, you know, maybe both of them are looking at, um, you know, some kind of IPO process, you know,

but you know, a as you guys will be well aware, the, you know, IPO Windows haven't exactly been open over the last couple of years, so, um, you know,

I think it'll be interesting to see

how they play in the next couple of years.

Yeah. Excellent. Um,

what regions does Cog State currently draw its revenue from, and what regions does it see it contributing the most over the FY 26 to 28 period?

Um, so most of our revenues outta the US and most of our customers outta the us so it's US or Europe.
Um, I think what's gonna be interesting over the next few years is, um, what does APAC look like?

Mm-hmm. Um, so I was at the Alzheimer's Association meeting

in Toronto in July, um,

and there was a lot of talk about drug discovery coming out

of China, um, and expectations

of inly assets in outta China.

I've been to China twice in the last month, um,

where the conversation's been flipped, where there's a lot

of these Chinese biotechs talking about, you know,

focusing on out licensing assets

after phase two to global pharma.

Um, we think that'll be a real thing.

And so we are trying to work through at the moment,

what does our APAC strategy look like in terms

of servicing those customers?

Can we do that from, you know,

Australia's relatively well positioned to service things out

of, you know, Japan and China.

Um, but, you know, do we need boots on

the ground and what does that look like? Yeah.

Great. Uh, one last question from our, our viewers

and then, and we'll start to wrap it up.

Um, uh, speaking of takeovers,

the company did have a takeover interest in the past,

but nothing was announced until

after the share price sort of reacted when the,

when the takeover didn't proceed.

Uh, why was that?

Why would, didn't we announce it?

So, I mean, essentially

because it wasn't, um, you know, it wasn't in the form

that wasn a announcable, it was still, there was still a lot of things under discussion.

So we were, we, we went through, um, a diligence process.

We'd had, we had agreed a price, um,

but it, you know, was still subject

to review internally from the, from the acquirer ultimately.

Um, you know, the acquirer decided not to proceed.

Um, and so, you know, and we didn't announce anything.

Um, you know, there was, you know, concern that there was at least, you know, there was some market talk around what was happening, and so that's why we had

to announce it after the fact.

Yeah. Um, less than ideal. Yeah.

Yeah. No, fair enough. My head's spinning actually.

Um, there's a lot to to digest here,

but I guess I'll, I'll put it to you, Brad.

What's, what's, you know, the top one

or two sort of takeaways you'd like investors to sort

of draw from, from this conversation?

I think if you're looking at cog,

say from an investment point of view, I, I, I still think

that the key metric, um, is, uh,

is growth in sales contracts, right?

The revenue, just, you know, we are running a pool of say, a hundred million US of work at the moment moment,

and the revenue just flows from that.

Yeah. You know, so your lead metric is still the sales contracts, and as I say,

for the last three years they've been below revenue.

I think, you know, as an investor

and as a management team, what we're looking is

for growth in those sales contracts.

Um, so I think, you know, so I think look for that.

Um, I think everyone is, you know,

rightly focused on the metadata relationship

and what, you know, how's that gonna play out,

and is that gonna give us, you know, increased market share?

And I think, um, you know, we are really hopeful that

that 26 will start to see that play out,

and I think that provides a lot more growth into 27 and 28.

Um, as said, I think the real thing for us is, you know,

can we go from 50 million of revenue to a hundred million

of revenue as quickly as possible?

And, you know, and what does leverage over opex

look like in that business?

And we think it'll be substantial.

Um, I think they're probably the, the, the three main, um,

three main takeaways.

Yeah. And then I suppose if I had

to throw in another is just, you know, what,

what does happen in Alzheimer's disease in terms of, um,

data readouts

and, you know, do we move into

that much earlier patient population

where we're talking about managing health rather than

managing the decline of people who are really sick?

Um, and we are really hopeful in the next 12 months,

we start to see some data that supports that.

Um, and then I think if that's the case,

Alzheimer's r ds changes forever for the better.

Yeah. Gosh, it's, it's an exciting time

and, um, I'm, I'm so, um, really appreciative

of your time in explaining and laying this out for us.

Um, just remember us, when, when you're,

when you are a much bigger company, we, we, we, we,

we were interested before it was cool.

Um, but other than that, Brad, we,

we won't leave at 18 months for the next one

because it is such a, a fascinating story.

And, and I can tell you there is a lot of support

amongst our little group for the business

and yeah, we wish, we wish you well for, for yourself,

for the shareholders, and also

for the people suffering from these,

from these terrible conditions.

Thank you Andrew. And I do really appreciate your support

and, um, you know, and I know a bunch

of the people on this call have been long time supporters,

so, um, yeah. For thank you all.

Excellent. We hope, We hope we'll, uh, you know,

you'll be rewarded in the, in the shorter term.

Awesome. Well, we look forward to to,

to staying abreast of it all.

Thank you so much for your time, Brad.

Thanks Andrew. Bye-bye. Cheers.