



TRUST AND COLLABORATION

Based in Aalborg, Denmark and Chicago, USA with subsidiaries in Sweden, Norway, France, Holland, Germany and England, Trackunit is one of the leading SaaS (Software as a Service) and tracking companies serving the equipment market, offering hardware, fleet management software & telematics. Its chief product and marketing officer is Laerke Ullerup who is also one of the eight members of its leadership team. Mark Darwin sat down with her for a quick chat at APEX, where the company was launching several new products.

"I am interested in people and try to understand what makes humans tick and how to drive transformation and change specifically around adopting new technologies and new digital products," says Ullerup. "For me, the construction equipment industry is an exciting place to be when you are interested in that there is so much potential for unlocking new innovations, new ways of collaborating and new customer experiences which is driving the new digital transformation."

"The technology side, I sometimes think is the easy part because people can be complicated and difficult. We need to make sense of the technology so that our customers can use and see the value of it."

Prior to joining Trackunit almost five years ago, Ullerup worked as a consultant for more than 12 years, running her own business and co-founding Purpose Makers. The projects she became involved with included driving innovation, leadership strategy programmes and workshop initiatives in the start-up and technology sectors, with a focus on digital transformation, entrepreneurship, communication and marketing.

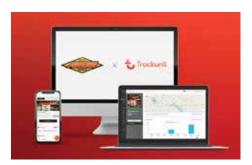
As chief product and marketing officer at Trackunit she is responsible for building brand awareness and improving corporate communications, while promoting growth through working with sales and tech support to help forge more partnerships.

"I am now five years in and have much more work to do. It is a very exciting sector and I



strongly believe that there is opportunity for everybody to work smarter and more innovatively, and ultimately more efficiently while playing a part in sustainability. All these are possible. Change is never easy but usually the harder things are to achieve, the greater the reward. If it was easy it is not as satisfying - change takes time, needs a bit of curiosity and a little bit of love."

"The ability to empathise and connect is more relevant than ever," she says. "I am a strong believer in the power of the human touch. We are all just humans, so the ability to empathise and connect in a world of computer screens, technology and abundance is more relevant and more important than ever. I have always been intrigued and fascinated with technology and the impact it has on work, collaboration, society and human relationships. Bringing people together and building connections gives me energy and drive. Developing Trackunit's GTM (go-to-market) strategy through partnerships is therefore a truly exciting challenge to tackle for me."





Established 20 years ago, Trackunit claims to have connected more than a million machines and tools on its platform. The bulk of its customers are currently in the aerial lift sector, making it a key market for the company and accounting for the majority of the equipment connected to the Trackunit cloud.

Trackunit Iris is the platform it purpose-built for the construction equipment market, it is hardware agnostic and runs everything from scissor lifts to excavators and all manner of products in between. It has an all-in-one embedded firmware and cloud system for software updates, data logging and diagnostics. Products include Trackunit Manager which gives an overview of every asset in the fleet, Trackunit Go and Trackunit On. These provide customers with information on machine utilisation, location, daily tasks, workflow, maintenance, repair information and theft protection.

INTERVIEW





WHAT DOES TRACKUNIT DO?

For many people who do not fully understand what Trackunit does, this example may help.

"The OEMs we partner with want to understand how their equipment is being used enabling them to make better machines and deliver better services," says Ullerup. "For example, one of the insights one company gained from the data supplied by us was that one telehandler model was never used at its maximum height. The real time usage data showed users were only making lifts to lower heights, which allowed them to build a slightly smaller and less costly model, which still served the needs of the users. Manufacturer's collect a lot of feedback on their own, but real time feedback on machine usage provides tangible data which helps improve their R&D and build better products. We cannot design machines, but we can provide the data that helps designers understand usage."

NEW PRODUCTS

Three new products unveiled include 'Sites', 'Emissions reporting' and the 'Market Place.'

"Sites is a new way of looking at the data we are already collecting, such as its location etc," says Ullerup. "Previously you could see the information for the fleet and manually create groups, but this new feature allows you to create the site in a much easier and scalable way. For the fleet owner, contractor or rental company, they can now see their equipment at site level whether that is in a rental yard, on a job site or in a depot and it doesn't matter if these sites are not permanent such as a construction project. Our customers can now see the dashboard of a given site and see the equipment there and with diagnostics which equipment is due for service or collection, etc..."

"We are also introducing something to help customers detect a specific site, eliminating the need for manual input, you see a location of assets and automatically it creates everything in a view instantly. A lot of our customers have been asking for this feature for a long time. Was it difficult and costly? Yes, because it is basically expanding the entire product experience, so it is something that is built into the product at every level."

EMISSIONS REPORTING

"We are seeing a lot of demand to become smarter about how to record and document emissions. The difference is that our new product helps customers do that with real time data usage rather than a global approximation based on a make and model. We use the real telematics data, and we can see by the hour how much it has been used and can document and help customers track their greenhouse gas emissions."

Manufacturers can give engine emission data but knowing and recording how often the machine is working etc is tricky. When you have a fleet of say 10,000 machines that becomes almost impossible to process.

"This is another in demand feature which we can also connect to Sites," she says. "Contractors are required to document their gas emissions from job sites such as a new highway, hospital or school. It is sometimes a requirement for the right to tender so having a document that can actually prove your greenhouse gas emissions is essential. There is a lot of legislation coming in this area and this new programme can help our customers and industry establish a baseline, but also to track and record it and eventually set targets for their greenhouse gas emissions."

"This is a very exciting area. For me it is critical that the industry takes this agenda seriously, there are a lot of great intentions, but it is hard to take action and document it because the foundation, data and the global standard has not been agreed on. It also works on site where people want to understand the emissions generated by each machine."

MARKET PLACE

"Earlier this year we announced we were launching a Market Place with the intention to invite the industry, our customers, partners, other developers and software companies to be part of creating new value for the eco system on top of the data that Trackunit has collected."

"It is essentially an invitation to co-create and we will announce more and more applications throughout the year. The first applications that are already live are called data feeds and these make it easy for fleet owners to see all of their equipment data in one system, avoiding the tedious process of exchanging credentials and API tokens, this takes away a lot of manual effort for fleet owners who would like to see all of their equipment data in one aggregated view."

"Later in the year we will invite the industry to co-create and we are already working with a lot of the leading players and have received good feedback. Early last year we announced a strategic partnership with Hilti to advance digital transformation in the construction industry - focused on bringing global scale to the tool and equipment connectivity domain. This is one of the first to have an application in the Market Place. The partnership aims to increase productivity and eliminate downtime in the industry. There will be more news on this later in the year."

The Market Place is an example of the journey Trackunit is on," she says. "To be able to keep a platform running requires a significant investment in security and scalability and the correct architecture. What most people don't see is the hidden value of how you collect all the data, store it, process it, clean it, how do you make sure it is secure and shareable in a way where we don't breach any contracts, and ensure that it is encrypted - all of that takes years and massive investment."

"You can of course go on Amazon or Alibaba and find a cheap tracker, and also perhaps some data, but to ensure you can rely on that data to be there tomorrow and in the future and have it in a secure, scalable platform, takes years. That investment is enabling this open architecture where we can invite others to come in and create value on top. It is a big investment in terms of making the platform extendable and also means that if someone wants to work with Trackunit and says 'I want to build by own version of the sustainability app but I want to use the Trackunit Missions reporting and I want to combine it with something that I have come up with', we can connect and hook into our Missions reporting allowing them to build a new solution on top of that. This is why the Trackunit platform is extendable, we can either build new applications or help customers get the data into their own applications."

"A concrete example is easier to understand. To run an internal experiment, we asked a few developers to run a little app on the Market Place. One of them had an idea to combine weather data with lift data to warn if the machine should be operating under windy conditions. You can create the app and set your own threshold - with say a 10 metres a second maximum wind speed - and then set it so that up from zero to four metres a











second you get a green light, between four and 10 a yellow warning, and a red warning when over 10 metres a second, which can create a trigger for the operator or site manager alerting them to the risks."

"This simple app is called CraneCast - the name and description were devised by Chat GPT - and all of this was done in one day by one developer. This shows the pace of innovation that is now possible."

ARTIFICIAL INTELLIGENCE

"Al is an emerging field, and everyone is trying to understand how best to benefit from it. We are looking into how to use it, however we do have very strict security policies so there is a natural limit to what we can and cannot do, but for the naming of an app, generating an essay, description or drafting something it is a great addition to the team. We also have a lot of machine learning and analytics capabilities in our

products, and this will also be supported by Al."

THE FUTURE?

"There is a huge trend around the Internet of Things (IoT), and we see massive investments in this area and an explosion in data. It is no longer enough just to produce a good machine, you also need to understand what happens after it leaves the factory."

data flow seamlessly. The sharing of data is a prerequisite for a lot of the new innovation that we can unlock. The data sharing part is all about humans again, a little bit tricky in that it requires us to trust each other and collaborate, to open up and come up with new ways of doing things. I know customers want to be able to access their data across many different platforms and be able to make many integrations. They don't really want to

"Lastly I think we will see a need to make

live in closed off systems where they can only see a simple view of the world. This is where I think it will head."

"I am not saying we should share everything, but if we combine our data with something that another player has we would all benefit. It is about generating value together instead of alone. That is what I believe in and that is how other industries such as automotive, medical and healthcare succeed - why should it not work in construction?"







The new Trojan AES battery is the positive affirmation of everything you want and need in a Motive battery. It features the best of our proven deep-cycle AGM technology and delivers robust performance in extreme temperatures and conditions, giving this VRLA battery up to three times the cycle life of standard AGM batteries.



Download data sheets and more at trojanbattery.com/YesAES. Say YES to Trojan AES.











YOU CAN DEPEND ON TROJAN BATTERY

Access equipment owners and operators increasingly depend on battery powered equipment. That makes them eager to keep up with evolutions in energy storage technology and solve operational problems.

Trojan Battery Company has some information on that front. Trojan, the pioneer of deep cycle battery technology, stands in the vanguard of evolving battery technology and moves innovative products through our pipeline.

THE NEW TROJAN AES BATTERY: EXPANDING THE LIMITS OF STANDARD AGM TECHNOLOGY

That includes their new AES Battery, an evolution of proven VRLA technology that breaks through the limitations of standard AGM batteries.

Standard AGM batteries should not be operated at a depth of discharge below 60% in most applications. They experience damage and possibly early failure when repeatedly used in a partial state of charge (PSoC) or opportunity charged, something that often happens in the heat of busy workdays. As a result, these batteries may deliver shorter-than-expected life and need frequent replacements.

Trojan's AES Battery solves these problems.

Available in 6, 8 and 12 volt models, they boost the performance of mobile elevated work platforms, aerial work platforms, material handling equipment, floor care machines, golf, personal transportation (PTVs) and utility vehicles.

The batteries are enhanced with a combination of technologies, including a proprietary carbon additive, to deliver all the benefits of standard AGM but also withstand both PSoC operation and opportunity charging. Unlike competitive products, they also feature Deep Cycle Series (DCS) technology and optimised active material to

prevent the degradation of the positive material. The batteries offer these competitive advantages over other models:

- Deliver up to three times the cycle life of standard AGM. The battery is validated at 1,200 cycles at 100% DoD. Competitive models only double the cycle life of standard AGM.
- Ensure robust performance in extreme temperatures ranging from -40°C to 71°C (-40°F to 160°F).
- Tested to withstand long-term PSoC, again and again. This ensures dependable high performance, helps prevent battery damage and extends life.

The maintenance free battery also has plug and play compatibility with standard AGM chargers and algorithms and is 99% recyclable.

BACKED BY TROJAN'S UNSURPASSED SERVICE AND SUPPORT

When purchasing batteries, it's also essential to consider the manufacturer's history, portfolio and support services.

Trojan Battery Company has been manufacturing batteries for almost a century, made the first golf car battery, pioneered deep-cycle battery technology and are a trusted supplier to OEMs. They have an international footprint, deep infrastructure and multiple manufacturing sites offering the following:

 A complete portfolio of deep cycle flooded lead acid, AES and 24, 36 and 48 volt lithium-ion batteries to fit every need and budget.





- Technical support through an International Customer Support Line staffed by battery experts
- Networks of trained International Master Distributors and Authorised Trojan Dealers.
- Close coordination with charger manufacturers to optimise charging for each battery, extending battery life.
- Two research and development centres which test batteries and develop new products.
- Manufacturing facilities in the US, China and Mexico.



Learn more about the Trojan AES at www.trojanbattery.info/YesAES/ or visit www.trojanbattery.com