Propelling satellites and ourselves: An interview with Tom O'Sullivan

Paul Ferretti spoke to Tom O'Sullivan, CEO of Animus Bytes, about the UK geospatial tech industry, learning from your mistakes and doing something you believe in.

Why are you calling on the UK Government to invest over £100M in a publicity splurge to raise the profile of geospatial tech amongst entrepreneurs ?

There's a huge amount of heritage, provenance and expertise in the UK's geospatial sector, not least of all in our armed forces. _The Royal Air Force_ specifically has extremely well-developed roots and careers, and their output is highly regarded amongst the UK and the US.

We're in a place where the world really matters, but equally, the data we can get from places on the planet really matters. And yet, even at a governmental level, we've got this consumerist attitude to that data, where we're prepared to buy it at an extortionate rate. And sometimes, we're prepared to buy it at value-based levels, but at others we're paying a premium for it – when actually we could grow it ourselves. For me, that's what intellectual property is all

about.

If the UK wants to sit on its own and has decided to vote its way out of the EU, then that's great – let's follow the democratic trail. But the thing that we should really be worrying about is our home. I don't want to force this down anyone's throats, but we have the pedigree, the history, the experience, and the skill set. But this will just fade if no one invests the money. I think the real issue is that there is a lack of awareness of who and what is available in the UK right now.

A little bit of cash could put us on the world stage against companies like *Maxar*. It's a matter of it not being a huge issue to put some cash in and see a huge amount out the other end.

So you're trying to convince them that the money they'd invest would be worth it?

Without the money, geospatial tech will just become a diminishing factor in the UK's technology sectors. And I actually think that we could argue the UK is failing to invest enough in technology as a whole. Geospatial technology is one of those huge sectors that would allow the government to practise what they preach: understanding and acting on information derived from real stuff – demographic data, satellite imagery, fishing, farming, borders, and so on.

What exactly is the UK Geospatial Strategy for 2030?

I think the real questions for you should be: who's the arbiter for that investment? Are we looking again at a government spend that's already earmarked?

We could spend the cash, we can earmark it, and we can make it accountable. But is it really in the UK, or is it in the UK defence industry?

I ask those questions – and I might sound hugely pompous having done so – but there doesn't seem to be any huge structure behind the strategy. There isn't any substantial framework in its promise to make the UK openly accountable and to introduce the investment of that cash.

It just feels like another huge, big-hand strategy; and yet, in my own mind, I can defend it by going, "well, maybe that's what I'm looking for!" I'd like to

have those questions answered because, if we are both trying to do the same thing, then that would be amazing.

Let me help you! Who do I need to speak to to transmit the information I have and make a meaningful impact on where that money goes?

How can startups and entrepreneurs help the British government achieve their goals?

I think it's a question about innovation. And actually, it's not on one person to force their opinion onto other people or to convince them. We fundamentally live within our brains. Our entire reality is subjective. We have no objective understanding of what it's like to be another person. So, to get all furious about a person missing the point is kind of missing the point itself. We should maybe ask the other question: "why do I feel so opposed to something, and what context am I missing?"

But if we absolve ourselves of that responsibility for a moment, I think innovation is really the core of this question.

A startup, by definition, is a spaceship doomed to crash. Anyone who's evangelising their startup or their new business otherwise is totally insane. But for those who are doing it 'eyes wide open' or have maybe done it a couple of times, they understand that the numbers just simply don't add up. The probability is you're going to spank into the ground in a huge explosion, but we live in a country where, if you walk away, you'll absolutely live on.

How amazing – and what a rush. Accelerated innovation only takes place with a huge amount of risk, and startups are an absolute firecracker to promote innovation that would help the government.

I think the UK government has always understood that they need those firecrackers. With entrepreneurs and their startups, they can make catastrophic mistakes, pick themselves up, and go out and do it again.

It's societally a good thing that these entrepreneurs don't work or try to work in a corporate environment that will cause pain and trouble. If we take enough of these people, with enough good intention, motivation, and application, and throw them at a wall, show them that we can do that a couple of times without completely destroying them, then we're going to see some gold.

I think it's just the natural order of things. The government benefits from these ideas, and also through patents and British licencing. I think it's 'eyes wide

open' from both sides. I hope it is, because if there are any entrepreneurs going out there who do not see that the odds are stacked against them, then I think they need a therapy doll.

So is it risky to start a business nowadays?

It's about what you value. What's risky about starting a business in the UK? You end up with no money and no business. No one's going to come and cut your head off.

Actually, the biggest risk is that public speaking is one of the English people's worst nightmares. Worse than death! Many people are more concerned with humiliation than they are with living. So, they would rather conform and have an average life than do something they believe in and risk someone humiliating them over it.

The biggest risk of screwing up in your startup is you have to start up again.

As long as you can maintain your humanity, no one else has to suffer because of your trial and error. And most importantly, we don't learn anything until we mess up. Failure is the greatest teacher. Fail as often as possible and come out the other end richer. Maybe a bit bruised, but that's progress.

You've got to screw it up, is my advice. Do it when you're young, and you have lots of energy.

I've screwed up so many times. As a young kid, I was expelled from school twice. I was literally considered to be some sort of failure by my teachers in all the schools I've been to. But living that misery was a blessing in disguise because when I went out into the world, my status quo was failure.

I realised very early on that there were some brilliant people who would never apply their brilliance because the most terrifying thing in their life was failing. I see it a lot with overachieving people who have had a wildly successful education, maybe in Oxford or Cambridge, maybe through a PhD. They then got some great executive jobs where they're heading up some massive technology project. But when you tell them they could do so much more, they often just go, "no way, too risky, can't mess it up."

As Jean-Jacques Rousseau said, we're born free and forever in chains. We create our own prisons as human beings.

And, I know I'm borrowing other people's words, but I believe that. I see it all the time around me – and I think that's a shame. If we all understood how

freeing not just failure but occupying a space of your choosing was, worrying slightly less about what everyone else thought, then progress would come a lot easier to the human race.

We wouldn't be sat here with such disparity in wealth. We wouldn't be sat here massively concerned with how we're going to convince someone to stop screwing up their own planet.

Is the UK collaborating with the European Space Agency or has Brexit made things difficult?

We can buy products from the _European Space Agency (ESA)_ regardless of the British government. The danger is people becoming apathetic to the fact that the British Government just aren't having those conversations.

They understand that British business is just going to circumvent them to talk to people like the ESA or private companies who have geospatial satellites. It would be great if they would see the value in that relationship.

I'm pretty confident that there are a lot of scientific advisors hanging off the coattails of ministers going, "we have a space agency just over here, we could do all of this amazing stuff. If it's about priorities, this is the highest priority; and if you don't listen, I'll just get louder."

It's not because I want to bang my own drum; it's just that it would be a criminal waste of energy, human resources, and experience if the UK didn't utilise its own sector.

We can buy satellite data from the US, but who knows what the checks and balances will be? For example, if the US was able to buy satellite imagery at zero hour, as in the moment it's taken, I would assume down the line they would say: "right, other countries can have the six-hour-old stuff because we want the latest, because it helps our military industrial complex."

It becomes not secret but controlled information. And I'm in danger of walking down some sort of conspiratorial side here. But it's business. The US values that stuff for a really, really good reason.

I think we all have our union. We don't need a passport or the government to tell us what our union is. I'm still able to go to the lakes in Italy or Tarifa and kite surf with a Hispanic hippie. No one cares – and that's great. That's what is wonderful about the human race. It's just about making your way through, even at an individual level, but also at a community level. You deal with the

constraints; you work around them. Brexit is just one of those.

Could you tell our readers more about Animus Bytes?

If my life was a novel, it'd be a dark comedy. Having catastrophically left a business that I started, I swore to never to start another business again. Then life laughed in my face and put me in a position where someone went:

"Hey, Tom, we really need some help with some software."

And there's that little voice again. It's always, "why are they talking to you?"

So, I was like, "okay, so what do you need?"

And they said, "we would like you to do it."

That's how I found myself in a place where I had an opportunity to start another business. The universe is conspiring to look after me despite my best efforts. So, I sat back, and I thought about names. Animus is a reference to some of Carl Jung's work, as in the Anima and Animus.

I had this other opportunity, and I was put in a place where I had choices. And my answer to that choice was to start the business. I could have done it in a lot of different ways; but I promised myself that if I did this, I wouldn't want to start lifestyle business.

There's enough lifestyle going on, so *Animus* had to have meaning. And, whether I was the only one who thought it or not, I wanted it to be something that could incrementally solve more complex problems.

Communication is the art of getting your point across. For example, the Americans and the Brits are cursed by the fact that we think we share a common language. We don't.

We use some words that sound the same but have very, very different meanings. I want to take Animus to a place where we're solving very complex problems that are very meaningful in their output. But we've got to get to know people. It's going to be a long journey. And that was really, I suppose, the challenge to myself.

We're now in a place where Animus is getting to know people. We're starting to solve those problems; we're starting to understand what they really mean – and what the real trouble is. Because we've all got our subjective reality, I'd like to get to know other people's reality and find out what the common theme

is. And perhaps we'll finish doing something that really matters.

Migrant Watch, is an application developed by Animus Bytes that pinpoints the real-time location of vulnerable migrants in need of rescue at sea. You display a real anthropism and a liking for human kindness. What in your journey has led you to embrace such values?

I kind of engineer my way out of stuff here and there – and some of the things I build, I might just build for myself.

But, I need that relationship with someone to understand what their problem is and to really dive into why it's important to them. Migrant Watch is a result of a conversation with an analyst who was working on trying to identify areas of concern for migrants and their positions. And it took maybe 45 minutes of his time to describe it to me. For me, it's like, "why is this a problem? How can we hook up the ships to find these people when we don't have a latitude and longitude for them?"

But we've got all this other data, and we're figuring it out manually. We're watching Tweet Deck. Literally. We're looking for tweets of migrants in danger, and then we're trying to locate where they are.

Some meaningful problems aren't very sexy, but they really help – and they're human-focused. I could have dedicated a week of my time with analyst who's working on a problem just to ask, "does this help? It's commercially invalid. It's the worst business decision anyone could make." But hey, I'm that guy – and that's how Migrant Watch came about.

Is there someone who inspires you?

Human kindness inspires me. Everywhere I've been, everywhere I've travelled, the people who have helped me had no good reason to help me. It's often been a total stranger who's done something meaningful for me, and then left without me having the opportunity to say thank you, or to perhaps relay to them how

meaningful that action was.

The spirit of that, whatever it is, inspires me. I think, fundamentally, people are good. I don't particularly want to talk about it, but if we went to Palestine or Israel, we'd find wonderful people – and some mixed-up messaging, for sure.

But we'd find peace anywhere. I've been to some of the "worst" places on the planet, according to lots of people. But I found some real beauty and kindness, with people just making do, smiling and coming to help. And that inspires me because I feel that as well; I try to give that to people when I can. For all the naysayers and the negativity, we live in a place where, despite lots of suffering, people are still kind. We should respect that.

Tom O'Sullivan is the CEO of _Animus Bytes_.

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