

0:02

You are listening to the shaping sustainable organizations' podcast series, where our industry experts discuss how businesses can drive sustainability at scale by leveraging SAP products and capabilities. The podcast begins in 321

0:20

Hello, and welcome to Episode 3 of our SAP and sustainability podcast series. I'm Graham Saunders and I'm the Global Go-to-market and Offerings Lead for the SAP practice at HCLTech. So today, continuing our theme on actionable sustainability, we're going to look at asset and product maintenance and its role in driving more sustainable business and more sustainable economy. And it continues our theme of focusing on driving action. So not just doing reporting on carbon footprint, but actually putting processes, putting capabilities in to actually drive action, because that's how really you drive change. So what we're looking at is what are the capabilities needed around asset maintenance, service, asset management, and how businesses can use SAP solutions to enable this and particularly enable processes that drive action. So I'm joined today by my colleague, Colin Breakwell. Well, Colin, would you please introduce yourself? Yes, many thanks, Graham. So I'm Colin Breakwell, with HCLTech, my role is to develop add on products to SAP across a range of industries. But with a particular focus on developing products for enterprise asset management, and and maintenance. I have worked around maintenance and asset maintenance complex assets for the last 30 years. And it's great to talk about making assets more sustainable today.

1:46

Excellent. Well, thanks for thanks for joining me. So to sort of get you know, there was some interesting legislation in March 2021, the EU introduced legislation to promote repairability of products. And that legislation obligates companies to ensure that they are repairable and that there is availability of parts for a minimum of 10 years. Now, whilst initially this is sort of focused on more consumer goods, I think it does show a really interesting shift. And it's interesting that there's actually legislation driving this to force companies to change, to focus on sustainability and waste reduction, by bringing in a right to repair means companies have to design products that are going to be you know, a much longer life and move away from this kind of throwaway culture, you know, one components broken, the whole thing goes in landfill, and you have to, you know, buy an entire replacement product. And that tends to be the mantra of a lot of, particularly consumer businesses. But this is interesting legislation. And there's similar in the US that came out of some initiatives around vehicle repair, forcing companies to open up their, you know, the tooling and the access to the to the right technology. So the independent people can also maintain products. So we expect that this is going to, you know, spread initially, there's a certain set of products, but I think that will, that will spread. And this is going to force companies to rethink a lot about their structure and their processes. It impacts product design, the way you design your products, the services that you provide around it, it makes you have to think about parts supply chains.

3:30

So I think it's, you know, whilst this is sort of initially focused on kind of consumer products, I think this is sort of critical for, you know, moving us away from that kind of throwaway economy.

3:43

And I think that, you know, I think there's been some good examples that I was looking for a new phone for one of my children recently, and you know, phones are very expensive. And we started to look around at phones, and how you, you know, the best way to source a phone, and it's really surprising how big the, the aftermarket for technology is, I was very surprised that number of different places you can buy refurbished phones and refurbished technology, you know, and you look at a phone, they probably don't need replacing every two years, you can have them refurbished, and for probably less than half the price of a new phone, you can go and buy a refurbished asset that's been renovated and is perfectly serviceable. I was very surprised with the quality and the availability of these kinds of things in the market. And I think that's really grown up over the last two or three years where assets have become more expensive consumer assets and all asset things are becoming more complex, more expensive, and people are beginning to get more used to perhaps buying secondhand things but not just through the kind of eBay kind of market but through this kind of re refurbishing where spares are available. assets get taken into that refurbished and then resold, opening up a whole new kind of market and aftermarket for assets.

5:09

But as Graham says they need to be repairable, they need to be able to have availability of spares to do that. So it's I think, a really interesting shift in, in the consumer behavior, but also the, the market behaviors to offer those things to consumers.

5:26

Yeah, I think there's nothing more powerful than, you know, that shift in consumer behavior, that's often what really drives change. And so it's encouraging to see people opting for the kind of refurbished options, certainly on consumer goods. And that was, whilst the legislation change, I was talking to him, I mean, he's focused on consumer products, but I think it highlights a point that, you know, we do need change. But I think that principle of designing things for a longer life, designing them actually to be repairable in the first place. So you can actually take them apart, put them back together again, you know, that thing can be can be applied across all products, and different types of assets, changing from being sort of a pure product company to being more I provide the product, but I'm also going to provide the service throughout the life of that product, that's going to be a huge change, you know, for organizations that currently just literally think about shipping out, you know, pure product, and that's it. I mean, that's, that's a huge impact, isn't it?

6:22

It is, it is a massive impact. And I think it goes all the way from, as you say, the conception of a product, how you design it, the principles of design, all the way through the whole business. And, and I think it needs changes everywhere, you know, so many products are virtually impossible nowadays, to, to maintain, you have to design them. With that in mind, you can't change a battery, on your smartphone, yourself, you have to have it repaired, you know, these things are very, you know, they're all the way back in the design processes around designing it for repair, and designing it for sustainability. Products are just simply not designed to make like that nowadays. And I think this idea of new opportunities in the market emerging, you know, the monetization of service moving perhaps more to rented or assets, you know, where you perhaps don't buy them, but you're having them on a service, and then the provider is responsible for maintaining them and making sure that they work.

7:27

Big growth in perhaps as we said before, the kind of aftermarket repair businesses growing up supply chains, you know, you see a lot of companies now being able to sell source and sell parts to enable these things to happen. So big changes in, in both the kind of manufacturing processes and the manufacturing companies opening up new opportunities for aftermarket for the retrofit and the repair markets. And then all of the supply chain processes to make sure spares are available and can be easily bought. I have another asset that I'm trying to repair my tumble dryer needs a new pump, and I've waited six weeks for this pump to come from, from the provider, you know, you can't encourage people to have to repair things if you can't get the parts.

8:17

And then all of the opportunities around the technicians to do all of that service work if we're going to make assets more more repair was not just people doing it themselves, there's a whole industry of, of field service technicians to come out and repair things with the skills that are needed to do all of that so many, many new market opportunities to grow and for businesses to expand into.

8:47

Yeah, I think, you know, and whilst, whilst this has an impact on business, it could actually represent also an opportunity, you know, if the consumer sentiment, let's say, shifts towards when when I choose a product, I'm not necessarily going to buy the cheapest, you know, the one gets five stars, but you know, hopefully they're looking at energy ratings. That's, that's more commonplace now, and a lot of consumer goods in particular, and other things, but But you know, you also look at the total cost over its lifespan. And that could be slightly more expensive for the initial product, but something that lasts significantly longer, you know, perhaps with the service plan, and, you know, that that sort of represents, I think, some interesting opportunities to companies as well, you know, build, build their reliability into their sort of product positioning, build service offerings in there. And, you know, hopefully as customers realize that, you know, sustainability is important, you know, they will be happier to say,

well, I will go down that, you know, that will be my buying decision. I will spend a bit more. And I'll you know, and I'll get the other parts that go along with this. I think it's interesting also to look at it from actually not just as a burden on companies, which would be easy to react and say I've got to change but I think there's some opportunity there as well.

10:00

No absolutely great opportunity across all different areas of their business to open up new revenue streams and more, perhaps more, more sustainable revenue you've seen in, in perhaps, other industries. So I do a lot of work in aerospace. And you see in the aerospace industry, a big move from buying assets to that kind of having assets as a service. So you know, you buy an aircraft or an aircraft engine from the OEM, you buy it on a service plan, so you never pay for it, you pay by usage, you have the asset available, they guarantee availability. And that, you know, you see that in these very high class by expensive assets, but that will permeate through many of the markets and many of the asset markets, and that, that perhaps that shift from owning to renting assets, and renting them with not just paying for it monthly, but paying for the service of the asset, its availability, making sure it's working, changes, you know, the consumer how you are, but opens up very different revenue opportunities for businesses, when you see that shift in many, many markets, cars, consumer goods, you know, beginning to move perhaps to that more service focused on behavior than just owning assets.

11:23

Yeah, and I think, you know, we've primarily been talking about consumer products. And I think that was interesting, because of the legislation, but, but actually, with the sort of large enterprise that we often deal with, you know, in terms of implementing SAP, etc, you know, they tend to be a lot of them are asset operators and service companies, where really, the focus there is about improving sustainability through making sure that asset operates efficiently looking at things like energy usage. But also, I think, you know, extending product life, you know, extending the life, so you maintain something, rather than replacing it more frequently. And I think that's, you know, what have you seen in that area, that's kind of this trend towards longer life and sustainability of the asset.

12:07

Yeah, and I think, you know, we perhaps often look at aerospace and defense as this kind of a place to get best practice from in asset maintenance and sustainability, you know, aircraft assets, aircraft, aerospace assets, they need to be reliable, failure is not acceptable, you know, they work in a highly regulated environment. So, there are some great things to learn from that kind of piece of the market, I think, and the aerospace assets, a lot of maintenance has been done, you know, very preventive maintenance, so they have maintenance regimes that keep assets reliable, perhaps less and less focus on some of the modern preventive maintenance techniques that would be perhaps more suited to more consumer assets. But there's a lot to learn from perhaps some of the other things they do around extending life, you know, aircraft, aerospace assets have always gone through many life extension

programs, upgrades, modifications, so designing assets, not only to be built and used today, but having the idea that you can upgrade them and change them and make them more extend their life beyond perhaps what you originally planned, is an interesting idea. And, and, and how you have to manage that. So often maintenance products don't really facilitate the long term modification and upgrade of assets. And that's where the HCLTech's iSAM and iMRO products, perhaps bring some more capability on top of your S/4HANA, our maintenance capabilities, you know, products specializing in the more complex upgrade modification processes that really do extend the life or improve operational efficiency. So modification is not just about making it last longer, it can be to improve energy usage, or fuel burn, or make an asset more efficient, which is the other dimension of making it more sustainable. Making it last longer, making it more efficient. I think the other thing you've seen, you know, there's been a lot of focus in businesses around kind of operational performance and operational availability of assets, collecting data to make sure that they are available and usable. I think that same data set can also be used to improve sustainability of the asset and, and perhaps changing the perception of what data you have, how you use the data to not just think about making sure it's available and working but making sure it's available. Working in a sustainable efficient way, will also be an interesting trend, I think connectivity aircraft, you know, my experience of aircraft, they collect huge amounts of data to look at reliability and performance of an aircraft. But nowadays, there's been an exponential growth in connectivity of goods. Everything from your humble cooker and oven, your washing machine, they all have connectivity to the internet for various reasons. Now, traditionally, those kinds of devices, perhaps told you what was wrong with them. But with more connectivity, more data is collected, you can move to even more predictive analysis of your assets and trying to actually prevent them failing, maintain them in different ways to extend their life and stop your washing machine drum breaking, if you can intercept that early with data, it will be a great way to keep assets more sustainable and extend their life.

15:37

I like the suggestion about the modification program. And that's got me thinking about my own iPhone battery. But you've been talking about aviation and it is often thought of as being, you know, best in class. And that is because as you said, failure isn't there has to be avoided, because it ends in disaster. But you know, whether you're in aviation, or perhaps mining power generation, you know, complex manufacturing plants, etc, you know, looking after all these assets, they are becoming more complex and more expensive, but making them more sustainable it's quite a challenge across that broad set of assets. But um, you know, I'm sure there are some common threads that we can pull out from that kind of best practice that you talked about that could be applied into those other kinds of asset classes and industries, right.

16:25

Yeah, I think so. I think that's right. You know, I think data is central to that kind of collecting and managing data helps you maintain your assets and data has many forms, but you know, coming from aerospace, we've always collected a lot of data around the assets and to manage them. And a lot of that is not just data, but perhaps traceability of your assets is important. You know, knowing where they've

been knowing where they've been operated, knowing how much they've operated is really important. And we're you know, we're familiar with that from aerospace. But that spreads down to you know, things like cars, we're very familiar with a car needing a service history, but it doesn't kind of permeate into many assets. You know, if you take parts off your car, and in the car, kind of spare parts aftermarket, you won't have traceability, but the more traceability you have of how an asset has been used, where it's been used, how much it's been used, is what's driving its value, if you can prove its heritage, prove, it's like it will have more value. So I think traceability of assets is a key learning, I think data, you know, that kind of digital twin, you know, digital thread of its data through its life isn't it's part of that as well, making sure you have the required data, you know, you've no one wants to buy a second hand asset that's, that's been damaged or has been overused. And proving that heritage is one of the keys to opening up a kind of market of reuse and, and recycling products. So I think traceability and also I think monitoring effectiveness. So in my experience, over maintaining something is as bad as under maintaining it, the more you maintain it, the more risk you have causing issues with it, you don't you know why? Why take it apart, if it's not needing maintenance, you know, that causes cost, causes risk. So that kind of idea of making sure you have effective maintenance, and making sure you're doing it well and it's needed is also important. So data drives that ability to look at reliability, look at the effectiveness of what you're doing to the asset, you're layering in your kind of predictive tools on top of that, creating a kind of optimized position where you maintain when you need to, but not too much, not too little, you know, so you're trying to optimize your maintenance around sustainability and operational performance. But they you know, kind of creating traceability, creating data, creating your digital twin, they are challenging things, and not kind of perhaps widespread and some of those challenges of certainly managing traceability and creating assets that are central to the kind of the IMRO solutions that we've been building, you know, simplifying that process, creating you know, the asset in a traceable way with all of its data in a simplified way in a system has often been a barrier. So, many people have, you know, what are kind of trace devices but they have many representations of them in their system because they can't relate them to each other and solving those problems through automations and simplified experiences and, and providing the tools to the technicians that enable them to do that actually does simplify your processes, creates better system data, but at the same time increases the value of your assets and creates opportunity perhaps weren't there before.

20:04

That we probably need to wrap this, this talk up, because it's been a, it's been a really interesting, and it's a very, very broad topic, you know. And so we've talked about the challenge of maintaining assets in a sustainable way. And you brought up some really good points, you know, particularly like, you know, thinking about modification, extending life, improving performance, but don't over maintain, you know, because that is also wasteful, that has an impact on the environment, if you throw parts and consumables at something unnecessarily. So it's about the optimization and using the data to do that. But I think what we've also talked about is, you know, that there are some, whilst there's some challenges, there are opportunities here, you know, for spare parts, network distribution, and offering field services, for customers and their assets, you know, and with the provenance and the data around the operation of asset and extending its life in a way that, you know, there are opportunities around trading those by having something that can demonstrate how it's been used, where it's been used, so that it has that future value. So I think there's a lot of really good points of that have come up. So thanks

for joining me today, Colin has been really useful. This is huge subject. And I think, you know, in general, all of us moving away from the kind of throwaway economy by looking at products in a different way that they have value in trying to extend their life, whether that's consumer products, or whether that's extending life and optimizing performance of industrial assets. I think this is a key part of how we can shift to a more sustainable economy. And of course, we need the systems and processes that support that and I hope you've you know, from the talk today, you've you know, we've mentioned some of the products that we've created to build on the S/4HANA maintenance capability in particular, but you know, all the capabilities that are needed for maintenance, planning, execution, connections, spare parts, etc. And all of those things are available and, and, you know, can help drive a business towards this more kind of sustainable, more maintainable, extended product life kind of business. So, if you've heard anything that interested you today in this talk, then please reach out and connect, you can use the email address sap@hcl.com Thank you very much for listening.