

## USER FRIENDLY

### Social Impact of Technology

**Host:** Hanish Patel, User Friendly host and digital transformation leader, Deloitte Consulting LLP

**Guests:** Monica Batchelder, chief sustainability officer, HPE

Rafi Addlestone, global TMT ESG leader, Deloitte UK

**Hanish Patel**

Sustainability is increasingly top of mind for many organizations, but for TMT companies, there is an added responsibility and opportunity to develop products that will support decarbonization and help companies achieve their sustainability goals.

On today's episode, I'll explore the social impact of technology and how it can help accelerate change, whether connecting ecosystems and enabling digitization or

reducing e-waste and providing more transparency through tracking and automation.

Joining me to discuss how companies can better support environmental, social, and governance initiatives, and their impact on social issues, equity, health, and education, are Monica Batchelder, chief sustainability officer at HPE, and Rafi Addlestone, global TMT ESG leader at Deloitte UK. Monica, Rafi, welcome to the show.

**Rafi Addlestone**

Thanks Hanish. Great to be here.

**Monica Batchelder**

Thanks for having us.

**Hanish Patel**

So, environmental, social, and governance, we could go on for an incredible amount of time, because it's such an important topic, but in today's episode, we're going to really just scratch the surface for you, as our

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listeners, around some of the key aspects and the key things that leaders need to be thinking about as they go forward on their ESG journey.

Alright, let's get first and cracking into this acronym that we hear a lot about, ESG, as in environmental, social, and governance. I mean, it's intertwined in many aspects of business, and we've certainly heard a lot more about it over the last few years. So, Rafi, can you explain what it means at an enterprise level, and why are so many companies setting up divisions and goals associated to it?

### Rafi Addlestone

Thanks, Hanish. So, ESG is an acronym that's becoming associated with this issue of sustainability. And there's lots of words to use; ESG and sustainability being one, or corporate purpose and impact being another, that all vaguely mean the same thing, which is understanding an organization's impact in the wider world, and also the impact of the wider world on that organization.

ESG—environmental, social, governance—has become the term most associated with investors in the investor community. It's associated with measurement, it's largely associated with the impact of a company's operations, how it operates, and what it does in and of itself.

Other words like "impact" or "purpose" may be a bit of a broader remit. They maybe speak a little bit more to the intended benefit that a company seeks to make in society, its role in society, what it seeks to do in order to make a positive difference through the work that it does. Every organization exists to solve problems. That's what enterprises are.

And it's about how organizations can articulate the relationship between that core reason for their being, the problem they exist to solve, and the positive impact it makes in the world. And that's more where we use words like "purpose" and "impact."

"Sustainability" is a word—is a bit more rooted in science and speaks a bit more to mitigating negative impacts generally, mitigating negative aspects of what organizations do. But it's now become a catchall for this phrase. So, at Deloitte, we use these terms interchangeably: sustainability, climate impact, and purpose. And I think that's true also at HP, is that right, Monica?

### Monica Batchelder

Yeah, I think it's interesting to see how the language has evolved from sort of speaking about corporate responsibility to speaking about ESG in terms of a financial perspective, because I think it reflects the mindset that's changing with business leaders from a conversation around trade-offs. So, what do I need to sacrifice, to be sustainable too? If we don't embrace this, we won't be successful as a company.

And it's sort of the responsibility of the entire company now, right? It used to be that sustainability goals were owned by the sustainability team. Now, it's a shared responsibility across all facets of an organization.

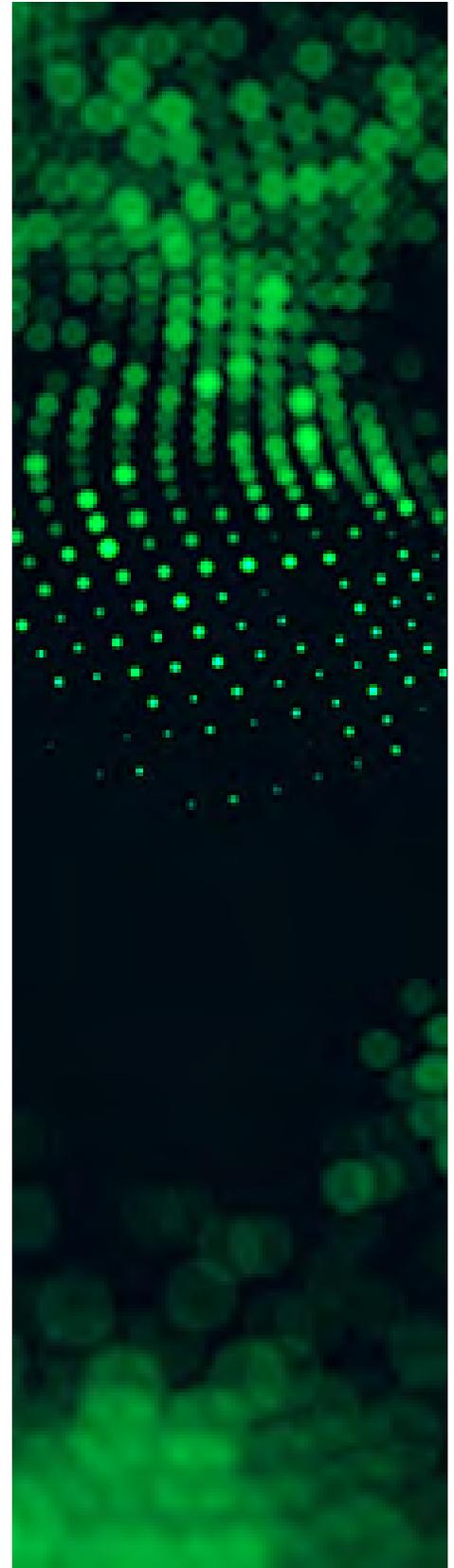
If you think about something like a net-zero target, if you're talking about a 90% plus reduction in greenhouse gas emissions, that takes transformation and accountability across the entire company. It can't just be driven from one siloed team. And so, I think the shift in language is reflecting that signal that companies see that ESG is key to the success of the company.

### Hanish Patel

So, that kind of mind shift, if we think about it from that perspective, specifically looking at technology, what role can it play in society to make it a better world now, as organizations are no longer regarding it as an element of trade-off but an absolute must-have to be successful?

### Rafi Addlestone

Well, there are lots of different ways. We're already seeing in the market of



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digital solutions being deployed to reduce emissions across different sectors. So, whether that's smart grids really changing the way that utilities and energy system works; whether that's around precision agriculture, enabling farmers to operate in a much more efficient way, reducing their use of herbicide, reducing their movement.

Whether that's around smart buildings and smart cities, all these different solutions that are increasingly being brought to bear on the wider market are having a positive impact. And there's lots of research out there we've done in others, sort of quantify that and quantifying the potential of that. And that's one of the primary ways in which technology can be seen as a force for good.

So, whether it's about focus on the public sector and around health and education, whether it's around a focus on disadvantaged parts of a country or disadvantaged individuals in society, how companies can be conscientious and conscious in directing their products and services to those needy groups is something that is increasingly a theme that we are being asked to think about.

### Monica Batchelder

Conscientious and conscious, I like that.

Yeah, I don't think it's a secret that only through technology and innovation are we going to be able to reach the scale that we need to tackle a lot of the most pressing challenges in the world today. And we have an incredible amount of data being produced from connected devices, from sensors, satellites, all different areas.

But that data isn't useful unless we can extract insights from it and actions from it. And so, things like analytics and artificial intelligence tools are going to become vital for sorting through those massive volumes of data and revealing actionable, real-time insights. And I think we see problems all around the world that I believe we can solve if we have these data and tools to solve them.

### Rafi Addlestone

Yeah, well, I think it's important to recognize there's a responsibility and opportunity particularly for technology. On the one hand, like the rest of the market, there's an obligation on technology companies to operate responsibly, to minimize their negative impacts, whether that's the resources they use in terms of energy and materials, water and waste; whether it's how they treat their people; whether it's how they operate in their supply chain.

These choices that companies make about how they operate and how they interact with their indirect stakeholders—that's increasingly under the microscope, and companies are increasingly gripping those challenges.

But then there's the other side of the coin, the positive side of the coin that Monica was talking about, which is how technology companies can recognize the growth opportunity inherent in sustainability. The idea that digital products are inherently scalable. The more that people use these solutions, the more problems they solve, the more efficient our system becomes ... the more digitized things are, which increasingly means using less resources. These tools can drive huge positive impacts in one-to-one ways.

But also, as Monica was suggesting, across ecosystems—using data to connect different parts of the system that weren't previously connected to do new things in new ways. And we have a massive job to do as a society to move from where we are today, to where we need to be, if we're going to mitigate climate catastrophe. We really are on a terrible trajectory when it comes to the environment, and we need to act now and urgently, and it's technology that's going to be enabling us to do that.

### Hanish Patel

So, often, when you think technology, it's always associated with innovation and doing new things in new ways. So, if we

think about that kind of purpose-driven technology innovation that takes place within organizations and often necessary for business leaders to really be able to deliver that transformational change, I'd love to kind of take that lens to it, Monica, and how are HPE and, frankly, other tech companies truly bringing that to life?

### Monica Batchelder

Yeah, so I think digital transformation is top of mind for most organizations. And the key is how we link that together with a company's sustainability agenda and their corporate purpose. And so, how that manifests would be different across any industry. But I think it all boils down to understanding where new value exists from sustainable markets, which business models will capture that value. And then which digital and data-driven technologies we need to enable it.

So, let me give you two examples of how HPE is thinking about it. Rafi spoke about how we can sort of connect new ecosystems together. And I think data sharing is one of the keys to how we can really use technology to solve global challenges. So, let's take global health for instance: There are nearly four billion people in the world that are at risk of contracting dengue fever.

And so we are working with a global health company to identify and integrate diverse data sources, to try to develop a disease surveillance solution for dengue. And the intent of that is essentially to develop publicly available insights that will help authorities and governments anywhere in the world to proactively deploy response strategies for at-risk populations.

And so, we're taking insights from one place in the world, combining them and making them publicly accessible to help a disease prevention around the world. And so, that's sort of the idea of how one person's data can be combined with another to have sort of exponential value to the data.

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And then the second example, I just wanted to talk about to Rafi's point around climate change and climate solutions, is we know today that the world doesn't have all the technology solutions we need to avoid climate catastrophe. In fact, it's estimated that about half of the carbon reductions that the world needs today need to come from technologies that haven't even reached the market.

And so, while all these tech companies are investing in building powerful supercomputers to aid climate research, or developing new, more efficient data centers, we also realize that we need to reach beyond our own value chain.

And so, to that end, HPE, Meta (formerly Facebook), and Microsoft actually pledged last year to make our patents freely available to anyone that could use them to drive low-carbon applications and low-carbon innovations like the generation and storage of clean energy.

So, while we're all working on our own climate road maps, we want to make sure that we're not a barrier to other innovation. And so, we see our patents as a potential springboard for innovators and researchers. And we see this as the type of collaboration that's going to be needed to solve such a pressing and complex global issue.

### Rafi Addlestone

And just to jump in, we've seen that in lots of different contexts across the system where people are using climate as recognizing they need to convene around climate and operate in a slightly different way.

And one of the reasons for that is because solving this problem is not possible by acting in a one-to-one relationship. Because so much of the challenge is drawn into scope three, which is the category of emissions associated with everything upstream and downstream of your operations—that's where most companies' challenge is really cited.

And to address those challenges, you by definition have to engage with people outside of your business. You have to engage with your suppliers and with the users of your products. And to do that means thinking about your interactions as society in a different way.

You're no longer just operating a one-to-one relationship with your customer. You're operating as a center point for a broader ecosystem. And that is why we're seeing these collaborations that haven't really existed in other formats before.

### Hanish Patel

What I want to do is a little bit of a slight pivot, because we talked about technology and I want to see if I can get both of your perspectives on a slightly different angle. And this is when we look at the "E" within ESG. There's certainly a few ways to look at it, at least in my mind.

You could look at it from a nature and a biodiversity standpoint, and I'd love to get a perspective from you Rafi on just how can companies better understand risks that are associated when we look at nature, biodiversity, when it comes to the "E" in ESG?

### Rafi Addlestone

Yeah, so I think the climate has been top of mind for a few years now. And increasingly, nature is coming up just as an important topic, and also circular economy and e-waste is another big one in our sector. But for nature in particular, we cannot exist on a dying planet, and everything that we use, everything that enables our lives, is rooted in nature. And we're seeing rapid degradation of the biosphere. Every metric is in the red. We are going over many of the sort of redlines when it comes to nature.

And so, thankfully, we're starting to wake up to that. And the TNFD [Taskforce on Nature-related Financial Disclosures] is a new framework that is being introduced into the corporate world on the back of an equivalent framework for climate TCFD,

which is asking companies to really think about their interaction with nature and their reliance on nature, and to understand what a degradation of the biosphere means for them and their business.

And we're starting to see companies, like HPE and others, start to recognize that they have responsibility, not just for carbon reduction, but also for managing the nature risks associated with their value chain. But a big part of that is obviously mining for tech.

We are relying hugely on really rare minerals and materials out of the ground that has huge challenges for the geographies in which that happens from a nature perspective. What can we do to support those communities, those local areas, to really maintain their biodiversity in the face of resource use?

### Hanish Patel

And you mentioned carbon there. So, when we think about carbon emissions, just e-waste as a whole, Monica, I'd love to get your perspective and kind of bring it back to how technology can help and be built with sustainability in mind when you think about those kind of emissions and e-waste and carbon as a whole.

### Monica Batchelder

Absolutely, we've been talking a lot about the potential of technology, but we need to ensure that the technologies in the IT industry itself are sustainable first, or we're not going to be able to reach that scale of technology applications that we need to solve the world's challenges.

And running IT systems can actually be a pretty significant source of emissions due to their power consumption. We find that often with large companies, the IT department often is one of the largest consumers of operational electricity in the entire organization, particularly for industries like the financial industry, which have these massive data centers.

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And there's a lot of inefficiencies of how IT estates are operated today. So, just a couple examples: One is a service outage can be catastrophic for companies. So, think about if you're a retailer on Black Friday, you need to have enough IT to support traffic on that day, even though it sits idle the rest of the year when you don't have that peak demand.

And so, we need to be provisioning things in a way that are more flexible throughout the service models, which you're seeing across various industries, to make sure that we can tackle some of those inefficiencies and meet peaks as needed.

And then another huge place for inefficiencies is cooling. We often talk about it as akin to trying to cool down a can of soda by putting it on the table and cranking up the air conditioning in the room, as opposed to putting it in a refrigerator. That's how we run cooling today and so, we need to be looking at new solutions, like direct liquid cooling, which are far more efficient and can ensure that we can scale our data centers and our IT services to the point that we need to tackle these big challenges.

### Hanish Patel

By the way, I love that example of trying to cool down a can of a drink just in that analogy. I'm going to have to use that one. But to your point, it's actually quite fascinating particularly as I read some of the stuff around just how it's starting to be built with that in mind, where before, it was just a case of, hey, we've just got to get the job done. And I think that's definitely something that IT organizations, leaders are certainly grappling with in terms of making sure that they're being more mindful in the way that they're conducting their operations.

And in that sense, I want to kind of move to the ... I'll call it the "S" part of ESG. And so many organizations are certainly familiar with the social criteria part of it. And it certainly, in the last couple years, has been really pushed to the forefront when it comes to things like diversity, equity, and inclusion.

But as companies continue to address these issues, how can they actually track the benefits and truly measure that success? And I'd like to turn to you first, Rafi, and then back over to you, Monica.

### Rafi Addlestone

Yeah, I think this is a really important and difficult challenge; how can companies that are looking to effect positive impact with humans enable that potential? How can they demonstrate that? And it's really difficult because the vast majority of cases, there isn't a feedback loop from the user.

So, for example, many tech companies have programs where they help people with digital skills and they're providing skills programs and free services to access connectivity, to improve their skill level when it comes to digital literacy. And that's amazing. It's amazing these people, these companies are doing that, they're investing in that, they recognize it's an important role they have to play.

How can they actually track the benefits of them doing so? They can tell you how many people have logged on, they can tell you how many people maybe have passed the test, but can they tell you really what that's meant for people in their life and what difference it's made for them in terms of their well-being and education, ability to get a job, their life chances, and life potential.

And I think it's a really important conversation to have because tech companies and technology have so much positive benefits in this direction. It brings people together, it allows ideas to be shared. It creates opportunity for people that in a non-digitized world wouldn't otherwise potentially be able to find it.

So, there's a massive opportunity for the sector to grip this challenge and to tell the story of its impact on the wider society and around potential. Whether that's around education, Monica mentioned health—whether in other directions; whether that's in terms of agriculture and fruit production.

The way that we think about this is really leaning on the expertise of the third sector of the nonprofit sector, who typically will organize, they make decisions based on impact and their ability to meet human potential and enable human potential.

And they use a technique called the theory of change, which is a means of a systems way of thinking, which connects activities with their direct outputs—the immediate things that happen, the volume of activities happened—with the outcomes of those outputs, the small changes that will occur for individuals and communities as a result. And then ultimately, the impact of those changes.

So, they create the system, this linear system of tracking the downstream effects of activities, and pull that together to measure their success. And increasingly, we're seeing corporates take on this approach to demonstrating their benefit in society and to hold themselves to account for the impact on people. And that's something that HPE is actively exploring as well.

### Monica Batchelder

Yeah, adding to Rafi's point, I think also, it's great to quantify the impact on society, but it's also important to translate that into financial terms for the company. We spoke about the transition to the language of ESG and how that's inextricably linked to the success of the business.

And so, when we're measuring things like human capital practices, which refers to training and developing talent. If you talk about improving different training programs for your employees or improving talent attrition and retention rates, you're not just helping to improve the productivity and the talent management costs of your employees, you're also increasing things like employee engagement and employee satisfaction at work.

And so, you want to be looking for metrics that can show both the value to the stakeholder that you're talking about,

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whether that's your employees or your communities, but also the value back to the company as well.

And one good example of how we can look at that is in terms of a skill shortage in the tech industry. So, it's great for us to be doing programs that improve connectivity and teach STEM skills, but ultimately, the goal of that is because we need to be building the tech pipeline of the future and the skills that we need in order to drive future innovation to staff our organizations.

### Hanish Patel

You mentioned the skill shortage. What other challenges come to mind, particularly for TMT companies, the ones they are likely to face, and frankly, how can our leaders guard against them?

### Monica Batchelder

A few things come to mind. I think that Rafi mentioned the digital divide in terms of connectivity, but as technologies like AI and machine learning accelerate, I think we also need to consider access to these technologies within this idea of the digital divide. So, really, a digital divide for organizations.

So, if you think about if only certain groups have access to Wi-Fi or a phone, the advantage and inequality of that is huge. And we need to think about AI and supercomputing the same way from the organizational perspective, because these are really going to be the raw ingredients that drive success for businesses in the future. And so, we need to be looking at ways to really democratize that technology so that it's available to more small and medium businesses as well.

### Rafi Addlestone

To build on that, when we're thinking about those pioneering technologies, there's also the ethical challenges around how they're used. There's lots of nefarious ways in which AI and things like facial recognition can be deployed, and it's going to be a challenge for technology companies that are developing

those tools to ensure that they're not used for nefarious purposes, civil liberty challenges, etc.

The other obvious piece to add is mental health and people's well-being and the ways in which people are addicted to technology or social media and other topics. And I have young daughters, I'm very concerned about their ... what being on social media might mean and what the access through technology to, bad elements in the society. That's something that needs careful consideration and fits within the "S" of ESG.

### Hanish Patel

So, I want to bring us home if I may, and clearly after hearing from both of you, ESG is just an absolute essential part of doing business. I loved the example before where it may have been the trade-off, but now, it has to be there to be successful.

And we talked a little bit about some sort of tracking and measurement, but how do we move beyond measurement and tracking, and truly on to transformation as many of our listeners and leaders amongst those listeners are thinking about what they need to do in their organizations going forward for ESG?

### Monica Batchelder

Yeah, one of the terms that we talk about is catalytic collaboration. So, how do we bring voices to the table that may not have been heard before? How do we think about innovation from an accelerator perspective, much broader than just, for example, publicly traded companies coming together, but a larger ecosystem approach that Rafi was speaking to earlier. How do we bring in the voice of stakeholders and customers and governments?

And so, in all these ways, corporations can play a variety of roles to accelerate the progress on these big challenges, but the key is working together. So, in the IT industry, for example, we actually have a shared supply chain. We share essentially most of the same suppliers. So, how can companies

work together to influence that shared supply chain or to share data, to boost the value of insights I referred to earlier.

We all need to learn from others who have been down the same path and are on the same journey that we're on, and we need to embrace this perspective of sort of fail first and then innovate again, because speed and scale is really what's most important here to tackle these larger global issues.

### Rafi Addlestone

I think that's really nicely put, Monica. And I think one of the things that will unlock all of that is having a clear vision for the future of our industry and how our industry can influence and enable the rest of the system in other sectors, because without that vision, without knowing where you're trying to get to, without making that sort of bold commitment to really drive the change, we're a little bit lost.

And I think that's definitely a role that we at Deloitte seek to play—try and help engender that vision for the future and try and help all of us to aspire to a more sustainable, equal world and how we can collaborate, as you say, to get there.

### Monica Batchelder

Absolutely. If I can just add one more point to that, I think part of your question, Hanish, was how do we move into actual transformation? And I've been hopping on this a bit, but bringing it back to the business case every single time is what we need to drive the transformation.

So, for example, decarbonizing industries has some of the highest potential returns that at least our generation has ever seen, if not in history. Whoever figures out how to capture carbon for less than a hundred dollars a ton, people speculate will be the world's first trillionaire. So, we need to keep bringing it back to the fact that we are not doing this because it's a nice thing to do, or it's the right thing to do. We're doing it because there is clear economic benefit for companies that, at the same time, will create shared value for society.

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### Rafi Addlestone

And the other side of the coin is not doing it will create huge economic disbenefits for society. At Deloitte, we published a major research study recently called Tipping Points all around the economic costs of not meeting the Paris Agreement and keeping temperature rises to 1.5 degrees.

And the scale of the economic destruction that will be roused by an ever-heating world is unimaginable. It's really unimaginable. And for individual companies who are lagging in this space, they're already seeing the challenge of it. And one of the biggest ways in which they're feeling it actually is not just from consumers—maybe a little bit from investors; not necessarily from regulators yet, although that is coming, but actually from employees.

And we hear over and over again that business leaders across our clients are feeling pressure from employees to get cracking on this agenda, to do it even more,

to push even further. And that employee voice is really being felt across the system. And responding positively has a positive impact. Unilever, who are one of the sort of shining lights of the sustainability movement, talk about one of the biggest benefits; The biggest benefit of their commitment to sustainability has actually been on talent and their ability to attract and retain talent. So, yeah, as much as all the business benefits that Monica just referenced, that's a really clear and tangible one that we're seeing.

### Monica Batchelder

Absolutely, and I think we need to look at employees as sort of these untapped resources to drive our agenda. To the point that it's not about the role of the sustainability team anymore; every employee across the company can contribute to achieving those goals.

### Hanish Patel

Brilliant. I think both of you have summed up incredibly well.

And I'll say two things, to kind of quote both of you back from earlier is, one, you mentioned it's no longer a trade-off. That in order for us to do this, what do we need to give up? I think it's, as you mentioned, it's just a core part of doing business, and doing it to be successful is point one.

And then I love that statement around, it's no longer a leader of a company, but in some way, a leader of an ecosystem, which has so much more wider element to it. And I think that's a great way to put it. So, with that, I'm actually going to say, firstly, thank you to the both of you, Monica and Rafi, for joining me today to cover an incredibly important topic.

One that has been at the forefront for a long time, but continues to gain traction and rightly so, such that leaders are really embedding it as a part of their strategy, as a part of their plan, as a part of what they do going forward. So, again, thank you for joining me; and to our listeners, until next time, happy listening.

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