

CaSSOA x Smarter Technologies - Intro to Energy Management Software

Mark Read

My name is Mark Reed. I'm CEO of Smarter Tech group. We're we're actually an IoT business. We're the only actually IoT business in the UK that is complete end to end. So what I mean by that is we manufacture hardware, physical devices, we own our own communications network called Orion, software engineers that build apps, APIs and platforms, and do integrations with other software systems.

The real interesting thing is because we own Orion, which is our own comms network, we can stream real time data in two in two directions. So it means we can turn things on and off remotely and we can do it without using SIM cards and expensive text. So essentially we've put a few, a couple of gateways up, a couple of receivers up on your site and then we can control things in real time.

Obviously, as a smart building operator, it can go much wider than the product that we're talking about today and it can in fact do all sorts of it, can basically track and monitor anything across your sites. The reason I reached out is we do have a leisure division that does a lot of sub metering effectively for all of the utilities across marinas, residential parks, holiday parks, and touring parks

The customer would plug their power in, scan AQR code, prepay or pay on account. This makes sure that you never lose a kilowatt and are always covered for all of your electricity bills.

As you know, in the UK, you're only allowed to pass on the electricity charges at the actual per kilowatt rate. So what our system allows you to do is to pass it on at the kilowatt kilowatt rate daytime rate.

The night time rates but also allows you to add service charges which you are allowed to do directly into the bill. So effectively whatever we provide, you should be free because you'd be passing those charges on to your users.

MR

So essentially the system gives you real time energy consumption data. The users also get an app, so which is really great for them. So if you've got a holiday home for instance, or something in storage, they can see the power that it is consuming.

It gives very accurate billing for every kilowatt down to a second. You can monitor and manage the usage not just for that particular unit, but across your whole park or your facility.

It also gives you things like your carbon footprint, a really good understanding at the granular level of where with across all of your business you're using electricity. So if you were operating a part, for instance, and had communal areas, bathrooms and things, then you could monitor those separately.

It also flags any unusual behaviour we it's all anti camper so if anyone tries to bypass metres and things like that and you'd be perhaps not surprised at how often that happens, then all of that will alert.

The simplest system just gives you real time data, so you can produce a bill on demand from our platform.

The we have standard software that comes for free. We supply everything on APIs so all of the data that you see here can be pushed into any other management systems or operating systems that you might run.

You can configure metre tariffs and you can configure metre tariffs, electricity, gas and water on a device level, which I'll show you in a minute or across an entire site.

You can set metre tariff; so a general tariff that exists across every single metre or different tariffs for different metres, you can set a start date and end date. So if you're changing your energy supplier in future you can do this in advance. So the new tariff comes in automatically. You can set a daytime and a night time rate. So again you are mandated to pass on.

The same rates that are on your energy contract. So if your energy contract gives you a different rate for day and night time, you should be passing that on accordingly to your to your users and then you can set your service fees so you can set a service fee

any way you like on per day. You can see this particular example set at 27 per day or you can set it on a per kilowatt basis. So you can add an uplift to the per kilowatt as a service fee.

And then you can also if you wanted to do a daily connection charge. The Ofgem rules are you can't that that you need to pass on the costs that you've received from the energy supplier. For the unit rates at the end of the month where there's been standing charges received by you as a business as well, we divide those standing charges between the users and actually increase their unit rate slightly to take account of the standing charges, and then you can add service fees or connection fees should you should you wish, which is where, how most people recover our charges.

Within the app that the customer gets there is an embedded payment platform. If you have an account with stripe or a similar provider we will embed that into our software. Then when the bills are sent out from here, there is a link for them to pay automatically into your system and into your bank.

L **Laura** 24:50

Who do you mainly sell to at the moment? So I'm just trying to picture it. I can kind of picture. I think it would work on our site. Who do you? What's your kind of biggest customer base at the moment?

BB **Becci Bailey** 24:50
Hi, Laura.

MR **Mark Read** 25:05

In the main, our sort of bread and butter stuff is smart buildings and smart cities. So our customers would be energy companies, large government, large military organisations, site managers, ports that sort of stuff.

So there are lots of rules and regulations now across Europe where if you own buildings, you have to understand the carbon footprint footprint of your building, even if you've you've let it out to somebody else. So often most of our work is going

into those buildings, buildings and fitting our retrofit kits so that the owners of the buildings have all this data. So that they can produce sub metering if they want to on the sub metering side you get a lot of blocks of flats.

BB

Becci Bailey I could imagine if you have a valeting area and you wanted to start kind of monitoring that and obviously energy prices increasing, you've got to know how to pass on that cost to the customer and this sounds like the perfect solution.

L

Laura 28:31

Yeah, we definitely do. We just do a fixed rate fixed charge.

I'd actually thought of doing a bay that people could book or turn up and use, especially in the winter, I get a lot of requests for it, I just let them do it at the moment in the valeting area, but I know I'm losing out and I know it's expensive and sometimes they want to test the things as well and they want to plug in and turn all the heating on and all sorts. And I just say yes, knowing I'm losing money but hoping it keeps the customer happy. So that's where I see it working. I also rent out it's non caravan related but we have old farm buildings that we rent out as studios. They're all electric heating.

Mark Read 29:52

The other big savings opportunity in this is that all of our metres are remotely controlled by you. So they have an inbuilt relay. So essentially, if you if you if you run an operation where somebody comes in and rents a unit and then leaves, you can turn the power off remotely.

What happens is they might rent a unit out for a week, but they don't then send the cleaners in immediately because you know it's going to then be empty for a couple of weeks, so they don't want to put the cleaners in for two weeks.

But they were losing huge amounts of money on electricity because people have left and they've left lights on and fridges and heaters and all sorts of stuff is just merrily, burning money. So with our system you can all you can just basically turn the power off to that unit remotely. Be sure that you're not losing any money until it until you turn it back on again to go and clean it in advance of it being rented out in future.

L **Laura** 31:01

That's interesting, because also with solar panels, they sort of leave things trickle charging, I think, well, you don't need them trickle charging overnight. And I don't like them trickle charging overnight, but I'll let them do it. But I wonder if you could almost turn things off as the sun went down when I started to buying electric rather than generating it. Yeah.

MR **Mark Read** 31:18

It'll just give you the control to do whatever you want. And the other thing, I don't know whether you, whether you guys suffer with, but we see quite a lot in touring parks is people that you know, they set a low overnight amount for usage of electricity, expecting somebody an attempt to do not do much more than boil a kettle. But they're turning up with electric cars and taking 70 kilowatts overnight, right, which is costing a fortune. So all of that sort of stuff can be managed with a with a system like this.

L **Laura** 31:58

Yeah. I actually think from a safety perspective as well, turning them off overnight is a it offers something you know people leave, I've we've got units where garages where people leave like their drill batteries charging and bits and bobs like that. And I just think it would mitigate from any concern I have over that you just know it's off overnight, don't you? So it's your fire risk goes down, doesn't it?

Sharon:

We're hundred acre site and we have 1700 customers. We've been asked about electric charging points.

MR **Mark Read** 33:49

So we can monitor solar EV, all sorts of stuff is not a is not a problem. And give you a way to add in ancillary charges to it to make sure that it's profitable for you.