BUSINESS SUSTAINABILITY RESTS ON HARMONISING PEOPLE, PLANET & PROFIT

Industrial businesses are under increasing pressure to make their production processes more sustainable and reduce their impact on the environment.

Doing so requires leveraging the latest technologies to minimise waste, lower energy use and improve efficiencies across the entire product lifecycle, and embracing smarter ways of working in order to drive outcomes over outputs.

Both are subjects close to the heart of John Kitchingman, a champion of community, human connections and the role of technology in fostering both.

John is Managing Director, EuroNorth for Dassault Systèmes, which provides business and people with virtual universes to imagine sustainable innovations, and has itself been recognised as the Most Sustainable Company in the World.*

What role does technology play in successfully hitting the UN's Sustainable Development Goals?

While it will take a huge amount of commitment from people, businesses and society to hit the UN SDGs, technology is critical in driving that even further.

In particular, virtual twin technology is instrumental in driving sustainability across the enterprise and across all sectors. A virtual twin is a scientifically accurate virtual model of an object that can be tested to analyse and optimise how it behaves across different scenarios across its lifecycle.

In a whitepaper co-authored by Accenture and Dassault Systèmes, we found that virtual twins provide an untapped opportunity to help companies unlock combined benefits of $1.3 trillion of economic value and 7.5 gigatons of carbon emissions reductions by 2030.

A virtual twin allows you to create a digital model of a heart, a car, a plane, of test environments and test treatments, and evaluate all those 'what if'

situations far earlier in the development cycle. That has a quantifiable real-world impact in terms of abstracting costs, reducing waste of physical prototypes and accelerating time to market.

Virtual twins and the data they generate are also invaluable in the development of additional or future products, helping to inform such things as design decisions and the materials used. It's also vital that businesses work together with their value networks, rather than in isolation.

Our own research found that 75% of business leaders believed that to become sustainable, they needed to devise and work with their partners towards a common purpose.

How does an automotive manufacturer, for example, pull their suppliers in far earlier in the decision-making process, making what can be costly design decisions in the virtual world before anything is cut, bent or painted in the real world?

Additionally, 66% said that they needed to work more closely with suppliers to decarbonise their businesses. However, before they start implementing change, 70% admitted that they needed a centralised, accessible data management solution across their entire ecosystem.

Sustainable Transformation will only work if the focus is on action not admin. How are digital tools helping to realise that aim?

Too often, the onus is put on simply capturing data and not on doing so in an intelligent manner. That can result in a plethora of solutions that don't integrate well with each other and leads to employees having to file the same information in multiple different systems. That doesn't drive commonality and reuse, it doesn't drive knowledge and IP building, it only serves to make the task longer and more onerous.

A centralised data platform captures information from all systems, legacy and newly integrated, and provides the single source of truth that companies often struggle to realise.

Again, this is where virtual twins have a key role to play and companies are already using them extensively in their distributed design and engineering teams. In some clients now, we're seeing a unified bill of material and engineering data being accessed by the procurement team, the quality team, the warranty team, the finance team. More and more business functions are aligning themselves to that virtual twin model in order to simplify their processes.

Clearly, virtual twins are designed to help visualise complex data and analyse, and make modelling much easier. But an extension of that is being able to make decisions based on hard evidence, extensive simulation modelling and interrogable data.

It's a difficult challenge, especially for larger organisations, but we're seeing growing numbers of clients adopt and embrace this way of working.

How are digital tools helping organisations capture the total business value of sustainable initiatives, particularly those which don't have easily-defined financial value, such as brand value and employee engagement?

The measures you just mentioned are absolutely critical. As are the ability to get teams working cross-functionally, the ability to collaborate quickly and easily, access to a simplified data set to make better decisions more swiftly, finding novel ways of working so that you're creating new intellectual property.

Many organisations are worried about an ageing workforce and losing valuable knowledge as people retire, alongside facing difficulties recruiting new talent. Enabling people to work in a far more collaborative way is a way of attracting that new talent to your business.

I think that's a wonderful outcome that's far more qualitative than ever before. It also brings a positive financial impact because it will lead to less attrition, less hiring costs, less time spent on training, and related associated costs.

Accelerating your time to market or improving product quality are other examples where what look to be non-financial initiatives, such as improved communication, collaboration and digital work flows, directly translate into bottom-line benefit.

What is Dassault Systèmes doing to achieve its own sustainability goals?

Businesses are realising that you don't have to sacrifice success for sustainability. Indeed, the two can actually be achieved harmoniously together. Something that Dassault Systèmes realised a long time ago.

We have made very clear commitments around achieving net zero in our own operations by 2040 and partnering with industrial firms on the development of innovative technological solutions that permanently remove CO2 from the atmosphere.

We've also changed the way we work with clients and what we set out to achieve together. We're not just focused on deploying our technologies to help you accelerate time to market or

increase your collaboration. We're looking at how can we help our clients evolve their entire business model? How can we help develop not just the workforce of the future, but the workforce of now?

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When I look at the work we're doing with Jaguar Land Rover around completely transforming the industry process, the industry solutions, the way in which they're introducing their new electric model architecture vehicle

programme, it demonstrates the strategic approach we take with clients now, aligned to their transformation strategy and goals.

How have you seen the role of leadership evolve to drive and then maintain change?

Leadership teams need to lead by example. We've all had to learn how to work with our teams far more collaboratively over the last 18 months when we couldn't be together. That has meant making sustainability a priority in everything we do, using our own tools, having honest conversations with our people so that they can implement the change we want to see in the world.

The pandemic has forced senior leaders to adapt the way we work and communicate, and I think it brings into play far more EQ than IQ. Empathy and agility are two core components of modern leadership, and will be critical as we move forward.

We undertook a wonderful give-back programme recently where all our people took time out of their busy week to invest in clean-up activities in local cities and towns. That's one way in which sustainability and giving back to society is becoming part of our everyday working lives and language.

* https://www.corporateknights.com/rankings/global-100-rankings/2018-global-100-rankings/2018-global-100-results/