

ARK DATA CENTRES HAS BEEN THROUGH A MASSIVE TRANSFORMATION,
MAKING IT A VALUABLE ALLY IN THE DATA SECTOR.

POWERING THE DATA REVOLUTION

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Huw Owen joined Ark in November 2012 following a recapitalisation process. The first thing he wanted to change was the name. "It was called Ark Continuity Ltd, but nobody could explain to me what continuity meant, so I renamed it Ark Data Centres," says Owen. >>



POWERING AND SUPPORTING

Ark Data Centres with intelligent network and IT infrastructures

Enterprises need to be built on strong foundations and this includes their networks. To ensure they can deliver a product or service every interaction in their business process relies on technology and fundamentally their network.

With the network and IT infrastructure being the engine that powers an Enterprise, it is crucial to capitalise on the latest technology advancements from Security, IoT or Cloud. Managing this and keeping on top of technology trends and innovations requires a wealth of experience and expertise. Working with an experienced Managed Service Provider (MSP) enables an organisation has flex and respond to their business requirements 24/7/365.

The market for IT products and services is changing and this has heightened the importance of IT across the business. It enables IT personnel to assume a more strategic role to drive the business forward, but the amount of technology they need to support this has also grown, driving the need to work with MSP's. Working with an experienced MSP to deliver a high-value managed service enables Enterprises to shift their focus on the outcome and how a solution performs after it is installed.

Tom Stone, Managing Director at Trust explains; *"Most organisations still struggle with two major IT-related issues that are often at odds with each other: keeping their IT infrastructure operating at optimal levels of performance, and simultaneously managing the spiralling costs associated with that goal."*

Add to that the breakneck pace of new technology emergence and adoption—services that enterprise users need available to them sooner rather than later to remain competitive—and you have a perfect storm of IT complications. Many companies spend an inordinate amount of time and investment trying to keep these opposing forces balanced.

To reduce the costs and complexity, we offer a managed service which delivers value to Enterprise customers, lending technological expertise and capabilities."

The Need for 24x7x365

The fact of the matter is that an organisations network and IT infrastructures need 24x7x365 monitoring, management, and optimisation support—somebody (or some team) has to do it. Enterprises that adopt a go-it-alone, in-house strategy, face the pitfalls of recruiting, hiring, supporting, and (re)training a team of IT professionals. When organisations choose this route they have the overhead expenses plus the supervisory headaches of managing and coordinating the team. And that's assuming they can find the right mix of professionals with experience in all the myriad technologies infrastructures contain.

With the explosion in emerging technologies that organisations need to implement and maintain, can they even afford to consider going it alone? What returns can they reasonably expect?

The move to working with a value add MSP enables organisations to reduce both CapEx and OpEx burdens. The reduction in expenditures and the efficiencies are equally as significant with quicker adoption of new technologies that can bolster core business, increase uptime and infrastructure efficiencies, and provide a much higher level of user satisfaction. When managed services are implemented in a partnership with a leading MSP, the gains far outweigh the costs.

What is the Desired Outcome of a Managed Service?

When embarking on managed services, what are the real reasons for doing so? Is it solely the expenditure reductions, or are organisations trying to achieve something else? Trust's methodology is to provide more with a blend of the best people, processes, and tools to achieve IT assurance. We believe in a partnership with our customers, and we see something more than just taking away some of the expenses and all of your IT concerns. Trust feel that organisations probably want to achieve a deeper business-oriented outcome, one that enables professionals to do what they do best—growing the business.

Trust offer managed services built for the agile Enterprise — delivering hardware, software and services at the time of purchase, reducing cost and complexity with agility to support changing business requirements over time.

ARK DATA CENTRES

Trust has been working with Ark to design, deploy and manage their network through their extensive development and growth. Most recently extending this to manage their IT services – truly providing one trusted supplier from consultation to design, deployment and proactive management of a robust and agile mission-critical infrastructure that Ark Data Centres and its customers depend upon.

SUPPORT

On-site experienced resources

24/7/365 service desk supervision, monitoring and support

24/7/365 contracted IT and network services provision.

All with
security
at the core.

DEPLOY

Deployment and management of a robust large-scale network and IT infrastructures.

DESIGN

Architecture consultancy for designing and building new and existing infrastructure.

Speak to our team
and power your
business today.

 sales@trustsystems.co.uk

 www.trustsystems.co.uk



Trust is a partner who has supported our extensive development and growth plans. Working with a supplier you know who can deliver when our ethos is to provide customers with a solid, robust and secure service is absolutely essential."

Andy Garvin, Director,
Ark Data Centres

At that point, Ark Data Centres had two sites, one in Spring Park, Bath, near a Ministry of Defence technology site, and another in Farnborough. The proximity to the Ministry of Defence site meant that Ark was not only close to a potential client but also benefited from the fibre-dense, power-dense network in the area, as well as a million-square-feet of underground space originally intended to shelter the government in the event of nuclear war.

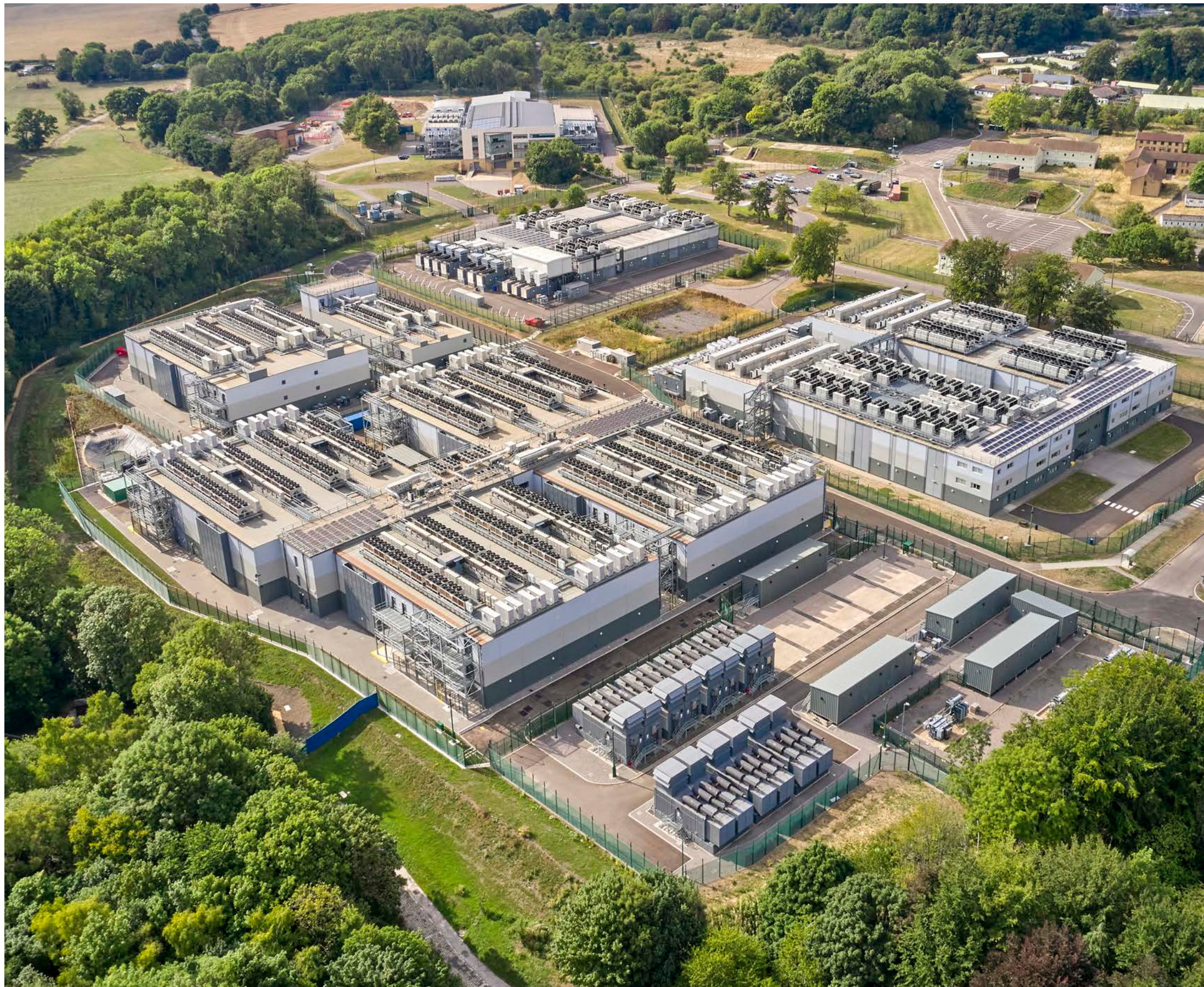
“We set about trying to create the company we had always wanted to work for,” Owen says. “I joined the firm with a couple of colleagues from a previous workplace.”

A PARTNERSHIP OF PUBLIC AND PRIVATE

Owen’s strategy was to pursue big commercial clients, while also leveraging Spring Park’s convenience for government work. Ark went on to win the Crown Hosting contract in 2014, becoming a joint venture partner with the UK government. Under this contract, anyone who receives government funding has the right to pre-costed, fully certified data centres.



Huw Owen, CEO,
Ark Data Centres.



“We sort everything while offering a 66% like-for-like saving,” says Owen.

At the same time, Ark was able to win a contract from a major FTSE 40 company undergoing an extensive transformation.

“We took over a lot of their old sites and that was a very successful venture that gave us great referenceability,” Owen tells us.

From there Ark Data Centres acquired facilities at Longcross, Meridian Park in Enfield, and a further seven sites, bringing it to nine sites in total. Owen’s strategic approach to the market has come to define Ark Data Centres, and it is reflected in the firm’s supply chain.

“98% of our supply chain is British,” Owen says. “We have alliances with key names such as BladeRoom and they are competent, capable people who we know how to do business with, enabling rapid growth.”

“IT IS WHAT BRITAIN SHOULD BE DOING, ENGINEERING GROWTH & JOBS. THAT IS SOMETHING WE ARE IMMENSELY PROUD OF.”

A NATIONAL SUCCESS

Indeed, Owen is proud of Ark Data Centres as a distinctly British success story.

“That is the thing that strikes me time and time again,” Owen tells us. “We have attracted billions in investments, 98% of our supply chain is British, and we have provided employment, construction work, and world-class British engineering and design. It is what Britain should >>

The World's Most Efficient and Sustainable Data Centres

BladeRoom are global leaders in the provision of highly energy-efficient data centres, manufacturing a sustainable and scalable solution capable of being deployed anywhere in the world.



Learn more: www.bladeroom.com

BLADEROOM DATA CENTRES

SOCIALLY RESPONSIBLE DATA CENTRES

For many businesses, enhancing sustainability now sits squarely at the top of the agenda and it's a principle we share with the customers we serve. That's why our data centres are designed around innovative technology that is proven to dramatically reduce energy consumption and carbon emissions.

A BladeRoom data centre, with its latest technological advances, uses zero mechanical cooling or refrigerants, and can operate at an annualised PUE of 1.04. This represents less than 4% of the total energy required to power the entire data centre and compared to the industry average, it is over 10 times more efficient. At the scale of a 100MW BladeRoom campus, situated in the UK, this results in annual carbon emission savings of up to 100,000 tonnes.

The real and significant reductions in carbon footprint that we are helping our clients to deliver today are the result of our 12-year commitment to innovation and continuous improvement and it is our mission to continue this journey towards a better and more responsible digital future.

DATA CENTRES DON'T GET ANY COOLER THAN THIS

BladeRoom facilities use an advanced cooling system, maximising free, filtered, ambient air with evaporative cooling. Free cooling is available for up to 100% of the time depending on the climate and supply air setpoints - saving significant cost and carbon emissions.

Rather than re-circulating and cooling the hot air from the IT as with traditional data centre cooling, a BladeRoom data centre operates like a server by drawing in highly filtered fresh air, intelligently matching air supply to IT demand and exhausting or partially recirculating warm air from the data centre as required.

Evaporative and free cooling enables the IT equipment to be cooled with supply air temperatures of between 18 °C and 30 °C for more than 99% of the year in the UK without the need for mechanical cooling across a range of IT loads, still performing efficiently at 15% utilisation of racks.

WHY 'FACTORY-FIRST' MATTERS

By manufacturing our data centres in our 15,000 m2 factory, we offer a sustainable

alternative to site-based construction which in turn, provides a more resource-efficient way to create socially responsible facilities.

Our 'Factory-first' production approach allows deliveries to be made to the factory in bulk from local suppliers, minimising transport and heavy goods emissions. Materials are tightly controlled which dramatically reduces waste, with noise and pollution levels minimised, and site-based operational risks are transferred to a more secure environment.

BLADEROOM DATA CENTRES X ARK DATA CENTRES

BladeRoom have been manufacturing data centres off-site in partnership with Ark Data Centres for over a decade. Work began on the first 1.5MW data centre in August 2011 at Ark's Spring Park campus, with our first partnership agreement signed in September 2013.

Together, we have built 116 data halls, totalling 111MW, and during this time our technology and construction approach have evolved considerably, enabling us to provide some of the most socially responsible data centres in the world.

www.bladeroom.com

Specialists in Mission Critical Systems

Gratte Brothers offers a trusted, fully integrated service for data centre infrastructure with resilient engineering. With over 28 years' experience designing and building high-quality, energy-efficient data centres that strive to lead the market in social responsibility, we've been one of Ark Data Centre's partners for over 10 years.

Our in-house design, prefabrication, installation and maintenance services mean we can deliver a unique end-to-end solution that is **Built on Quality**.



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 Over 28 years' data centre experience

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be doing, engineering growth and jobs. That is something we are immensely proud of.” BladeRoom in particular has proved a valuable partner. “BladeRoom is at the heart of our build, and it provides an efficient, agile system that we build our data centres around,” Owen says. “The Alliance Partnership enables us to get things done within budget and on time.”

As a joint venture with the UK government, Ark Data Centres is not only a great example of a British success story but also a valuable contributor to the country, making it a company people want to be a part of. “We do things that matter, which enables us to get people who really want to come to work,” Owen tells us. “If you think about what a data centre is, it is a building with power and fibre with security, humidity

and temperature control. You are essentially looking after a building, so making that appealing is a challenge. If you talk to our clients, what they like about us is that our people care about what they do. As a culture, traditionally data centres have been a highly transactional industry, which I don’t think is good enough. My board and I have sat on the boards of big tech companies, we understand our clients’ issues.” >>

MICIM

Established in 2016, MiCiM is dedicated to delivering comprehensive project management and construction services, specialising in Mission Critical facilities. With a wealth of experience exceeding 500 years collectively within our team, we offer a level of expertise that ensures not only the successful completion of projects but also the delivery of high-quality outcomes that all stakeholders can take pride in. Our commitment to transparency, integrity, and collaboration underscores every project we undertake.

MiCiM operates as an engineering-focused enterprise across various sectors, including Data Centres, Laboratories, Food Processing and Manufacturing.

In 2022, MiCiM expanded its capabilities by acquiring Operational Intelligence, a respected firm specialising in optimising data centre risk and energy performance. Enabling us to offer a broader range of consultancy services and training programs. Assisting operational teams in reducing the overall cost of ownership throughout the project lifecycle, including aiding in the development of a design basis, conducting design peer reviews, and offering commissioning consultancy.

MiCiM International, a wholly owned subsidiary of MiCiM Ltd, was established in August 2022, in Dublin, Ireland. This entity plays a pivotal role in our global expansion strategy, boasting a dedicated team of industry experts and a robust network to cater to the diverse needs of international clients.

Building on this momentum, MiCiM Italia was inaugurated in 2023, marking our entry into the European market. With an office established in Milan in early 2024, we are strategically positioned to serve as the cornerstone of our operations in Southern Europe.

www.micim.co.uk



Focused, end-to end, hands-on Mission Critical Management

MiCiM offer a wide range of highly skilled and experienced technical, Construction Management and Project Management services to the Data Centre and Mission Critical industries.

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- Project Management
- Engineering, Quality Assurance & Commissioning Management
- Professional Consultancy Services

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xIntegra

Performance by Design | Systems engineering for data centres



With the rise of big data, edge computing and the cloud, data centres are under pressure to be more high-performing, sustainable and cost-effective than ever, without compromising resilience or security. At the same time, new opportunities and revenue streams require faster speed-to-market. With our digital intelligence, world-class cyber-secure products and services, reliable, compatible solutions and engineering expertise, we help data centres realise real business benefits today while optimising their operations for the future.



Powering Business Worldwide

To discover more visit
www.eaton.com/xintegra

EATON

INNOVATIVE ENERGY EFFICIENCY

Eaton and Ark Data Centres share a 12-year history centred around sustainable and efficient energy management. The joint critical power infrastructure supplied by Eaton to Ark is currently 200MW.

Data centre growth is attracting many new entrants, but Ark sets itself apart as a leader in the design, construction, and operation of the UK's most efficient and sustainable data centres. Ark's significant year-on-year growth is a result of their commitment to innovative energy efficiency, allied with resilience and attention to managing the physical and logical security of customers. This is aligned to a robust approach of procuring renewable power, environmentally friendly fossil-free Hydrotreated Vegetable Oil for backup power generation and a commitment to supporting our customers deploy their equipment efficiently.

MISSION CRITICAL CAPABILITIES POWERED BY EATON

The power infrastructure developed and deployed by Ark relies on a robust, candid and sustained working relationship with critical third-party suppliers, which is why the relationship with intelligent power management company, Eaton is so important. Vendors are in a prime position to help meet challenges. Eaton has been working to reform conventional notions through the adoption of systems engineering within the data centre, which caters to the exigencies of the contemporary landscape. It considers the advantages of an end-to-end system design and explores the connected, integrated power train from grid to chip, including hardware, software, and services. We call this approach xIntegra.

XINTEGRA

A data centre has two principal domains, data and electrical, and while they each

serve different functions, how they interoperate is key for overall functionality. Although there are commonalities between them, they differ in how they transmit, receive, process, switch and store data and energy. If these two domains are intelligently connected, then events in one can trigger appropriate action in the other. Coupled with the evolution of AI, connected data and electrical domains move us forward to the self-optimised, self-aware intelligent data centre of the future – and this can only be achieved when designed and connected as an engineered system. System performance is defined not only by how all the elements function individually but also together.

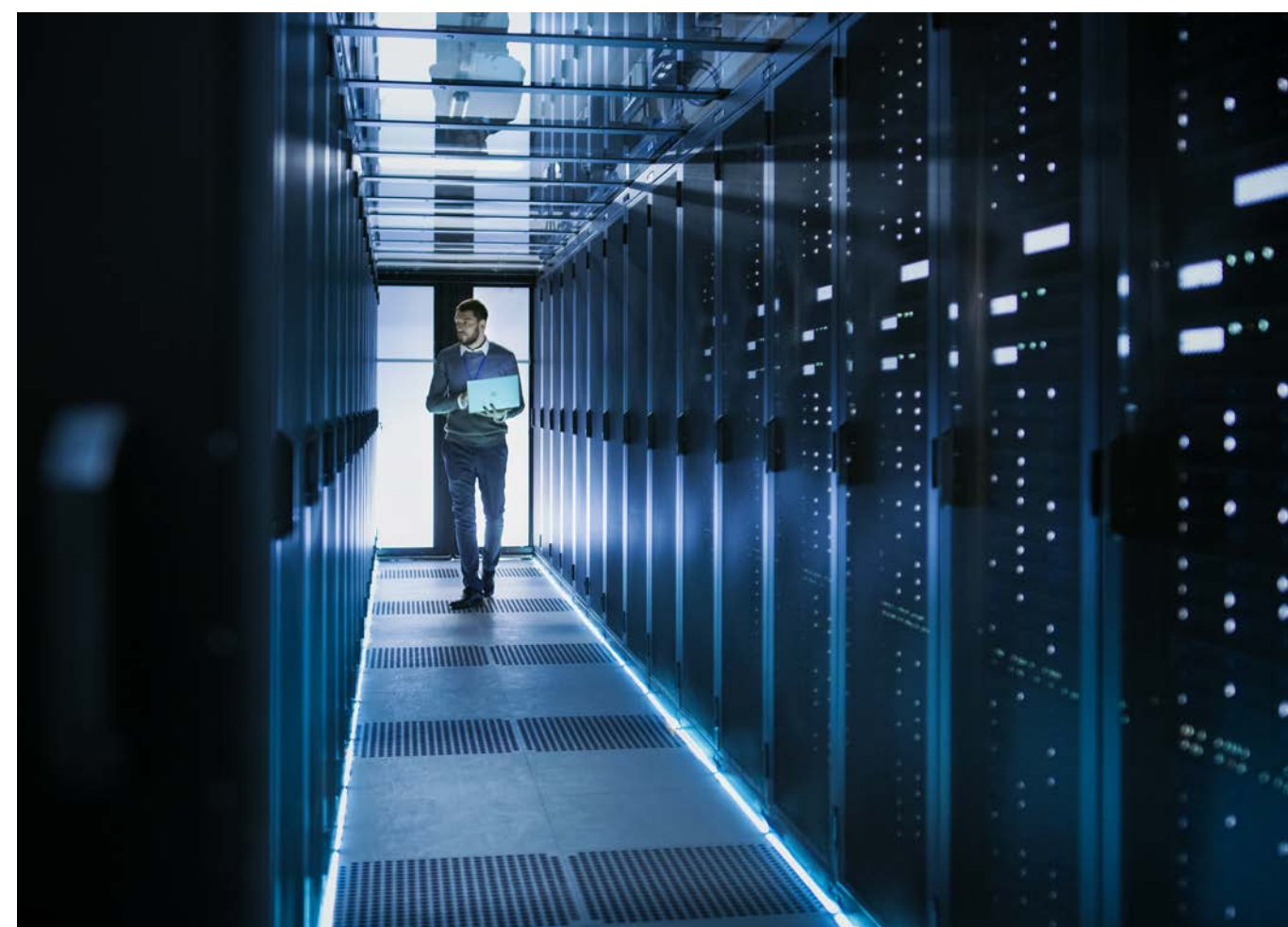
WORKING RELATIONSHIP

Data centre construction and operation have their own distinct challenges but the working relationship between Ark and Eaton relies on the ability to hold open, honest conversations in the design and operation phases. With the changes in the data centre market, changes in the way that power is distributed and more recently the scale at which large hyperscale customers procure capacity, this has been an absolute requirement. Eaton consistently demonstrates its commitment to Ark, to resolving the inevitable challenges associated with data centre operation and a willingness to become a part of 'the team.'

CONCLUSION

Through xIntegra, Ark benefits from dedicated support teams at each stage of the process, which has helped them to maintain the highest standards, and to ensure that it always benefits from the most effective and resilient power infrastructure. Both parties look forward to what comes next from the partnership.

www.eaton.com/datacentres



TREATING PEOPLE AS PEOPLE

The way Ark Data Centres treats its people is central to that offering.

“We work with a company called Mindalpa, doing detailed surveys distinguished by gender and age groups so we keep our finger on the pulse and understand our organisation,” Owen says. “Every five weeks we have ‘Tea and Cakes’, with the whole company on a call, and once a year we get everyone together in person. We treat our people as people.”

Through Mindalpa, Ark Data Centres uses psychometric testing to create an essential tool for managing company interactions.

“It means that when our people engage with each other they have access to that, so they understand how to best engage with one another,” Owen says. “It is ongoing training, not just to make them good at what they do but equipping

them to manage conflict and have difficult conversations and negotiations. That is leadership.”

Every year Ark Data Centres puts out ten priorities that have been workshoped by the entire company.

“Everyone knows what they are doing to aid those priorities,” Owen says. “It is about discipline. None of us work on anything that isn’t essential to the company. It gives us a sense of mission and working for a company that values, challenges and rewards us. We don’t have human resources, we have people, leadership and training. People aren’t resources – people do business with people.”

NEW MARKETS

Those people are more essential than ever as demand for data centres is soaring, and that is before the growth in AI technology is taken into account.



“The market has changed with the influx of the AI market,” Owen says. “It is made up of two key components. There is the inference component, which will remain largely in the operating zones we see today, and then there is the training component, housing the vast data needed for training. That will be more remote.”

“TODAY OUR CHALLENGE IS ENSURING THAT OUR RULES, TOOLS, AND PROCESSES GROW IN SYNC WITH US.”

Ark Data Centres is looking to win business in this new arena and is entering the European market with its new Brussels site to better serve it.

“I’m originally from Africa, and I’m not a fan of arriving at watering holes late,” Owen tells us. “We have got sophisticated spreadsheets tracking country population, e-commerce saturation, and infrastructure to help us predict where the next big emerging market for AI platforms is going to be.”

A BIG JOURNEY

Owen is clearly excited about the possibilities ahead, but Ark Data Centres has already come a long way.

“I joined an untested company, saying that we were going after the Crown Hosting contract and FTSE 40 companies and convincing them that if we did things with the right mindset, we could win deals at that sort of scale,” Owen recalls. “It was about getting people into a room, working in a directed manner with clear targets and clear outcomes.”

It was about building the company’s confidence.

“Now we practically have to reign them in, but early on that was our biggest challenge,” Owen says. “Today our challenge is ensuring that our rules, tools, and processes grow in sync with us. We need to retain that agility and culture as we grow from 20-odd employees to over 100 and a community of contractors taking it to 300.”

That agility and culture will be only more vital as the market evolves.

“With AI coming in, it is essential to remain innovative and relevant in all of these markets,” Owen says. “It has been a hell of a journey over the last decade, from two sites in the UK to nine sites bridging into Europe.” ☺