accenture

A Walk in the Cloud

Accenture, Microsoft and SSE: A greener future

Ellen Bencard, Walk in the Cloud Host

Ellen Bencard leads Accenture's marketing campaigns in the UK while also managing to nourish her journalistic roots as an established blogger on the arts, travel and fine dining. Her corporate work usually finds her behind the scenes, coaching her team to bring together big ideas, insightful commentators, exciting events and innovative channels in ways that inspire prospective clients. But this isn't the first time she's stepped into the limelight to show off her training as a reporter, writer and presenter. She's anchored a web-based YouTube series for BT called Top Tips for CIOs and was Northwestern University's on-site media spokesperson at the Royal Wedding of Prince Harry and fellow alumna Meghan Markle. Born and educated in the American Midwest, Ellen's lived in the UK since 1999 and is a proud dual citizen.

Matthew Higham, Chief Digital Officer, Microsoft UK

Matthew Higham is the Chief Digital Officer for Microsoft UK and the Sustainability Lead for Enterprise. His role centres around creating market disruption through deep partnership with customers. He is a passionate leader in the use of technology for social good and to working in harmony with the planet and its resources, its resources while securing a more equitable future for all. Matthew leads co-innovation to create market leading solutions working alongside Microsoft's product engineering and Research organisations to bring science based impact & transformation. He also sits on the techUK Climate Strategy & Resilience Council which provides strategic direction for all industry activities related to climate risk, resilience, energy transition and net zero carbon.

John Downes, Director of Engineering & Innovation, SSE Renewables

John is Director of Engineering & Innovation at SSE Renewables where he leads the renewable engineering centre of excellent responsible for all engineering activities across the company's project and operational portfolio. This includes establishing appropriate engineering design teams across the project development and construction portfolio to deliver engineering design and assurance activities and providing engineering support and asset integrity management across the renewable operational portfolio. John is also responsible for the delivery of digital innovation across the business.

Previously he held the role of Director of Engineering within SSE's Wholesale business and has had various operational and engineering management positions prior to this. He is a Chartered Engineer, Fellow of the IET, has an Honours degree in Electronic Engineering from Birmingham University, and a Masters in Business from Henley Management College.

Intro: Walk in the Cloud.

Ellen: We all get by with a little help from our friends. And that applies as much to big organisations as to people. This is Ellen Bencard. With the first episode in a new series of Accenture's Walk in the Cloud. This time I'll be digging into ideas or services that have grown out of partnerships. They all live in the cloud, they're all transforming our world. Yet, none of them would've happened if the organisations behind them had been walking solo.

Today, we're going to be exploring technology's role in creating a greener future with two friends of Accenture. Matt Higham joins us from Microsoft and John Downes from SSE. Hello, both.

John: Hello.

Matt: Hi.

Ellen: So what happens when the world's largest software company and a multinational energy company and Accenture get together to tackle decarbonisation? I hear that they try to save the world. So Matt, let me start with you. Why is going green, such a big deal for you?

Matt: It's entrenched in every being and every part of our mission statement as an organisation and the culture that we see ourselves as a technology platform company. We feel that we have the opportunity as a global player to really harness the power of technology, to make the world a more sustainable place and to improve our sustainable future. And that includes economic sustainable growth.

So working in this way feels to us that in partnership it with other organisations that have similar mindsets, cultures, morals, and ethics around this subject particularly, is the only way forward because we don't have all the answers. But we very much love the partnership that we've been building with SSC and Accenture, hopefully it paves the way for other organisations to follow.

Ellen: Now, let's take a look at, at SSE. Now, it's a company working hard and investing big to become carbon free by 2050. Now, most people would think energy companies are at the top of the carbon production scale, John Downes. How do you make a shift that big?

John: Yeah, no, absolutely good question. SSE is about providing energy people need today, but it's also looking to the future and how to achieve this net zero world. And as you say, a utility and an energy company that can take people by surprise. So huge ambitions by 2030, we're looking to reduce our carbon intensity by 60% compared to where we were in 2018. We're looking at tripling our renewable energy output by 2030. And we're also investing in a electricity network that enables more renewable generation to come onto the system and also to support things like electric vehicles. So, so far some real solid progress. We've got rid of our coal generation and we're currently building more offshore wind than anyone else in the world. And we're scaling up our renewable generation activities in new markets and in new countries. So, very much part of the transition, making huge grounds and that will all help us to become net zero by 2050.

Ellen: Exciting stuff. So tell me when Accenture, Microsoft and SSE started working together, what difference did you guys think you could make? Matt tell me about those initial conversations.

Matt: The initial conversations just started with a joint ambition really, which was to try and make a difference and to try and help SSE achieve its goals because energy transition, both for the UK and the world is key to humanity's success. The original interaction was a workshop up in Scotland between Microsoft and SSE. And then we brought in Accenture and Avanade at a later date. But what it did do is it set a renewed expectation.

I think a renewed understanding, certainly for SSE, the speed and pace that you can harness technology to be able to achieve some of those goals. And it really opened our eyes from a workshop perspective just as to the sheer opportunity there is ahead of us within the energy market, and how we could play a key role into helping SSE and a wider society achieving those. But I think within less than four hours, we understood well over a hundred different challenges and opportunities that could be identified to then prioritise against those and pick areas where we could really deliver high impact at low cost and high agility by bringing the two parties together or three parties in this case.

Ellen: So John, tell me about some of those opportunities. What are the ones that really stood out to you in those early talks?

John: Well, I think, I mean, to be honest, I probably had one of the easiest jobs. I had three key themes or key problems that I knew that as a renewables business that we would need to solve. So the first one, how can we better support our field workers? If you imagine we've got many people out in the sea, or onshore wind farms, or in hydro plants. So how can we make their work safer, provide them with proper support from backup base so they can detect and predict plant issues, or even schedule work more efficiently?

Now the second one, how to reduce the costs of your assets, you know your operational costs. So if you could have fully autonomous assets, let them maintain themselves, reduce the amount of time people take to travel to the sites and all the environmental impact of, you know, taking boats out up to a wind farm or driving Land Rovers out to an onshore wind farm. You can reduce the costs of that and you can keep the renewable assets more available to the grid. So they displace what a thermal generator would otherwise be producing.

And then the third theme was all around environmental monitoring. Where are we building and developing assets out in the environment and how can we be sure that we are protecting that environment? So whether it's species recognition where we have bird colonies nearby in the cliffs adjacent to some of our wind farms, or whether it's using satellite imagery to look at our water runoff that goes into the locks of our hydro plants and how can we maximise that?

Through to fish and mammals and other bird life, even down to peat environments, that we may be closely monitoring that adjacent to our sites. So as I say, really easy job for me, throw the problems out there in terms of what we need to solve and then use the partnerships' innovation to come up with some of the technology that can help solve them.

Ellen: Right. And what's happening now? Matt, give me an idea of what the current projects are doing.

Matt: So we started off, we came up with kind of a traditional kind three horizon plan, which was we set some north stars on what we wanted to achieve out of the partnership. And we sent it back on horizon one, which were those kind of rapid innovation outcomes where we could lay the foundations of capability. To then scale into horizon two so you get that real hyper scaled innovation because innovation in this space or any impact isn't innovation or change until it's done at scale, right?

So we targeted three areas of focus, all linked to exactly what John said, those three areas. And then we built the rapid innovation outcomes. So between six to 12 weeks, we developed the outcomes and we built something called a minimum viable product. So rather than doing a proof of concept, which is something you would kind of build and then throw away, we wanted to build something that was minimally viable as a product and delivered a percentage of the ultimate outcome we wanted to achieve.

We've now done all of those, which is two fantastic outcomes. So we've allowed for an application that really covers the field service from a health and safety perspective on a low work perspective. We've done the puffins project, we're monitoring puffins site through cameras and AI, and we've done some other things around the operational efficiency as well. So being able to take that real time telemetry from the asset to really understand it in granular detail throughout its operations. We're now scaling each one of those. So we're taking those to be endemic in the business as usual of SSE, so that we can start to look at other attributes that we can help the engineers on all of the assets across hydro and wind, and obviously extending to different species at different sites and in different environments really centering in on the natural equity. Then also, what we're now doing is we're pivoting back and we're looking at going, okay, well, they're in train. What else can we do? So it's really starting to grow legs free from those wonderful outcomes.

Ellen: And you have to tell me a little bit more about the puffins, because this is probably the only time I'll ever get to talk about puffins on this podcast. How are the puffins lives better because of this?

Matt: So it's a double edged sword or a double edged benefit, I guess, in this sense. So puffins are tenacious little birds, but they're also a fantastic measure for the quality of the ecosystem and the sustainability of that local ecosystem.

So they're highly impacted from everything from bird strikes, to weather conditions, to warming of the environment, and also overfishing in the seas as well. So by looking at the nesting sites, we can really understand their behaviors, what they're up to. We've been working in partnership with Scottish Natural Heritage, or Nature Scotland as they're now called, in order to provide them with more data around these wonderful little birds. And what they're seeing is at scale so much more information, some of it, which they've never had before, to be able to really understand the impact of anything on here.

The other part is, one of the big challenges SSE has, is around consenting for wind farms. That takes a lot of money and a lot of time. And often they need to understand what the impact is to their environment. It's really difficult to measure, but now, because we're able to measure this and we're able to measure this across other species, it means that they've got the data to be able to partner with the wildlife trust and the local environment to make sure that they're not impacting or they can make changes to their operations to minimise the impact to the environment to make sure that we're speeding up consenting, but also reducing the overall cost of potential, renewable energy for the UK and the global market.

Ellen: That's fantastic. So we used to talk about canaries and coal mines, and these days, we get to talk about puffins and the planet.

John, tell me about the partnership and how the trio of teams coming together got you started on things you couldn't have done on your own.

John: No, absolutely. What's really key for me is that there's lots of technology out there, especially in the digital space, but it's very innovative and you need to be very agile in terms of how you deliver it and really think beyond your normal boundaries. We are a utility, we're used to operating and building huge assets. So first of all, we can only deliver the technology if we create an environment where people are, it is safe for them to take risks and to push boundaries of how they do things to really be innovative and get those thought processes working. So I think, what the partnership brought is we had plenty of problems that we needed help solving. We created a team that did have the space to start thinking of new things. But then we needed somebody who could help follow that through with almost the art of the possible, more diversity.

So, we get people from different business sectors coming along into one room that can really make you think and set new boundaries of what's really possible. But also, I strongly believe, and this is probably as equally as important. If you take too long trying to deliver something, then the customer or the stakeholder that you are trying to transition into this space will have disappeared by the time you've delivered anything. Or the solution that someone goes away is just become outdated before it's even deployed.

So really important that we turn things that would've taken two years, turn them into things now that can be deployed in three months. And that's really opened our eyes in what can be delivered at speed and how effective the final solution is. That's a really important piece for us.

Ellen: Let me ask both of you as we come to the end of our walk, to think bigger than just this project that you've been working on together. And what's your top tip for fellow people in the corporate world when it comes to decarbonization and helping to have a greener planet? Matt, let me start with you.

Matt: It's a fundamental pivot on culture and the way that we measure value within business. And then there's a huge shift in the culture towards data as well. And what I mean by that is, we need to start first of all measuring, but then holding metrics of value that are different to that of EBITDA or monetary value, and then select those metrics around societal and planetary impact, but then hold them equally to at the stakes of value at the board level and to our shareholders and to the general public around our brand. And it's not until we really do that, that we actually will get this motivational shift in the market to be able to be a much more purposeful and sustainable business ecosystem.

In order to achieve that we also have to build partnerships. We don't all have the answers. We have to work in a very different way. What we've achieved over the last few months, or even two years where between Accenture, Microsoft, and SSE, is a shift in the culture and relationship. So it's been very much less supply vendor, what can you do for me? It's how can we work together to common a goal and a common impact? And in order to do that, we've also had to shift the culture around data.

So SSE for the first time have been sharing detailed amounts of data to Nature Scotland around the puffins. We've had to be able to have access to some of that data to be able to drive the impact. If they really want to drive a long term change in the energy market, there has to be much more open data ecosystem to show how we transition from fossil fuel to a much more mixed energy provision and then how we manage that into demand. That's game changing and it fundamentally breaks our perceptions on supply vendor contracts, legal consortium frameworks, and everything that falls out underneath that. So it's really about being super open-minded and a lot of it's around culture and being able to put the frameworks in place that support those.

Ellen: And John, how about you? What can you add there?

John: Yeah, I think what's really important for me is thinking of sustainability across the whole life cycle, or the complete supply chain that's associated with your business.

So, okay, we can be very proud of building renewable assets and displacing thermal, but where's the steel coming from, where's the concrete coming from, what's powering the industries to make those, what effect are we having in the environment when we're building these absolutely huge wind farms?

So my advice, you have to look across all of your activities and your supply chain and incremental improvements to sustainability in every single thing that you do is, is so important along with that this technology that you will have never even heard of that will actually be playing a key part in helping to drive those sustainability improvements. And it's really just, how do you work as a business to deal with something that you've got no proof that it works? You've really got test and trial, and have a complete different risk appetite for this type of technology, but you will land some of the technology that will be really valuable to your business. You just have to place those bets and find the ones that you're going to stick with for years to come.

Ellen: Well that is great insight. I thank you to John and Matt for taking this walk with us today. I think lots here for people to think about and thank you for contributing to the greening of the planet.

Next time, I'll be talking about how cloud is triggering the rise of a whole new type of job and new ways of thinking in the finance department. Join me for some sensible conversation with friends from Accenture and Amazon Web Services.

Outro: Walk in the Cloud.