STL PARTNERS

100 edge computing companies to watch in 2023

As always, this list includes a range of companies, from start-ups to those established in the ecosystem. This year, we've asked companies to provide more information on their financial milestones associated with edge computing, as well as for details on the practicalities of edge applications that they are enabling. From this, we can chart the increase in maturity of edge offerings with more companies seeing significant revenues streams coming from their edge portfolio. We can also see the increased range of edge use cases being enabled ranging from global manufacturing operations to retail to V2X communications.

Matt Bamforth, Senior Consultant

February 2023

© STL Partners

1. A5G Networks, Inc.

Company type: Start-up

Position in edge ecosystem: Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Application/Software (Analytics & APIs); Integration & Services (Design & engineering)

Notable achievements in 2022: A5G Networks partnered with Vodafone Idea to enable industry 4.0 and smart mobile edge computing in India. They have set up a pilot private network in Mumbai utilising existing 4G spectrum. A5GNetworks have also partnered with ng-voice to deliver cloud-native 4G and 5G solutions to enterprises.

Key financial milestones reached: A5G Networks, Inc. has secured its first round of funding.

An edge computing use case they help to enable: A5G Networks is providing autonomous 4G, 5G, WiFi converged packet core that enables efficient edge deployments. It can be used for enabling public, private roaming, IoT, smart city and industry 4.0. More specific use cases are drone delivery, connected cars and digitalization of medium to large enterprises. A5G Networks' customers are both MNOs and enterprises, including car manufacturers and port authority.

2. Aarna Networks

Company type: Start-up

Position in edge ecosystem: Application/Software (Software application);

Notable achievements in 2022: In 2022, Aarna Networks achieved several notable accomplishments including the release of the Aarna Networks Multi Cluster Orchestration Platform (AMCOP) and the AMCOP O-RAN SMO SaaS, which was the industry's first open source O-RAN SMO. They also launched the beta version of Aarna Edge Services (AES), a SaaS platform that provides zero-touch orchestration for edge infrastructure and public clouds. The company also highlighted customer engagement through four new case studies and continued to lead in open source projects.

Key financial milestones reached: Aarna Networks continued to grow steadily in 2022 and is gearing up for a Series A round in the first half of 2023.

An edge computing use case they help to enable: Aarna Networks provided orchestration, lifecycle management, real-time policy driven closed loop automation, and an O-RAN SMO to a large customer in Japan for their private 5G network. The IoT and Mobile Broadband use case involves thousands of devices streaming at 4K speeds. The enterprise network operator can now create an infrastructure, deploy network functions, and configure them easily.

3. Accenture

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Site maintenance & operations); Network (Interconnect, IoT platform, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Analytics & APIs); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: In FY22, Accenture delivered edge services at 125 clients across 15 industries. Approximately half of the clients were in industries that included Comms & Media, Consumer Goods & Services, Energy and Industrial.

Key financial milestones reached: $4.2B invested in acquisitions which help procure specialized talent. Acquisitions bolster Accenture's edge capabilities including XtremeEDA to expand silicon design and semiconductor engineering capabilities.

An edge computing use case they help to enable: Accenture is collaborating with Mars, the leading company in confectionary, food and pet care, to modernize its global manufacturing operations using AI, cloud, edge technology and digital twins. The two companies have been testing the use of digital twins to optimize production processes and improve equipment performance, reliability, quality and energy efficiency.

4. Acromove

Company type: Start-up

Position in edge ecosystem: Facility (Data centre, Rack systems, Power & cooling, Site maintenance & operations); Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor, End-device); Network (Interconnect, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Design & engineering, Professional services)

Notable achievements in 2022: Acromove launched their ServerPack Edge Data center in a box product and demonstrated in several MNOs, TowerCos globally. They also improved their AcroCloud platform and carried out planned collaborations with important System Integrators and Vendors. They participated in known ICT Exhibitions globally and presented their solutions i.e. MWC, DTW/TM Forum, Fyuz/TIP, etc. They also launched a new service for their data migration product. Their ambitions for 2023 are to complete the PoCs they have finalised, launch more features and finalise the PoCs they started with closing commercially 2-3 customers for each product line.

An edge computing use case they help to enable: Acromove are in PoC phase with customers for Retail and V2X cases by providing the edge cloud solution. In retail they provide the autonomy asked by the customers and also increased the economies of scale by hosting all necessary functions on their edge cloud data centre; while in V2X, they are providing off the grid functionality with considerable economies of scale plus edge features - latency, capacity etc.

5. Adtran

Company type: Established

Position in edge ecosystem: Hardware (Server, Switchers & routers); Network (IoT platform, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: In 2022, ADVA launched their new product Ensemble Cloudlet for on-premises cloud. This open solution is optimized for economical hosting of virtualized and containerized workloads and automated deployment. The solution provides a scalable path for CSPs, MSPs, or SIs to offer customer workload hosting combined with managed networking services. The product extends beyond single-node uCPEs to include advanced capabilities such as scaling, clustering, extended storage, recovery/resiliency, etc. Customers can start with single node uCPE solutions and grow them into multi-node Edge Compute offerings

or start with a multi-node Edge Compute deployment. ADVA is seeking to continue its efforts to embrace the edge and customer premises for cloud success.

Key financial milestones reached: ADVA and Adtran closed on a merger in 2022. Operational integration will occur in 2023. The products and services of both ADVA and Adtran will be delivered under the Adtran brand in 2023 and moving forward.

An edge computing use case they help to enable: Enterprise customers are leveraging open compute hardware to run their own applications in a PaaS fashion. Adtran is working with a major US operator that is offering a BYO application hosting service on the same platform that it is hosting managed VNFs. CSPs want to be able to host more sophisticated managed services, such as analytics for smart manufacturing. This capability is being used today by a major operator in APAC to support a Smart Warehouse application.

6. AI EdgeLabs

Company type: Company type: Start-up
Position in edge ecosystem: Data centers, servers, end-devices, IoT platforms, Edge gateways, Edge Infrastructure, Containers, APIs, Integration & Services

Notable achievements in 2022: Employing disruptive technologies like Artificial Intelligence (AI) and Deep Learning for industries like Automotive, Retail, Manufacturing, Healthcare, Agriculture, and more, AI EdgeLabs cemented its place as a leading provider of cybersecurity solutions for IOT Edge distributed environments. AI EdgeLabs provides security AI and automation, essential to defending an expanding Edge/IoT attack surface and responding to the massive increase in security events, which humans cannot keep up with. In 2022, AI EdgeLabs took strategic steps to form alliances with some of the most prominent partners including Supermicro, Sixsq, Zededa, Ekinops, Sunlight, and more. Through unwavering commitment, we serve industries to detect, prevent, respond to, and remediate cyber threats and attacks before they have a chance to cause harm. From ransomware, brute force attacks, Distributed Denial of Service (DDoS) attacks, and more, AI EdgeLabs has a vantage point to accurately spot even the slightest anomalies that signal the presence of malicious intent. In 2023, we are working to strengthen our partnership network with disruptive and prominent Edge orchestrators to be strategically positioned to help the industries we serve.

An edge computing use case they help to enable: Recently, AI EdgeLabs helped a major telecommunications company specializing in broadband and fixed-line that suffered the exploitation of vulnerabilities in their MEC networks and MEC components, which led to unauthorized data access, the elevation of privileges, and cloud intrusion. By leveraging the platform's automated AI detection and response protocols, AI EdgeLabs moved the defense perimeter away from the mobile core of the client and closer to where attacks were coming from. AI EdgeLabs blocked upstream malware traffic and reduced the risk of network-wide service interruptions, much like the one the client had suffered before implementing the AI EdgeLabs solution.

7. AI-Blox

Company type: Start-up

Position in edge ecosystem: Facility (Data centre); Hardware (End-device); Network (IoT platform); Integration & Services (Design & engineering)

Notable achievements in 2022: In the last 12 months AI- Blox have commercially launched their Blox hardware platform for edge AI applications after one year of prototyping. It's a modular by design (Lego blocks for AI) offering flexibility & customisation options, all in the same form factor.

Key financial milestones reached: AI Blox achieved a positive financial result in their first year of operation.

An edge computing use case they help to enable: They helped a forklift truck company to implement native safety system (scanning surroundings through machine vision) delivering a GPU-powered hardware platform with integrated touchscreen

8. AiM Future

Company type: Start-up

Position in edge ecosystem: Hardware (Processor);

Notable achievements in 2022: AiM Future have had many product launches in 2022 and have launched several versions of their NeuroMosaic Processors including the NMP-300, NMP-500, NMP-7000. Their new customer acquisitions include Supergate and PnP Networks and they have secured partnerships with SiFive, Effinix and CoSignOn.

Key financial milestones reached: They have nearly closed series-A funding.

An edge computing use case they help to enable: Their products are geared to run EfficientDet, and EfficientNet for object detection in rear-view camera systems in automotive applications. They are also using these for another customer to be used in doorbell systems where face detection is used.

9. Alef Edge

Company type: Growth stage

Position in edge ecosystem: Network (Interconnect, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform); Application/Software (Analytics & APIs);

Notable achievements in 2022: Alef Edge launched APIs to deploy a private mobile network in minutes. They also announced a partnership with LittleBird to remove the complexity of deploying a private mobile network, while allowing LittleBird to launch across multiple properties quickly and affordably. Alef Edge also announced their new Alef Developer Community - a forum for developers' tools to host and orchestrate time sensitive apps at the edge via APIs and unlock the potential of 5G adoption.

An edge computing use case they help to enable: Alef Edge have several smart warehouse initiatives leveraging IoT use cases for process improvement. This will allow for 1) Asset Tracking - sensors for real time location services (RTLS) to track mobile and portable equipment to optimize utilization 2) Employee Connectivity - Connectivity to Warehouse Management System (WMS) for job allocation and handling 3) Inventory Pallet Tracking - RTLS for item and pallet tracking to increase pick and pack operations 4) Push to Talk/Video - Communications for crew and security employees.

10. Amazon Web Services

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system,

Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Amazon Web Services have launched two products in 2022. This includes the Amazon Elastic Kubernetes Service (EKS) Anywhere Curated Packages, which are software packages that extend the core functionalities of Kubernetes. This also includes AWS' IoT FleetWise which helps automotive companies collect, transform and transfer vehicle data to the cloud in near real time. AWS IoT RoboRunner is an AWS for Robotics service that unlocks new use cases for robotics automation by helping fleets of robots seamlessly work together. In addition, there is also the general availability of AWS IoT TwinMaker, a service that makes it easier for developers to create digital twins of real-world systems such as buildings, factories, production lines, and equipment. AWS have also announced work with a number of telecoms operators, including Telenor, Spark New Zealand and Vodacom.

An edge computing use case they help to enable: AWS is partnered with Verizon to enable public multi access edge computing for Verizon's 5G mobile customers. One of the latest B2B2B2C use cases involves Edison Interactive & Harper DB (application developers) built the shark experience application for Club Car (Hardware manufacture - Golf Carts) which is a premier in cart entertainment platform. AWS & Verizon's edge partnership brought together Edison Interactive, Harper DB, AWS (MEC), and Verizon public 5G to create this connected cart experience for golfers. AWS is the MEC provider hosted on Verizon 5G network. This has two things 1/ it has given club car the advantage of an advance media engagement platform enabling them to sell unique experiences to golf course across the US 2/ it enables Club Car's customers to provide unique experiences to the golfers that access their clubs.

11. American Tower

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Multi-cloud platform);

Notable achievements in 2022: American Tower added to its network a total of six Edge Data Centers with the acquisition of CoreSite and DataSite. Within the past year, American Tower has also entered into agreements to add new edge collocation facilities at existing tower sites. American Tower's collocation portfolio now consists of its edge facilities, plus 28 Metro and Regional Data Centers. American Tower has combined its ability to deploy infrastructure at the mobile edge with CoreSite's interconnections and direct access to the cloud, providing a comprehensive, end-to-end distributed network solution.

Key financial milestones reached: With the acquisitions of CoreSite and Datasite, American Tower added 26 collocation facilities to its ecosystem within months.

An edge computing use case they help to enable: Enterprises today are operating within a competitive environment and relying on their infrastructure to deliver maximum performance, convenience and reliability across a distributed network. This trend requires global IT providers, such as phoenixNAP, to expand their existing connectivity, software and network solutions to optimize applications at the originating source or at the edge. As a result, American Tower and phoenixNAP worked together to design and deploy a Bare Metal Cloud (BMC) solution at an American Tower Edge Data Center in Austin in March 2022. BMC provides customers with access to cloud-native ready dedicated servers with automation and low latency in several Southwestern U.S. locations. It also helped increase convenience by enabling customers to deploy and manage their physical services and network. BMC provides customers with scalable resources that can be provisioned with a few clicks. With plans to expand the relationship, this is the first of many new opportunities created for phoenixNAP's customers to access optimal low-latency environments.

12. Arctos Labs

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration); Integration & Services (Professional services)

Notable achievements in 2022: Arctos Labs launched the second version of their Edge Compute Optimization solution with a range of new features to support dynamic placement optimization.

An edge computing use case they help to enable: Arctos Labs solution is relevant in discussions around Mobile Private Networks orchestration, where Mobile Core elements are placed across the edge to cloud continuum depending on constraints and costs to optimise operator use of telco cloud and public cloud whilst delivering increased automation to service fulfilment.

13. AtlasEdge

Company type: Growth stage

Position in edge ecosystem: Facility (Real estate, Data centre, Power & cooling, Site maintenance & operations); Network (Interconnect, Cloud connect);

Notable achievements in 2022: AtlasEdge partnered with Megaport, providing AtlasEdge customers with direct multicloud connectivity. AtlasEdge also joined the Climate Neutral Data Centre Pact together with leading trade associations representing data centre operators and companies that own or operate data centres within the European Union. Finally, AtlasEdge deployed Carma, an innovative Network and Digital Infrastructure Platform forming the integrated core of AtlasEdge's sales, operations, engineering, customer service, security, and finance systems, as well as the customer-facing portal.

Key financial milestones reached: AtlasEdge acquired Datacenter One. The deal included four centres in Stuttgart (x2), Dusseldorf and Leverkusen, with additional sites under construction. The acquisition of Datacenter helped to accelerate AtlasEdge's expansion across Germany. AtlasEdge also acquired of Cornelius House, enhancing existing UK coverage and providing capacity in an emerging regional aggregation hub.

An edge computing use case they help to enable: AtlasEdge's portfolio of more than 1400 connected locations, and their block-based data centre platform enables them to deliver capacity in a 90-day RFS target window, which allows their customers to provide services closer to end users.

14. Atos

Company type: Established

Position in edge ecosystem: Facility (Data centre); Hardware (Server, Switchers & routers, Hardware maintenance & operations, End-device); Network (IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Atos have launched several partnerships with telco providers such as British Telecom, Verizon and Nokia in 2022. At their AI centre of excellence lab, they have also focused on the development of AI services capabilities at the edge. Finally, their new server launches BullSequana EX series with next-gen computer vision use cases based on Ipsotek VISuite new release.

Key financial milestones reached: Atos have experienced over 50% growth in 2022.

An edge computing use case they help to enable: Atos have partnered with Canberra University in order to assist in providing security throughout the campus through access control, perimeter protection, parking management, people safety etc. They delivered edge infra BullSequana Edge (now BullSequana E) and computer software (Ipsotek).

15. Avassa

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Virtualisation & containers); Application/Software (Analytics & APIs);

Notable achievements in 2022: 2022 brought several important and exciting milestones for Avassa. Avassa was named a Gartner Cool Vendor in Edge Computing as one of four companies globally. Extenda Retail chooses Avassa's edge platform for their in-store software solutions. They also entered a number of partnerships strengthening their position within the ecosystem, with Scale Computing, Sunlight.io, Cysec, Axiomatics and several others.

An edge computing use case they help to enable: Teams in charge of distributed applications want to manage their innovative software with the same ease that they are used to from the cloud. Meanwhile, vendor-specific solutions with exotic hardware running proprietary software stand in the way. This makes the application lifecycle management manual, expensive and too slow. Avassa provides a container application orchestration platform for the edge that connects the fast-moving tools and processes of the cloud with enterprises' edge environments. With Avassa, platform teams will provide a cloud-like experience that enables application teams to seamlessly extend their deployment and monitoring capabilities to the edge. With the ability to remotely install new hosts, perform targeted deployments, and continuously monitor application health across sites, enterprises can easily and securely manage the lifecycle of edge applications — and keep up with the speed of innovation.

16. Avesha

Company type: Start-up

Position in edge ecosystem: Facility (Data centre); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform); Application/Software (Software application);

Notable achievements in 2022: Avesha has partnered with COX to build the next generation federated edge. Avesha has also released the next version of KubeSlice with more features around security and resource optimization and launched a new product Smart Scaler - an intelligent Horizontal Pod Autoscaler.

An edge computing use case they help to enable: With KubeSlice, Avesha is providing the ability for COX customers to create virtual clusters with seamless and secure communication between applications across the globe. The platform also supports intelligent workload placement to the optimal edge.

17. Azion

Company type: Growth stage

Position in edge ecosystem: Network (IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Azion launched webassembly support and their new real-time Observability platform. They also added 31 edge locations worldwide. The new Azion Marketplace was launched with partners such as Radware and FaunaDB. They also won the 5th largest Bank in the world as a customer, as well as one of the largest Media companies, with over 300M subscribers. They secured PCI Compliance, FIPS 140-2 Compliance, SOC 2 Type 2 and SOC 3 and reached a NPS of 79. They also delivered a Live Map to track in real time ecommerce traffic and cyberattacks.

Key financial milestones reached: Azion reached their highest GAAP revenue growth ever, with 71% growth YoY.

An edge computing use case they help to enable: Azion enables customers to build applications once and run them anywhere: the network edge, remote devices, on-premises or multi-cloud. As an example, Azion helps retailers to run the same application on their retail shops (on-premises) and the web (on Azion's managed edge infrastructure), including the Point-of-Sale software and overall checkout system.

18. Barbara

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: Barbara has established a strategic partnership with industrial gateway manufacturer Advantech to offer intelligent and secure perimeter devices. Barbara has also added new functionality to its Edge Platform, including increasing edge hardware compatibility with 27 new models, making UI/UX responsive to allow using the platform on tablets and mobile devices, as well as releasing Barbara Academy. Finally, Barbara has launched international partner's programme, dedicated to working with Systems Integrators and AI providers.

Key financial milestones reached: Barbara has closed pre-series A investment round, raising 2.6M€. The investors included Caixa Capital Risc and Iberdrola Ventures.

An edge computing use case they help to enable: Barbara worked with Acciona to combine digital applications and algorithms that have shorter life cycles with traditional industrial systems with longer cycles. Acciona faced the need to adapt to these cycles to be able to develop and maintain edge applications remotely. With Barbara Edge Platform, Acciona managed to deploy Artificial Intelligence models at the Edge and predict chemical levels in the water supply and purification plant based on real-time variables, reducing the deployment time of edge applications by 86%, optimising chemical control processes, as well as saving $250,000 per plant in its first year.

19. Bridge Alliance

Company type: Start-up

Position in edge ecosystem: Network (Edge gateway); Edge Cloud Infrastructure (Edge aggregation & orchestration);

Notable achievements in 2022: Bridge Alliance's Federated Edge Hub (FEH) Test bed readiness allows Application partners with deployment ready/real use cases to conduct field trials in the Bridge Alliance's member operators' live 5G networks.

In 2022 Bridge Mobile partnered with Singtel and Telefonica, to interconnect between two heterogenous multi-access edge computing (MEC) platforms through Bridge Alliance Federated Edge Hub (FEH) as part of a GSMA Foundry Telco Edge Cloud trial.

Key financial milestones reached: Bridge Alliance are now calling for application partners with commercial use cases to conduct field trials in live 5G network and jointly work on the commercial model.

An edge computing use case they help to enable: The Bridge Alliance have worked across a 360-degree interactive live streaming use case which will enable unique experiences leveraging 5G and multi-market edge computing. It covers 8K broadcast featured real-time interactions between remote participants in multiple markets and performers, as if they were at the event in person. The solution allows immersive remote participant experience with many applications, ranging from entertainment to helping retail industries to reach out to customers across markets in new, creative, and innovative ways to drive sales.

20. CanaryBit

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (PaaS);

Notable achievements in 2022: In 2022, CanaryBit expanded its security services for cloud and edge infrastructure with the launch of Confidential Cloud service for secure data processing at the edge. The company joined the Leonardo Business Innovation Factory in Rome and started a research project, funded by the European Commission, to combine confidential computing and homomorphic encryption for machine learning on encrypted data, which will run through 2025. Additionally, CanaryBit joined the MobilityXLab in Gothenburg to explore solutions for confidential data processing and collaboration in the automotive industry.

An edge computing use case they help to enable: CanaryBit provides confidential data sharing solutions for centralised IoT companies to help them better offer services while preserving the privacy of device operators. With the fast-growing IoT data market producing vast amounts of data, IoT companies can leverage CanaryBit's service to securely share scope-limited data with third parties while maintaining full control. Our vision is to empower data owners to choose what data they share, with whom, and what they receive in exchange.

21. Cellnex

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Network (IoT platform);

Notable achievements in 2022: Cellnex completed several projects in 2022, including a private OpenRAN network to provide smart port solutions including real time good tracking at Bristol Port, drone surveillance for security and smart junctions for traffic management. 5G CAT, seven use cases aimed at developing solutions in the urban mobility environment, remote education, the industrial sector, remote procurement, audio visual transmission, management of security and emergencies in the urban environment, and the construction of a neutral multi-operator network Portwin combines cutting-edge technologies such as 5G, Edge Computing,

Artificial Intelligence and Radar to digitise the ship docking operation by providing real-time assistance with highly accurate data of any ship approaching the Port of Valencia facilities.

Additionally, Cellnex signed a partnership with Vapor IO to expand its edge computing grid to Europe leveraging Cellnex's fibre optic network, small edge data centres and tower ground space for hosting the necessary equipment. Cellnex continues commercializing its on-premises edge computing solution through its own private network business to provide low latency edge computing and talking with MNOs offering edge computing to reduce backhaul costs to/from centralised cores and provide them with shared edge facilities to support 5G network developments.

An edge computing use case they help to enable: Smart Junctions – the use case enhanced legacy traffic management technologies with 5G capabilities to deliver a world-first demonstration of a 5G Multi Access Edge Computing (MEC) based solution for controlling traffic signals using private 5G and public data networks. Simulations showed the potential for a 48% reduction in journey time for HGVs on busy approaches, amounting to a possible 8% reduction in CO_2 emissions and fuel consumption. The ability to provide long range detection of vehicles without adding remote infrastructure-based sensors (and associated ducting) has the potential to reduce capital investment and maintenance costs for public authorities once 5G location services become more widespread. Cellnex provided the communication infrastructure (inc. macro site, fibre, servers…) and design/integration services.

22. Cisco

Company type: Established

Position in edge ecosystem: Facility (Data centre); Hardware (Server, Switchers & routers); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Design & engineering, Professional services)

Notable achievements in 2022: In 2022 Cisco have developed their 'Great Bear' edge application platform that allows for the development, deployment and operations of next generation apps and data at scale.

An edge computing use case they help to enable: Cisco partnered with Qwilt and JPX in Japan to deploy edge cloud for a content delivery solution to enhance the streaming quality and capacity. The solution combines Qwilt's CDN platform based on open caching along with Cisco's edge infrastructure.

23. ClearBlade

Company type: Start-up

Position in edge ecosystem: Network (IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: ClearBlade achieved a number of customer acquisitions and product launches during 2022. They acquired over 85 new customers primarily through the Google channel and launched all of their products on the Google Cloud Marketplace in October.

ClearBlade released several product updates and new features in 2022. For their IoT Core and Edge products, they introduced native ONNX.ai (Beta x86), API and Message Throttling, Edge Synch APIs, Key Store, and Kafka. For the Intelligent Assets product, they introduced Heatmaps Reports, National Language Support, Webhooks Action Types, and OPC-UA Configuration. All these new features and updates allowed their clients to have better control over their data and improved the overall performance of their IoT solutions.

Key financial milestones reached: ClearBlade ran a Series B raise extension of $2.5 million, achieved customer growth of 577% and MRR revenue growth of 286%

An edge computing use case they help to enable: A major energy technology company has partnered with ClearBlade to deliver their IoT/Edge solutions for remote drilling automation to another oil & gas company. The company selected ClearBlade after a six-month pilot competing with Microsoft, AWS, and other oil & gas focused vendors. ClearBlade Edge software and platform are being used as core building blocks of their new digital service, which will be sold to large integrated oil and natural gas companies. The initial product was delivered in June 2022 andhas already begun ingesting and normalizing data from legacy acquisition systems to provide real-time data visualizations. ClearBlade will offer remote configuration and control to improve operational efficiencies through condition-based monitoring and preventative maintenance.

24. ClearX

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform); Application/Software (PaaS);

Notable achievements in 2022: Deployment of ClearX's Data services for Fixed Lines product with four operators including Vodafone and Deutsche Telekom. The product utilises core capabilities essential for ClearC's edge offering and has won two awards: Global Carrier Award 2022, as best blockchain and security innovation in the industry and World communication award as best network transformation.

An edge computing use case they help to enable: ClearX provides commercial infrastructure and standardized ways for CSPs, edge aggregators, and vertical platforms to create marketplaces and interact with one another. This applies to many use cases and would allow a vertical platform serving drone companies to provide service globally and on-demand by sourcing edge resources on-demand across multiple locations. This is achieved by greatly simplifying the interaction with multiple CSPs and supply-side aggregators. ClearX allows all said parties to interact through a unified API, with diverse business models.

25. Cloudera

Company type: Established

Position in edge ecosystem: Hardware (End-device); Network (IoT platform); Edge Cloud Infrastructure (Multi-cloud platform); Application/Software (Analytics & APIs);

Notable achievements in 2022: Cloudera have partnered with companies such as T-Mobile USA (Network Analytics), LG Uplus (5G Service Assurance) and Smart Axiata (MArketing Automation) in 2022.

An edge computing use case they help to enable: Several cable companies deploy Cloudera Edge agents in their set top boxes for audience measurement, that aggregate at the edge and then route back aggregations and statistics. LG Uplus is ingesting 400TB per day, and using streaming technologies to aggregate, truncate and enrich that data at the point of collection in order to offset downstream system inundation, reducing costs and optimising data workload performance.

26. CODESYS

Company type: Growth stage

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: In 2022, the CODESYS Automation Server, an Industry 4.0 platform for CODESYS based controllers, underwent an important extension that enables the use of virtual PLCs running on every platform with Container or Hypervisor technology. This extension offers greater flexibility and scalability, making it easier for customers to deploy their automation projects. The virtual PLC technology provides the ability to run automation projects on any device, including edge computing solutions, which is crucial for Industry 4.0 and the future of automation. This launch in 2022 marks a significant milestone in the evolution of the CODESYS Automation Server and the advancement of automation and Industry 4.0.

An edge computing use case they help to enable: The CODESYS runtime system provides a solution for incorporating edge computing into industrial control systems. This system allows for the conversion of edge computers into edge programmable logic controllers (PLCs) through the use of ready-to-use SoftPLCs for edge devices with either Linux or Windows operating systems. The CODESYS runtime system has been adopted by a large number of users across various industrial sectors, including factory automation, building automation, off-highway machine automation, energy production and distribution systems, and process automation.

27. Colt

Company type: Established

Position in edge ecosystem: Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor); Network (Interconnect, Edge gateway, Cloud connect);

Notable achievements in 2022: In 2022, Colt launched Colt Edge that is a separate uCPE product. It can be ordered as an add-on to IP Access, SD WAN & IP VPN. Colt Edge integrates compute, storage and networking on a commodity, off-the-shelf server, providing network services as virtual functions to any site on a network. Colt Edge is the equivalent of a Cloud for network services but at the customer premise or network edge, where network services can be deployed as Virtual Network Functions (VNFs). Colt Edge is the next step in the development of uCPE to run customer application and unmanaged VNFs.

An edge computing use case they help to enable: Colt enables wholesale customers to implement and run SD WAN and VNF solutions. Colt offer enterprises the ability to run their specific SD WAN as VNFs on Colt Edge, which provides full control of the SD WAN, cost-effectiveness, overcomes the lack of SD WAN interoperability and the need to manage multiple vendors. Colt controls the procuring and maintenance of connectivity and uCPE with the VNF, while the customer has full control over their end-to-end solution of the virtual functions. This solution delivers cost savings, improved network management, and a more scalable solution for wholesale customers.

28. Coredge.io

Company type: Growth stage

Position in edge ecosystem: Network (Interconnect, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: In 2022, Coredge became a Silver Member of the Cloud Native Computing Foundation and the Linux Foundation, as well as being a Silver Partner at the 2nd edition of the Open RAN India 2022 conference. Coredge has also joined Nephio for innovation in telco cloud-native automation. Their

product provides an easy provisioning of Kubernetes clusters at the edge, with the ability to update and upgrade with no downtime, and integrated monitoring and logging capabilities. The development of Coredge Cloud Orbiter offers a unified cloud experience for applications and infrastructure lifecycle management and is used by service providers, government organizations, data centers, and telecom industries.

Key financial milestones reached: Coredge are expecting 10M USD series A round to be closed in the coming year.

An edge computing use case they help to enable: Coredge provided a solution to a telco customer who experienced trouble onboarding cloud-native oRAN while utilizing a homegrown toolchain. The solution included a thorough adaptation and compliance check of the cloud-native, resulting in a single pane of glass for multi-cloud management, multi-cloud visibility, total governance and observability, centralized metering, and simplified application lifecycle management. This led to a reduction of the vendor onboarding application by 94%, from 4 months to 1 week, allowing the client to launch their platform with centrally managed clusters and automatic application infrastructure, fundamentally changing customer interaction.

29. Cox Edge

Company type: Start-up

Position in edge ecosystem: Network (Content & application delivery); Edge Cloud Infrastructure (IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS);

Notable achievements in 2022: Cox Edge was named as a finalist in the Outstanding Use Case: Service Provider AI category of the 2022 Leading Lights, in acknowledgment of Cox Edge's efforts in AIOps, which involves applying analytics and machine learning to big data to improve IT operations via automation.
Cox Edge has also redesigned its website and portal to make it easier for customers to discover the possibilities and build the next generation of experiences focused on running faster workloads in minutes, new fresh looks for enhancing experiences, along with easily starting with free credits and trials to unlock new possibilities.
Cox Edge launched 11 new locations to continue fulfilling their goal of bringing compute resources closer to end users. New locations include Providence, RI, Chandler, Pensacola, Bentonville, New Orleans, Merrifield, Wichita, Baton Rouge, Tulsa, Santa Ana, and Omaha.
They also soft launched the beta for Object Storage and Bare Metal in the Cox Edge portal, continuing to provide a one-stop-shop for our consumers.
Cox Edge engaged in multiple valuable partnerships including a strategic partnership with Dell's cloud service, and solution partnerships with Spectro Cloud and Avesha.

An edge computing use case they help to enable: Cox Edge created an AIOps solution on the edge, enabling the detection of anomalies in real time. This innovative solution improves availability by reducing downtime, ensuring HA, and providing real-time visibility of an entire app landscape. Additionally, the Cox Solution increases agility via reduced MTTR, prevented and predicted outages, and an enhanced CX, while also reducing the cost of operations thanks to intelligent automation and proactive operations that reduce tickets and incidents.
Another use case is in retail: The Cox Edge Video Intelligence Solution a.k.a. Retail POC, aims to deliver a much-needed boost in the sales of retail stores and the reduction of operating costs. Their Edge/SaaS solution leverages the existing & secure video data feeds, originating from Cox retail stores and terminating at network video recorders (NVR). Network video recorders are strategically located in various Cox data centers. The Cox Edge infrastructure deployed in the data center integrates with NVR and leverages the video data without consuming any customer/PII information. The anonymized data undergoes extensive analytics powered by Deep North, a 3rd party vendor product.
This retail POC puts life into the CV concept to deliver tangible results for their customers and Cox.

30. Crosser

Company type: Start-up

Position in edge ecosystem: Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Crosser achieved significant growth in 2022, with over 105% growth in revenue over the last 12 months and a 50% increase in new customers. The company also signed strategic partnerships and white label agreements with 3 global industrial enterprises in the automation and software sector. Crosser's customer base includes a wide range of industries, including manufacturing, pulp & paper, maritime, metallurgy, automotive, and food & beverage, with notable partnerships with SCA, Stora Enso, Nestle, Woodbridge, Valmet, and Royal Caribbean.

Key financial milestones reached: During 2022, Crosser closed a funding round together with existing investors and one new venture capital firm. The goal was to establish another 24 months runway for expanding business globally.

An edge computing use case they help to enable: Crosser enabled edge analytics and intelligent ERP integrations to enable Logistics 4.0 for Mirka, a leader in surface finishing technology. Crosser helped the company take the step on a transition between automating and achieving value.

31. Cumucore

Company type: Start-up

Position in edge ecosystem: Network (IoT platform);

Notable achievements in 2022: Cumucore delivered a proof-of-concept project, with HPE, to the International Space Station. During the project it was verified that 5G non-public networks are a suitable technology to be used in space. Cumucore also delivered a temporary sales terminal project in Finland. The network was used on 7 seven major music and sport events in Finland serving over 500 000 customers and providing significant cost savings for festival organizers. Cumicore also delivered a 5G standalone network to Bosch Hochkirche. In this project 5G SA network is used to develop new technologies and process for construction industry. Additionally, Cumucore worked on five different research projects to develop network slicing, 5GLAN, TSN and 6G technologies.

An edge computing use case they help to enable: With Sennheiser, Cumucore developed a concept where MEC is used to do audio mixing on site. Sennheiser developed microphone and in-ear-monitoring with 5G air-interface and audio mixing. Cumucore's role was to deliver the 5G Core with MEC capability. Additionally, Cumucore delivered APIs that can used to set data flows within specific network slices and different QoS settings.

32. DartPoints

Company type: Growth stage

Position in edge ecosystem: Facility (Data centre, Rack systems, Power & cooling, Site maintenance & operations);

Notable achievements in 2022: In April 2022, DartPoints launched the first internet exchange (IX) in Columbia, S.C., called Bridge IX™. South Carolina's internet traffic has traditionally been routed to the closest major network markets, such as Atlanta and Charlotte, N.C. DartPoints' South Carolina mission is to keep the state's traffic local to improve network performance and resiliency and reduce connectivity costs.

The company also made a series of executive hires, bringing on Jeff Greenberg as Vice President and Chief Marketing Officer, Jackie Steinberg as Channel Chief and Charles Carlos as General Manager — Midwest. In June, DartPoints announced an expansion and extensive electrical upgrades at its Greenville, S.C. data centre. The company also launched its updated managed detection and response (MDR) product, which combines MDR, endpoint detection and response (EDR), security orchestration, automation and response (SOAR), and extended detection and response (XDR) into one complete solution with support and monitoring by DartPoints experts.

Key financial milestones reached: DartPoints is in the middle of a significant growth phase. The dollar value of new contracts signed in 2022 increased by 25% compared to 2021. As a result, revenue generated in 2022 increased by 7% compared to 2021.

In May 2020, DartPoints received a majority investment from Astra Capital Management, a private equity firm that invests in growth businesses in the communications and technology services sectors. This partnership initiated an aggressive plan to expand DartPoints' edge interconnection solutions to underserved markets. In August of that same year, DartPoints revealed its strategy to build and acquire edge interconnection and colocation facilities in the Southwest, Southeast, Upper Midwest, and Mid-Atlantic regions. The company's strategy focuses on delivering lower-cost, high-performance solutions in Tier 2-4 markets that are not optimally served today.

The Astra-backed DartPoints team completed deep data analytical modelling around the edge interconnect and peering market sector, which is at the core of the company's investments. In addition, the team identified goals of acquiring into markets that provide presence, a solid customer base, and an accelerated timeline to scale.

In March 2021, DartPoints acquired Immedion, a colocation, cloud, and managed services provider with eight data centres in seven markets throughout South Carolina, North Carolina, Ohio, and Indiana.

An edge computing use case they help to enable: In July 2022, DartPoints announced its partnership with the University of South Carolina. The University of South Carolina (UofSC) was looking for a way to get out of the on-premise data center experience. However, while searching for a new data center vendor, UofSC had a hard time finding a vendor that could do what the university needed — until they found DartPoints. DartPoints is providing a custom software-defined data centre (SDDC) solution, which replaced the university's former data centre. DartPoints' custom SDDC cloud solution will significantly improve the university's IT agility. It adheres to UofSC's compliance requirements while providing the multi-tenancy of public cloud infrastructure.

Since 2012, DartPoints has envisioned a world where everyone has an equal opportunity to connect, communicate, and experience the brilliance surrounding us. DartPoints led the edge data center revolution, recognizing and meeting the need for cost-efficient and performance-driven interconnection.

33. Deep Safety

Company type: Start-up

Position in edge ecosystem: Hardware (End-device); Application/Software (Software application); Integration & Services (Systems integration)

Notable achievements in 2022: In 2022 they undertook a Better AI technology showcase in Tesla and won a European Community R&D project EU4CCAM.

Key financial milestones reached: Deep Safety are in part two of their seed round.

An edge computing use case they help to enable: They developed the AiDAR sensor for autonomous systems with this solution used in the automotive industry for autonomous driving, but also for AgTech and construction vehicles or robots. This is part of their Better AI technology, which implements a deep learning perception system to detect all the unknown edge cases without training within the edge device.

34. Dianomic

Company type: Start-up

Position in edge ecosystem: Network (Interconnect, IoT platform, Cloud connect, Content & application delivery); Application/Software (Analytics & APIs);

Notable achievements in 2022: Dianomic is the primary contributor to the Linux Foundation project Fledge and the supplier of FogLAMP, Fledge's commercially supported package. Fledge/FledgePower finishes 2022 as a world leading open source IIoT Platform with exponential growth in production deployments. Dianomic's industrial contributors, integrators and users know OT and the requirements of the industrial 4.0 edge including: RTE, AVEVA, OSIsoft, Archer Daniel Midland, Google, General Atomics, Honda Racing, Dianomic Systems, Neuman Aluminum, JEA, Kapsch, Raesemann Enterprises, Alliander, Opus One, ACDP and UC Davis. Fledge added a wider class of data, support for set point control, many new industrial protocols, more edge intelligence and greater performance.

Key financial milestones reached: Dianomic closed its A round in 2022 and experienced >200% growth.

An edge computing use case they help to enable: Archer-Daniels-Midland (ADM), an American multinational food processing and commodities company, use Dianomic's FogLAMP IIoT platform. They use the platform to integrate, scale and manage data from grain silos, lab equipment, infrared cameras, near infrared sensors, and high-fidelity vibration sensors.

35. Dori AI

Company type: Start-up

Position in edge ecosystem: Application/Software (Software application);

Notable achievements in 2022: Dori AI launched a full stack AI computer vision edge platform for telcos to enable real time feedback, AI-driven decisions, instant video replay and intelligent visual search.
Key financial milestones reached: They received funding to launch their AI Video Analytics Platform for Manufacturing and Industrial Use Cases.

An edge computing use case they help to enable: Dori AI have focused on industrial 4.0 use cases of product quality and employee productivity for manufacturers and warehouse operators.

36. DXN

Company type: Start-up

Position in edge ecosystem: Facility (Real estate, Data centre, Site maintenance & operations); Integration & Services (Design & engineering)

Notable achievements in 2022: DXN contracted design and build orders for major customers such as Boeing Defence, Sub.co, Belau Submarine Cable Company (BSCC), Wingu Africa, Covalent Lithium, the Centre of

National Resilience in Perth via Multiplex, and several global internet companies during the year. DXN also contracted 27 modules in FY22. In November 2022, DXN announced that it had entered into an Exclusive Global Distribution Licence Agreement with Flow2Edge for the global marketing and export of DXN's modular data centre products.

Key financial milestones reached: DXN had a successful FY22 with significant growth in sales and cash receipts. Total sales increased by 91% from the previous year to reach $15.4 million and cash receipts increased from $7.26 million to $16.63 million. To further expand their market, DXN entered into an Exclusive Global Distribution and Licensing Agreement (EGDLA) with Flow2Edge Holdings. This agreement grants Flow2Edge worldwide exclusivity (excluding Australia) for the marketing and distribution of DXN data centre modules and they will pay DXN $2 million in exclusivity fees over the 10-year initial agreement. Additionally, DXN entered into an Exclusive Global Consulting and Support Agreement (EGCSA) with Flow2Edge to support their edge data centre operations across Asia Pacific.

An edge computing use case they help to enable: DXN designed and built a prefabricated data centre for Newcrest, the largest gold producer listed on the Australian Securities Exchange, to house their critical communications infrastructure at the Cadia gold mine in NSW. The data centre solution includes 20 racks, 150kW IT load, BMS, dedicated hot/cold aisle, fire suppression, UPS backup, in-row cooling, custom distribution board, and integrated man trap. The data centre underpins Newcrest's modern mining goals, ensuring effective data management, and the end outcome is improved automation and systems for the customer.

37. Edgegap

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (PaaS);

Notable achievements in 2022: Edgegap are launching multiplayer games which have been in development for years, they went from a few thousand players per day to hundreds of thousands per day. Edgegap also grew their edge network from 150 to 400 locations worldwide.

Key financial milestones reached: Since the platform went live, Edgegap's revenue has been growing steadily MoM, with over 12 games lives and 100+ being developed soon to be launched in the next few years.

An edge computing use case they help to enable: Edgegap allows game studios to automate the deployment and management of game servers on a highly distributed worldwide edge infrastructure to reduce latency for the end-users and improve server resource utilization. Edgegap work with over 100 studios.

38. Elisa

Company type: Established

Notable achievements in 2022: Elisa began lab verification and production launch of regional edge cloud platforms for hosting containerized network functions.
To effectively capture business opportunities with new 5G services such as private mobile networking, Elisa needed new operational models/tools that enable automation. Therefore, a critical area of investment has been in edge cloud infrastructure technology, as data must be processed with ultra-low latency near the customer to deliver 5G services with an edge infrastructure.
Elisa continues to implement its automation principle of keeping operator involvement at minimum by enabling 'zero-touch' commissioning and management of edge clouds.

100 edge computing companies to watch in 2023

An edge computing use case they help to enable: Elisa's focus has been on enabling regional mobile breakout for Elisa's consumer and corporate customers to enable development and use of new 5G services benefitting from low latency. Regional breakout also enables use cases such as more efficient traffic handling with an option to deploy edge CDN caches. This keeps the majority of video streaming traffic local to a region.

39. Elisa Polystar

Company type: Growth stage

Position in edge ecosystem: Application/Software (Analytics & APIs);

Notable achievements in 2022: In 2022 Elisa Polystar presented an O-RAN network automation solution. The solution launched included a new, end-to-end cloud-native assurance and monitoring solution suite that provides full visibility of customer experience in multi-vendor 5G standalone networks.

Key financial milestones reached: Elisa Polystar extended their automation portfolio to transport and DataOps domains via acquiring Frinx sro and Cardinality Ltd. Combining with Cardinality, adds to Elisa Polystar's data management, AI, analytics and automation portfolio with comprehensive data ingestion and cloud-native capabilities. FRINX products and software complement Elisa Polystar's zero-touch automation and analytics offering, which helps communications service providers (CSPs) automate their network management processes in a multivendor telecom network environment.

An edge computing use case they help to enable: Together with Google Cloud, Elisa Polystar worked with Vodafone to resolve their problem with siloed data management and data sharing across their Cloud-native DataOps and analytics platform. The solution moves data efficiently from far end locations to a centralized Google Cloud data repository. It implements data virtualization capabilities, open API interfaces and microservices-based architecture to enable Vodafone to use preferred third-party tools for creating dashboards, reports and advanced analytics.

40. Green Edge Computing (GECCO)

Company type: Start-up

Position in edge ecosystem: Facility (Data centre, Rack systems); Hardware (Server, Switchers & routers, Hardware maintenance & operations, End-device); Network (IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Integration & Services (Professional services)

Notable achievements in 2022: In 2022 GECCO launched the initial prototype of the EdgePod™, which is a multi-server edge computing platform that requires 90% less resources and space, 75% less energy and cooling, and has an 80% lower carbon/GHG footprint when compared to conventional server technology. GECCO also implemented the first wave of its core IP around the miniaturization, ruggedization, and advanced cooling of dense multi-server compute solutions. Finally, GECCO was selected as a regional winner of the CleanTech Open and was accepted into Creative Destruction Labs (CDL) Compute stream accelerator.

Key financial milestones reached: In 2022 GECCO closed investor funding and received a grant from Sustainable Development Technology Canada (SDTC), who fund companies that help solve some of the world's most pressing environmental challenges.

An edge computing use case they help to enable: GECCO rugged, miniaturized, multi-server computing solutions are relevant for numerous edge verticals including retail, smart buildings, environmental monitoring,

defense, AI/ML, telco/MEC, and even the outer space. GECCO is currently working with large retailers to demonstrate that the EdgePod™ can be mounted out of the way on a wall, will utilize 75% less power, generate 75% less heat and zero noise, requires no space power or HVAC, is physically secure against intrusion/vibration/moisture, requires no onsite maintenance and is remotely manageable, and can be delivered at up to a 50% reduced total cost of ownership compared to traditional alternatives.

41. GT Systems

Company type: Start-up

Position in edge ecosystem: Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Analytics & APIs); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: GT Systems was selected by Laser Light Communications to supply its next gen protocol and operating system for its proposed MEO satellite and DWDM backbone network, using Nokia SR Linux switches.

An edge computing use case they help to enable: GT Systems are leading the transition to Information Centric Networking (ICN) and intelligent routing. Their patented technology uses intelligent Secure Peer Assist Network (SPAN-AI) agents to optimise local caching, routing, and operations; with a global optimising AI that also trains and optimises SPAN agents. They have proven this is a highly efficient design using state of the art, Bell Labs developed, graph-edge-based, cloud net flow modelling.

42. HARMAN

Company type: Established

Position in edge ecosystem: Application/Software (PaaS);

Notable achievements in 2022: Within 2022 HARMAN announced MECWAVE, a-low-latency edge-based compute platform for turn-key connectivity to boost safety, in-cabin experiences, and smart city use cases. MECWAVE accelerates the deployment of V2X communications, including safety-critical applications like hazard alerts, along with high-throughput connectivity experiences like interactive infotainment and video streaming. Harman also successfully completed a commercial PoC in partnership with US MNO for a large Automotive Global OEM on using 5G MEC for delivering real time video stream enhanced with AI/ML augmentation and fusion of V2X.

An edge computing use case they help to enable: Harman is developing ultra-low latency and high bandwidth use cases based on V2X, audio and video to bring experiences and insights to their customers ranging from private campus, automotive OEMs and road operators. Harman is collaborating with leading ecosystem partners including MNOs & OEMs to bring this technology to real world deployment.

43. HarperDB

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (PaaS);

100 edge computing companies to watch in 2023

Notable achievements in 2022: In 2022 HarperDB expanded their enterprise partnerships and is now working with companies like Lumen, Akamai, Google, Verizon, and Equinix to bring an end-to-end solution to the market. HarperDB has also just released product version HarperDB 4.0, which allows users to cluster millions of nodes across the planet for the ultimate global data mesh.

An edge computing use case they help to enable: One of HarperDB's customers, Edison Interactive, delivering digital out of home content for golfers on the golf carts themselves, was looking for a reliable connectivity and cloud solution that could decrease the response-times of the touchscreen to enable a more seamless golfing experience overall. HarperDB solved this problem by distributing both the API endpoints and data to the edge. In partnership with HarperDB, Edison Interactive's development and engineering teams recreated databases inside Verizon's multi-access edge computing platform. This solution reduced latency from 5 seconds to 20 milliseconds, enabled real-time responses and analytics, and greatly reduced costs and complexity.

44. Heata

Company type: Start-up

Position in edge ecosystem: Facility (Power & cooling); Hardware (Server); Edge Cloud Infrastructure (Virtualisation & containers);

Notable achievements in 2022: Heata won an Innovate UK grant to undertake a 100-unit trial to gain SAP accreditation such that the heata unit can positively affect Energy Performance Certificates. Heata units are beginning to be deployed into homes as part of the trial. They also received investment from Civo, a cloud native service provider, with a partnership and pilot announced.

Key financial milestones reached: Funding round raising over 200k as well as an Innovate UK grant.

An edge computing use case they help to enable: Heata is a distributed cloud compute business that re-uses the waste heat from its compute to provide free hot water for households in the UK. Their servers will be embedded in a community. Suitable local authority compute workloads could be processed on the heata network present within their community. Creating a powerful circular proposition whereby the local authority's processing is providing free hot water to their own constituents / tenants, with the potential to provide significant support to those in fuel poverty.
By re-using the waste heat from compute to offset domestic hot water heating:
  • The local authority benefits from groundbreaking sustainable compute.
  • The local authority housing is made more energy efficient, supporting net zero goals.
  • The households themselves benefit from free hot water, paid for by the local authority's compute.
The heata network also becomes an Edge focused extension of the move to 'Sovereign' data centres. The heata network can provide a 'Local' data centre, where businesses' data processing can support the people living in their area. Perhaps in time suitable consumer processing (FaaS - eg AI / IoT requests) could also be undertaken on their local heata network.

45. Imagimob

Company type: Start-up

Position in edge ecosystem: Application/Software (Software application); Integration & Services (Systems integration, Professional services)

Notable achievements in 2022: Imagimob and Syntiant announced a collaboration in 2022 to integrate Imagimob's tinyML platform with Syntiant's AI chip, the NDP120. This will allow developers to create

production-ready deep learning tinyML applications and optimize and deploy the ML models with the NDP120 with ease. The solution supports a variety of use cases, such as sound event detection, fall detection, and gesture detection.

An edge computing use case they help to enable: Sound Event Detection is the detection of specific sounds or audio patterns. It has many potential applications such as security systems, industrial process monitoring, and smart home devices. Imagimob provides a solution for this use case by offering a development platform for machine learning on edge devices. With Imagimob, developers can quickly go from data collection to deployment on an edge device, reducing the time it takes to reach a working demo of a sound event detection system to just a few days. The platform provides tools and resources to help developers create and optimize machine learning models, allowing them to easily create a system that can accurately detect the specific sounds or audio patterns they require.

46. Intel Corporation

Company type: Established

Position in edge ecosystem: Hardware (Server, Switchers & routers, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect); Edge Cloud Infrastructure (IaaS, Operating system, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: Intel announced Geti™ platform to scale AI at the edge, allowing noncoder domain experts to collaborate with data scientists and quickly build and train AI models. The platform is already in use by industry innovators in manufacturing and healthcare fields. In addition, Intel partnered with Ericsson to launch a global Cloud RAN tech hub focused on improving energy efficiency and network performance, reducing time to market, and monetizing new business opportunities such as enterprise applications.

Key financial milestones reached: NEX provided double-digit revenue growth to Intel, achieving record revenue in three of four quarters. Intel also acquired Ananki - a startup created from the Open Networking Foundation (ONF) to focus on the commercialization of private 5G services based on open-source network technologies.

An edge computing use case they help to enable: One of Intel's clients, Verizon, virtualized its radio access network (vRAN) on cloud-native virtualized architecture with standardized interfaces for greater flexibility, improved cost efficiency, and faster delivery of new services like AR/VR, remote healthcare, autonomous robotics, and smart city solutions. Verizon's vRAN runs on a combination of Intel processors, Intel Ethernet controllers, and FlexRAN™ software.

47. Intent HQ

Company type: Growth stage

Position in edge ecosystem: Application/Software (Software application);

Notable achievements in 2022: In 2022 Intent HQ launched Intent xChange, an insights marketplace where brands can create, buy, or sell their own privacy-safe customer insights and dynamic reports. Intent Edge, their Edge AI computing solution, enables brands to add an entirely privacy-safe source of customer device data to their xChange data profile for unique insights into customer behaviour.
Intent Edge has been beta tested with selected users and will be launched to market in 2023. With Intent Edge, the customer data never leaves the customer's device. Intent Edge also connects with Intent Lift, their customer AI analytics platform so that brands can unlock the value of their customer data.

The insights gleaned from this alternative data source can be used to enrich existing CRM customer data and customer insights or used to create data features within Intent xChange for monetization. Finally, using Intent Edge, the insights can be used to activate customer campaigns directly on to the devices of only the relevant customers at only the most relevant times, for a hyper personalised experience.

Through Intent xChange, complete end to end privacy allows brands to quickly buy or sell fully anonymised, first-party aggregate data for campaigns and creating insights, all without any personally identifiable information (PII) leaving the customer's mobile phone. Use cases examples include timely/personalised upsell/cross-sell opportunity, early churn detection and retention, and new monetization opportunities.

Key financial milestones reached: Intent HQ is continually expanding and company headcount in 2022 rose by 64% on the previous year, to reach 127 people employed globally.

The company is also committed to improving diversity and launched a strategic Diversity, Equality and Inclusion programme in 2020. This has been very successful, culminating in Intent HQ being awarded Best Tech Employer by Women in Tech in 2022 for 'going above and beyond to ensure inclusivity and diversity'. 'In 2020 when the programme was launched, around 25% of new hires were women, but in 2022, the percentage of women joining Intent HQ had risen to 44%, just a few points shy of our ultimate target to reach gender parity.

Intent HQ was also recognised within the FT1000 Europe's Fastest Growing Companies list by the Financial Times in 2022.

An edge computing use case they help to enable: One of the strongest use cases for Intent Edge is Early Churn Detection and Customer Retention. Intent HQ's EDGE technology makes it straightforward for any company with physical outlets to improve brand loyalty and preserve customer revenues by offering very targeted, timely retention offers.

The use case can be modified to suit different business processes, for e.g., it is equally relevant for leisure and hospitality, retail, health clubs etc.

48. IOTech Systems

Company type: Growth stage

Position in edge ecosystem: Hardware (Server, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: IOTech announced a new release of Edge Xrt, its software platform for time-critical OT systems. Edge XRT 2.0 provides extended OT connectivity, auto-discovery for easy device onboarding and a new MQTT API to simplify integration and management. IOTech has also upgraded Edge Xpert to support EdgeX Foundry's redesigned architecture. Finally, IOTech has partnered with Baumier Automation to accelerate digital transformation within Brazil's industrial automation market, as well as King Steel to provide industry 4.0 capabilities to smart manufacturing products.

Key financial milestones reached: IOTech Systems has raised Series B funding.

An edge computing use case they help to enable: IOTech edge platform software allows users to create industrial applications that leverage the latest advances in AI, analytics and inferencing technologies. The edge platform enables easy data acquisition from a range of industrial OT devices/sensors to act on the data. Transformed data or processing results can then either be sent to any SCADA or IT/Cloud endpoints for further processing/storage. Alternatively, commands can be sent back to the connected OT devices. This was used by King Steel to deliver real-time data acquisition, data storage, data visualization and analytics for its NexCell® Injection Moulding Machines.

49. Kaloom

Company type: Growth stage

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling); Hardware (Server, Switchers & routers, Processor); Network (Interconnect, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Analytics & APIs);

Notable achievements in 2022: Kaloom in collaboration with Red Hat has accounced availability of its Unified Edge solution. The solution allows network, compute and storage nodes to share the same underlying container-based execution environment, simplifying complex next-generation networks and accelerating transformation from virtualized to containerized infrastructure.

Key financial milestones reached: Kaloom secured $21M in funding to accelerate network transformation and 5G-edge deployments.

50. KoiReader

Company type: Growth stage

Position in edge ecosystem: Facility (Rack systems); Hardware (Server, End-device); Network (IoT platform); Edge Cloud Infrastructure (Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration)

Notable achievements in 2022: In 2022, KoiReader achieved a number of notable accomplishments, including joining NVIDIA Metropolis Partner Program, becoming an Intel partner to deliver Industrial and Supply Chain automation to Enterprise customers, and partnering with leading supply chain organizations to build new applications around their common technology core and patents. KoiReader, a founding member of the Warehousing Association of India, also authored the chapter on Automation, AI, and Machine Learning in Logistics and Supply Chain as part of India's National Logistics Policy.
In addition to these accomplishments, they won many awards globally such as Supply and Demand Executive's Top Tech Startups Award, Food Logistics' Top Technology and Software Provider Award, and Supplain ranked them among the Top 25 global supply chain innovation companies in the world.

Key financial milestones reached: They have on-going engagements with multiple Fortune 100 and 500 corporations globally and expect to close this year 2023-24 with an ARR of US$10 Mn.

An edge computing use case they help to enable: KoiReader are helping to enable next-generation edge computing use cases that provides 100% supply chain accuracy through their KoiVision Platform. Their platform is powered by machine vision and proprietary AutonomousOCR technology, that enables vision-driven solutions for logistics, supply chain, and industrial automation. As a result, their customers benefit from improved accuracy and efficiency in their operations.

51. KRYP.TOOLS

Company type: Start-up

Position in edge ecosystem: Network (Content & application delivery); Application/Software (PaaS);

Notable achievements in 2022: KRYP.TOOLS was established in 2022 following the launch of its MVP at GITEX Global 2021 in Dubai, where the company was among the top 10 AI and blockchain startups competing

against 700 other companies. The commercial version of its platform was launched later that year at GITEX Global. Additionally, KRYP.TOOLS entered into partnerships with AWS and NVIDIA through the Inception program, which is focused on data processing using eGPU technology for ML and AI-based market predictions.

Key financial milestones reached: KRYP.TOOLS received seed funding of $400k in 2022.

An edge computing use case they help to enable: KRYP.TOOLS is a SaaS designed for wealth managers and investors to maximize their returns in the digital assets market. The platform has received requests from large investment funds and banks for dedicated instances, which will be deployed through edge computing. The company is currently in the process of developing a prototype for this use case.

52. Kyndryl

Company type: Established

Position in edge ecosystem: Network (Interconnect, Cloud connect); Edge Cloud Infrastructure (IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Analytics & APIs); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: In 2022, Kyndryl signed a 5G and edge partnership deal with Nokia and expanded their partnership with Lenovo to accelerate scalable hybrid cloud and edge computing solutions. They also collaborated with Cisco on network and edge computing solutions for enterprise customers and digitized businesses with Vodafone Spain using a hybrid multicloud solution. Kyndryl drove digital transformation with Konica Minolta using imaging IoT and AI to address social issues. Additionally, Kyndryl expanded their technology strategy and integration services to enable customers' digital transformation and received recognitions from ISG and Gartner for their managed network services.

Key financial milestones reached: In full-year 2021, the company reported revenues of $18.7 billion and a net loss of $2.3 billion. The pro forma revenues were $18.5 billion with a pro forma adjusted pre-tax income of $114 million. Kyndryl continued to make progress on its 'Alliances, Advanced Delivery, and Accounts initiatives and has positioned itself to capture growth opportunities through partnerships with cloud hyperscalers.

An edge computing use case they help to enable: Collaboration with Nokia has already resulted in private LTE and 5G real world deployments and several proof-of-concept (PoC) applications for Dow Inc. to support Industry 4.0-enabled worker safety and collaboration, asset tracking, and other capabilities using a blueprint that it plans to expand and deploy across its sites worldwide.

53. Leading Edge Data Centres

Company type: Start-up

Position in edge ecosystem: Facility (Data centre); Network (Interconnect, Cloud connect);

Notable achievements in 2022: LEDC had a successful 2022, designing, building, and deploying 4 tier III data centers in regional hubs, connecting all major telecommunications providers in Australia,improving speeds and customer savings. The company has created over 200 jobs, aims to use 100% renewable energy by 2023 and achieved ISO-27001 certification, and received Uptime Institute Tier III certification.

Key financial milestones reached: Raised $30M from Digital Bridge to drive the growth of the business and have reached revenue goals this year.

An edge computing use case they help to enable: Toim Technology upgraded car dealership JT Fossey's internet services by replacing its previous setup with a single 200 Mbps connection from Leading Edge Data Centres. Toim designed and deployed the new network in collaboration with JT Fossey's IT manager, leveraging fiber links from telco aggregator Encoo Communications. JT Fossey is now paying 70% less and has improved network speeds, stability and security, and the ability to transfer and store sensitive data in a secure facility. LEDC, a regional-based data center and network provider, offers access to its ecosystem of MSPs, telcos and cloud providers to customers outside metro areas.

54. LF Edge

Company type: Start-up

Notable achievements in 2022: LF Edge supports the development of open source edge computing projects and has become involved in sectors such as telecommunications, cloud, IoT, AI, and more. In 2022, LF Edge made significant impacts, as demonstrated by its tenet publications and new use cases, such as the Olympic Games Beijing 2022, where Tencent used Akraino's Connected Vehicle Blueprint to track and analyze real-time traffic data. Other use cases include Project Alvarium, which provided trustworthy sustainability reporting, UC Davis and Opus One using Fledge for safer winemaking, the Mayflower Autonomous Ship, which used Open Horizon components to sail across the Atlantic, and retailers using EdgeX Foundry to improve self-checkout efficiency.

Key financial milestones reached: As a non-profit, LF Edge's revenue comes from paying sponsors. In 2022, seven organizations joined as paying members, including UNIBERG, Shanghai Qiany Technology, Spectro Cloud, Emerson, the Ritsumeikan Trust, Xi'an University of Architecture and Technology and Jeju National University.

An edge computing use case they help to enable: Equinix and Aarna Networks, with the support of LF Edge, developed a solution using the Akraino Public Cloud Edge Interface (PCEI) blueprint that demonstrates multi-domain infrastructure orchestration and cloud native application deployment across various domains such as public clouds, edge clouds, and network operators. This solution showcases how telco providers can share their services in a multi-access edge computing (MEC) federation environment by orchestrating 5G control and user plane functions, using bare metal servers and software stacks, interconnection with the public cloud and deployment of cloud native IoT applications. The solution demonstrated MEC Service Federation for location-aware IoT.

55. Litmus

Company type: Growth stage

Position in edge ecosystem: Network (IoT platform, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, Operating system, Virtualisation & containers); Application/Software (Analytics & APIs); Integration & Services (Professional services)

Notable achievements in 2022: In 2022, Litmus introduced over 25 new industrial drivers and launched the digital twin functionality, expanding their capabilities in the IoT space. In addition, they created an Edge Solutions marketplace, further solidifying their position as a leader in edge computing. Litmus also formed new partnerships with companies such as Google Cloud, Dell and Belden, positioning themselves as the edge platform of choice for these companies. The success of these efforts was reflected in the growth of both their customers and partners, with customer growth reaching 250% and partner growth reaching 200%.

Key financial milestones reached: In 2022, Litmus successfully closed a Series B funding round, raising 30 million dollars.

An edge computing use case they help to enable: A multinational engineering company adopted Litmus' Industrial IoT platform to gain visibility into their overall equipment effectiveness (OEE) and other production metrics. The company faced challenges such as a complex shop floor with legacy protocols and strict security requirements, but with the deployment of Litmus Edge on gateways and Litmus Edge Manager in a central data centre, they were able to quickly connect to legacy systems and collect OEE and downtime data. This led to reduced downtime and scrap, and the ability to develop and securely deploy edge applications while maintaining security guidelines. The integration with MindSphere allowed for data collation and the generation and deployment of data models to the edge.

56. MatreComm

Company type: Start-up

Position in edge ecosystem: Network (Interconnect, IoT platform, Edge gateway, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration);

Notable achievements in 2022: MatreComm CraftWorld and CraftCraftWANI were launched, as well as making forays across major Telco's and ISPs.

Key financial milestones reached: MatreComm have become self-sustained in their revenues, with major Tier Telco's and ISP's being their customers.

An edge computing use case they help to enable: Telco's/ISP's today have a multi-vendor, multi-technology networks, which are complex and chaotic to manage. Telco's/ISP's need to transform from Internet Service Providers to Digital Service Providers. As part of transition to this journey from ISP to DSP, they need a platform which helps to manage the networks in a seamless manner and help transition the journey accordingly. MatreComm CraftWorld is a single unified platform, wherein they have Network and the Value-added services being provided from a single place, single console.
The platform allows customers to manage multi-vendor, multi-technology networks; create and manage services from a single console; integrate billing and invoicing; and create and manage services from a single console. Telcos/ISPs are able to then build a roadmap to becoming a Digital Service Provider.

57. Microsoft

Company type: Established

Position in the edge ecosystem: Edge cloud infrastructure (IaaS; multi-cloud platform; virtualisation and containers), hardware (server), network (IoT platform)

Notable achievements in 2022: Microsoft announced the next-generation of its hybrid cloud platform for operators – Azure Operator Distributed Services. Microsoft also announced the next generation of its packet core services – Azure Private 5G Core and Azure Operator 5G Core. Microsoft Azure Operator 5G Core is an Azure service that enables operators to build, deploy, and manage scalable mobile networks. Azure Private 5G Core helps deployment of a complete set of 5G core functions on a small footprint compute running on Azure Stack Edge at the enterprise site.
Microsoft also announced Azure public MEC with AT&T and Azure public MEC with Singtel. Azure public MEC integrates Azure compute and edge-optimized Azure services with the mobile operator's public 5G network connectivity.
An edge computing use case they help to enable: Microsoft has partnered with CommScope to use private networks to transform CommScope's fiber-optic cable manufacturing technology centre in Shakopee, Minnesota. The Microsoft Azure private multi-access edge compute solution with CommScope ONECELL

CBRS access points simplifies the consumption of private 5G networks to run latency sensitive applications on the factory site. CommScope Manufacturing is transforming their workforce by boosting employee capabilities and decreasing manufacturing start-up time with the use of Augmented Reality application running on Azure private MEC and Microsoft Hololens as the end user device. With NEAL Analytics' solution and leveraging Azure private MEC and cloud, CommScope is transforming operations by analysing trend data to ensure quality metrics are maintained and are presented to line workers in real time.

58. mimik

Company type: Growth stage

Position in the edge ecosystem: Application/Software (PaaS)

Notable achievements in 2022: mimik signed new partnership agreement with Tata Elxsi focused on delivering 5G services for industry 4.0, automotive and media distribution. They also partnered with Business & Decision, a SI company that are part of Orange Group. Mimik released an updated version of their product edgeEngine 3.0 in 2022 and revamped their developer portal and documentation.

Key financials milestones reached: Their 2022 revenues increased by greater than 100% YoY.
An edge computing use case they help to enable: Wipro, a global system integrator, worked with mimik to deploy a Software Defined Vehicle (SDV) solution, which was showcased during the recent CES trade show held in Las Vegas. mimik provides a single platform regardless of the underlying hardware platform and operating system. Given that up to 70 incompatible hardware exist within cars, mimik's single platform solution in the market provides horizontal compatibility. This is crucial for car manufacturers, especially during software updates, and fast-tracks delivery of new experiences to stay current with the OTT providers (apple car, android auto, amazon car services, etc.) vs. waiting for the next car model production.

59. Nearby Computing

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: Nearby Computing launched v2.0 of their Nearby One orchetration platform. They also signed new deals with MNOs in APAC and global partnerships with 3 of the largest 5 SIs in the world. Nearby also ran innovative projects in the US using V2X.

Key financial milestones reached: Nearby Computing secured additional pre-series A funding.

An edge computing use case they help to enable: Nearby Computing's Neutral Host Shared Digital Infrastructure enables C-V2X and MEC market adoption. C-V2X, a new technology protocol defined as part of the 5G standard, is meant to enable vehicles to communicate over cellular with connected things ranging from other vehicles, in-car devices, to infrastructure (like traffic lights), or pedestrians holding devices. One major focus of C-V2X is to enhance road safety by enabling collision warnings and alerts. Using Nearby One, the E2E Edge Orchestrator, brings the power of the cloud closer to the vehicle through using MEV, threat detection can be improved. The solution lowers latency offers massive bandwidth for processing and improves communications and connectivity between vehicles and road infrastructure, reducing lag for critical decision making.

100 edge computing companies to watch in 2023

60. Nife Labs

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application);

Notable achievements in 2022: Nife Labs had a new product release in 2022, as well as acquiring 11 customers and adding 6 new partners.

An edge computing use case they help to enable: Nife Labs have an interesting case of supporting online jamming across low latency regions/locations for a startup focused on music industry, where the end customers are musicians.

61. NodeWeaver

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Operating system, Virtualisation & containers);

Notable achievements in 2022: NodeWearver moved into production with their first F500 customer, expanded a number of key partnerships and initiated several major PoCs, including Carrefour in Greece and two major telcos, which are ongoing.

Key financial milestones reached: NodeWeaver exceeded our revenue goals for the year and revised upwards their forecast for 2023.

An edge computing use case they help to enable: One use case is for cruise ship operators: full zero-touch deployment, with hardware sourced and provided with no need for pre-installation or configuration; in-ship operation with full proactive self-management, transparent high-availability for all the executed VNFs from major vendors like Juniper and Fortinet, integrated monitoring and remote management even through ephemeral connectivity (when the ship is at sea). Other examples include in retail, in-store network management and private 5G for a major European retail chain.
For telcos, executing a 5G RAN stack with full remote management and realtime workload support for mixed execution (realtime and non-realtime tasks).

62. Nokia

Company type: Established

Position in edge ecosystem: Facility (Data centre, Rack systems); Hardware (Server, Switchers & routers, End-device); Network (IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform); Application/Software (PaaS); Integration & Services (Professional services)

Notable achievements in 2022: Nokia announced new platform capabilities and applications for its on-premise Mission Critical Industrial Edge (MXIE) compute solution enabling Nokia MXIE to host applications from different ecosystems, including legacy non-cloud native workloads, elevate operational technology (OT) network security and facilitate application development to advance enterprise digital transformation. In 2022, they also announced plans to integrate Microsoft Azure Arc capabilities into the Nokia MX Industrial Edge (MXIE) platform, to allow for the potential of mission critical applications for Industry 4.0 use cases.

An edge computing use case they help to enable: Kyndryl's industrial customers are deploying Nokia private wireless networks to achieve high-performance wireless connectivity. Nokia MXIE is a part of the solution which offers a converged compute platform to support the core operation of private wireless networks and host a multitude of OT edge computing applications. By leveraging Nokia MXIE, Kyndryl is allowing customers to design, deploy and manage end-to-end industrial use cases with an improvement to their industrial operations.

63. Open Access Data Centres

Company type: Start-up

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Network (Interconnect);

Notable achievements in 2022: Having closed funding at the end of 2021, OADC launched 30 operational edge data centres throughout South Africa, supplemented by 4 core data centres in key cities, implementing Open Access' core-to-edge network architecture and broader strategy.

Key financial milestones reached: The first-round funding (US$200m) closed at the end of 2021, enabling OADC to start deployment. Subsequently, their parent company WIOCC Group has closed further funding of $30 million.

An edge computing use case they help to enable: One of their end customers is using OADC core and end data centres together with national, international connectivity and IP services from WIOCC to deliver multiplayer gaming services in South Africa. OADC's network infrastructure is enabling them to attract new customers, develop and launch new service offerings, grow revenues and profitability.

64. OptDyn

Company type: Start-up

Position in edge ecosystem: Hardware (Switchers & routers, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers);

Notable achievements in 2022: OptDyn has progressed across several primary areas:
With an unprecedented increase in cyber-attacks perpetrated by nation states over the past year, OptDyn continues to advise, educate, empower, and assist governments in deploying Subutai Peer Edge Clouds to reduce their reliance on centralized Big Tech Clouds and protecting critical sovereign data from forced search and seizure under 2018's CLOUD Act. Subutai P2P Edge Cloud platform's easy-to-deploy, always on cloud infrastructure assures uptime and interoperability, provides a scalable framework that meets today's rigorous industry standard directives, and promotes future innovation.
The Subutai Blockchain Router has been chosen by select second-generation Smart Cities to provide their residents evergreen financial benefits in the form of passive income on the Edge.
LifeLine, OptDyn's forthcoming plug-and-play suite of AI-powered connected Edge devices for remote workforces, ensures workers' security, connectivity, and uptime so they are able to Work From Anywhere. In 2022 OptDyn established pre-launch national partnerships to pilot LifeLine to attract, retain, and promote inclusive gig economy and under-represented workforces.
OptDyn has also enjoyed an uptick in interest in Subutai for community hosting a growing number of de-platforming-resistant decentralized social media platforms, both for infrastructure (P2P Edge Clouds), as well

as standing up instances using Subutai Blueprints (for example, Mastodon). Subutai PeerOS for Edge Clouds and Subutai Blueprints are freely available to users at no cost.

An edge computing use case they help to enable: OptDyn's Subutai P2P Edge Cloud platform powers Bharat Compute Grid —India's first distributed Edge Computing grid dedicated to research, development, innovation and deployment of far-Edge applications. Bharat Compute Grid acts as the computing infrastructure for ultra-low latency, Edge applications in agriculture, healthcare, and Industry 4.0 distributed across 10 peers in five cities in India.

To build BharatCompute's distributed private Cloud and enable applications to be developed for Edge-first solutions, the projects team needed a very stable and reliable Peer-to-Peer platform. In total, it took the team just over 4 weeks from selecting Subutai as the deployment platform for BharatCompute and getting their proof-of-concept up and running.

Initial prototyping on BharatCompute began in November 2020, with the project officially launching in August 2021. An active focus area is AgriTech, with demonstrated unit improvement in yield vs reduction in input cost (e.g., fertilizers, irrigation).

Future plans include Bharat Compute's new commercial launch in Q2 2023 to cover additional Edge use cases in agriculture, healthcare, and industrial automation, as well as expanding the grid with prominent Indian research universities and deploying their new distributed applications.

65. Opticoms

Company type: Start-up

Position in edge ecosystem: Hardware (End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Opticoms announced new partnerships with Intel and NearbyComputing. They are now listed in Intel Network Builders ecosystem. They had a product launch for non-standalone 5G campus networks and standalone 5G network family for indoor and outdoor scenarios. Opticoms also won a contract as the Private 5G and Edge computing supplier of a German MNO.

Key financial milestones reached: Opticoms saw 120% revenue growth and doubled their team size in comparison to the previous year.

An edge computing use case they help to enable: A remote controlled excavator demonstrated in Bauma 2022 where driver and excavator had a physical distance of 400 km. Captured images are processed on the excavator compute machine to improve the latency performance.

66. Orange Business Services

Company type: Established

Position in edge ecosystem: Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Orange Business Services has partnered with Fortinet for secure access service edge solution based on cloud-native technologies and using a dedicated global IP backbone to deliver

expanded on-demand services. SASE will extend security capabilities, allowing all types of enterprises to take advantage of zero-trust network access and firewall-as-a-service.

An edge computing use case they help to enable: OBS offers edge services to control drones and process camera images to check airport perimeters for one of their customers.

67. Proximity Data Centres

Company type: Growth stage

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Network (Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration);

Notable achievements in 2022: Proximity Data Centres has acquired 3 new data centres in the UK and their facilities were chosen by Quickline and The Grid Factory. Proximity has also signed agreements for additional connectivity to the data centres with 4 major service providers, including Virgin Media O2 and Glide. The company has also focused on the development of their new division Edge IX, which is expected to be establishing regional internet exchanges across the UK in 2023 and 2024.

An edge computing use case they help to enable: Proximity worked with the Grid Factory to deliver an advanced implementation of a sophisticated edge computing platform based on NVIDIA RTX datacentre technology. The edge service delivers a 3D virtual reality model for use by designers, architects and engineers. Powered by NVIDIA RTX datacentre technology, the application allows high levels of collaboration through the design, approval and build phases and so reduces the associated costs to the client.

68. Pulsant

Company type: Growth stage

Position in edge ecosystem: Facility (Data centre); Network (Interconnect, Cloud connect); Edge Cloud Infrastructure (IaaS);

Notable achievements in 2022: In August of 2022, Pulsant, achieved Prestige Partner status from global Network-as-a-Service (Naas) provider Megaport. Through the Megaport partnership, Pulsant clients can connect to more than 360 cloud service providers through a single access point, including major hyperscalers Alibaba, AWS, Google Cloud, IBM Cloud, Microsoft Azure, Nutanix, Oracle Cloud, Salesforce, and SAP. Pulsant then launched Pulsant Cloud in September 2022 as part of its investment in its edge infrastructure platform this year. Pulsant Cloud delivers edge capabilities and advanced management tools for organisations with applications in complex hybrid cloud environments. This addresses the significant challenges organisations face around managing, optimising and securing increasingly complex hybrid IT environments, providing a single-pane-of-glass solution that streamlines the management of private and public cloud deployments and connectivity.
November 2022 also saw Pulsant launch unveil PulsantFlex – a unique solution designed to make edge transformation far simpler and more flexible. The new PulsantFlex solution enables organisations to seamlessly migrate their infrastructure from colocation into the cloud (or vice versa) whenever best suits their business. This solution, combined with Pulsant Cloud, gives the company's clients unrivalled flexibility and control in configuring their infrastructure and contractual terms to take advantage of edge computing.

Key financial milestones reached: Pulsant has invested more than £100 million to build its edge infrastructure platform in 2022. Pulsant announced the acquisition of Reading-based data centre and cloud services provider Amito in February 2022.
The acquisition was Pulsant's second within a two-month timescale, following the acquisition of a Manchester data centre and associated clients from M247 Limited in December 2021. The Amito deal included the company's 15,000 sq ft and 800 rack data centre in Reading which provides 2.9MW of IT load capacity and has been built from the ground up with energy efficiency in mind.

An edge computing use case they help to enable: In 2022, a local authority in the south of England wanted to redefine life on the edge and become a world-class digital and smart city. Through a smart city partner based in the US, it planned to execute the design, construction, installation and operation of over 200 new smart bus shelters each of which is to have high-speed connectivity, providing digital countdown screens, free wi-fi, CCTV cameras and improved access for people with disabilities. All within 10 months.
Pulsant was selected to provide the low latency connectivity for this edge project. Each of the shelters in the project require high-speed, broad bandwidth, low latency connectivity to provide fully resilient connectivity for a significant range of applications. Pulsant's edge data centre provides the hub for the compute and connectivity which provide low latency. This enables the customer and its infrastructure partners to maintain full sovereignty for data that must remain in the UK.

69. Qwilt

Company type: Growth stage

Position in edge ecosystem: Network (Edge gateway, Content & application delivery); Application/Software (Analytics & APIs);

Notable achievements in 2022: Qwilt announced new Service Provider Partners - Airtel India, Vodafone Turkey, JPIX Japan and many more not yet announced.

Key financial milestones reached: Their most recent round of funding, led by Cisco, closed last year.

An edge computing use case they help to enable: Qwilt supports a global streaming platform with content delivery and edge computing services.

70. Rafay Systems

Company type: Growth stage

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Rafay launched service mesh manager and network policy manager for traffic management and transport security for Kubernetes. Rafay also launched cost management service to deliver real-time visibility and allocation of Kubernetes cloud costs. In addition to Rafay's product advancements, the company strengthened its strategic partnership with AWS and launched a Technical Alliance Program to reduce the complexity of Kubernetes management and operations. Finally, Rafay launched open-source software project, Paralus, to enable secure, audited access to remote Kubernetes clusters.

Key financial milestones reached: In 2022, Rafay announced it doubled its total annual recurring revenue.

An edge computing use case they help to enable: Verizon Business chose Rafay to power application edge-managed Kubernetes operations. Verizon Business wanted to offer a managed service to help customers deploy and operate containerized applications and Kubernetes across data centers, in the cloud and at the network's edge.

71. Rakuten Symphony

Company type: Established

Position in edge ecosystem: Facility (Data centre, Rack systems, Site maintenance & operations); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Within 2022, Rakuten acquired Robin.io officially rebranding to Symworld Cloud, positioned under Rakuten's Unified Cloud BU. The Symworld cloud platform, coupled with their orchestration solution, is now in production with multiple operators, which will provide TCO savings and acceleration of Edge service delivery by 80%. Symworld Cloud runs on a very small footprint (one Physical core) enabling edge deployments with a small footprint and Symworld Orchestrator's ability to provide centralized Zero touch metal-to-service orchestration enables delivery of a more cost-effective edge solution.

Key financial milestones reached: Rakuten Symphony acquired Robio.io in 2022 renaming to Symworld Cloud and is positioned under Rakuten's Unified Cloud BU.

An edge computing use case they help to enable: Rakuten Symphony with Symworld Cloud is working with ISV partners to provide edge applications for use cases such as quality assurance, AI enabled video analytics, plant maintenance and operations and security and access control as part of food factory automation. Within smart cities their edge applications have enabled traffic management, ramp metering and signal control incident management and bus, taxi, and public transportation intelligent scheduling for a local government. In transportation they are focusing on ports with container tracking and release, automated logistics and security and access control.

72. Ranial Systems

Company type: Start-up

Position in edge ecosystem: Facility (Real estate, Power & cooling, Site maintenance & operations); Hardware (End-device); Network (IoT platform, Edge gateway); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering)

Notable achievements in 2022: Ranial offers an edge computing solution enabling real-time process automation and asset management for utilities, cleantech, manufacturing and logistics industries. They have patented their IoT platform which offers cognitive intelligence capabilities to gain incremental operational intelligence, real-time monitoring, and autonomous operations at the edge. The integrated hardware and software solutions are leveraging proprietary embedded AI to facilitate proactive condition monitoring and controls at the point of action.

100 edge computing companies to watch in 2023

Key financial milestones reached: Ranial is on track for 36.4% CAGR growth in FY 2023- 2024 with a pipeline of engagements in microgrid, automation, asset management and fleet management to deliver edge native IoT solutions. Their R&D is funded by US federal agency, NSF.

An edge computing use case they help to enable: Ranial Systems has enabled autonomous energy and asset management operations of the world's largest grid connected mobile energy storage and microgrid implementation. The solution is designed to provide autonomous energy dispatch scheduling, ramping/smoothening of renewable sites, real-time demand response management operations and absolve standard energy management functions.

73. Red Hat

Company type: Established

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Red Hat announced a partnership with ABB to enable industries using ABB's process automation and industrial software to scale rapidly and flexibly leveraging Red Hat's enterprise platforms and application services. Red Hat also partnered with Intel to launch the Intelligent Edge Solution Center - a collaborative environment for customers and partners to co-develop integrated solutions to meet the needs of edge, AI/ML and industrial use cases. Finally, Red Hat announced Red Hat Device Edge, which delivers an enterprise-ready and supported distribution of Kubernetes named MicroShift, combined with an edge-optimized OS.

An edge computing use case they help to enable: International Space Station mission specialists' studying microbes needed to send DNA sequencing results to Earth, but sending data from sensors in space to Earth for analysis creates long delays. To accelerate the data transfers, ML models were built on Red Hat OpenShift, packaging the code with everything it needs to run, including operating systems, tools and libraries. Red Hat AMQ streams ingest the data from diverse sensors in space and Red Hat OpenShift Serverless scales the application up or down based on the volume of data.

74. Reddix Group

Company type: Start-up

Position in edge ecosystem: Facility (Data centre, Rack systems); Hardware (Server, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: The Reddix Group authored a paper on Quantum Edge-Enabled Smart Cities which they published globally. They were also part of the Defense Health Agency 10 year, 10 Billion IDIQ Contract as a subcontractor team-member.

An edge computing use case they help to enable: Reddix Group are focusing on using technologies and SDKs from NVIDIA with use cases on Wearable Technologies for the Defense Health Agency and others interested in AR/VF with AI, ML and enablers.

75. Scurid Inc.

Company type: Start-up

Position in edge ecosystem: Hardware (Hardware maintenance & operations, End-device); Network (IoT platform); Application/Software (Analytics & APIs); Integration & Services (Professional services)
Notable achievements in 2022: Scurid has announced its technology partnership with Microsoft and Weavechain, as well as a new reseller partnership in Japan. Scurid has also launched support for STMicrocontrollers, enabling Zero Touch onboarding of IoT/IIoT hardware.

Key financial milestones reached: Scurid has received support from Microsoft in the form of USD 150K Azure Credits.

An edge computing use case they help to enable: A Scurid customer from the smart home vertical, was looking to build and integrate variety of hardware & software while maintaining user data security, authentication and authorization of device identities within the house even in offline situations or when replacing broken hardware with new. Scurid's software on smart home devices, and server deployed within the house enabled our customer to achieve & address those pain point all with simple APIs.

76. SixSq

Company type: Growth stage

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: SixSq launched their app vendor programme, providing sector specific business apps in retail, manufacturing, transport, logistics and energy. They also closed their first telco and service provider customers.

Key financial milestones reached: SixSq significantly increased their recurring revenue, providing unmatched flexibility to their customers and new market opportunities to their app vendors.

An edge computing use case they help to enable: SixSq's edge solution supports a European public transport company, including on-board passenger services (e.g. ticketing system, information), for an entire fleet of buses, trams and smart stops. The solution also includes a range of apps provided by different app vendors, demonstrating the value of man edge shared infrastructure. Gain in time and effort funds the solution within the first year.

77. Smart Mobile Labs

Company type: Start-up

Position in edge ecosystem: Facility (Data centre); Hardware (Server, End-device); Network (Interconnect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (Software application); Integration & Services (Systems integration)

Notable achievements in 2022: Smart Mobile Labs launched their 5G TV Production on Phones product.
Key financial milestones reached: Their revenue grew to over €5m.

An edge computing use case they help to enable: Content producers may use their EVO server for edge computing to get real-time TV signals on phones from several incoming cameras and control outgoing broadcast signal.

78. Spectro Cloud

Company type: Growth stage

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers);

Notable achievements in 2022: In 2022, Spectro Cloud launched its Palette Edge product. Through its unique decentralized architecture, Palette Edge makes it easy for organizations to deploy Kubernetes clusters to edge devices at massive scale. Spectro Cloud also became the lead sponsor of the Kairos open source project, which is a unique engine for building, deploying and maintaining immutable K8s and OS images to secure edge deployments. Finally, Spectro Cloud were recognized as a Gartner Cool Vendor for Edge Computing and were a finalist in the Edge Computing World 'Rising Star' award, Tech Trailblazers Awards and the DevOps 2022 Industry Awards.

Key financial milestones reached: Spectro Cloud closed a $40M Series B round of funding, bringing the total funding amount to $67.5M. Spectro Cloud is backed by Stripes, Sierra Ventures, Boldstart Ventures, T-Mobile Ventures, Westwave Capital, Alter Venture Partners and Firebolt Ventures.

An edge computing use case they help to enable: Spectro Cloud's Palette Edge product allowed to provide GE Healthcare with an end-to-end centralized multi-environment solution to deploy and manage a diverse collection of curated Kubernetes clusters across multiple locations. Using Palette's Cluster Profiles, GE Healthcare can now model the K8s infrastructure, as well as deploy and manage across any environment in a repeatable, consistent way. This allowed GE Healthcare to avoid field engineering visits at edge locations and resulted in up to 90% reduction in operational costs.

79. Summit Tech

Company type: Growth stage

Position in edge ecosystem: Application/Software (Software application);

Notable achievements in 2022: Summit Tech has hosted its first live Odience customer event with Canadian fashion brand Rudsak and has won Edge Computing World's Edge Native Application of the Year award. Summit Tech has also expanded their geographical footprint in Asia and MENA with technical trials of Odience on both in-house MNO and hyperscaler MECs. Summit was a launch partner for Azure Public MEC which included technical trials with AT&T and showcasing at MWC.

Key financial milestones reached: Summit Tech achieved first commercial revenues for Odience.
An edge computing use case they help to enable: Odience delivers immersive and interactive live events for brands, retailers, and event managers, allowing customers to view, interact, and participate with the hosts, products and content as if they were virtually attending the event. The platform uses edge computing to deliver personalised high quality 360° video at very low latency, low bandwidth and high scale to user's mobile phones, PCs, and VR headsets. Real time delivery allows user's phone camera video to be shown on screens in the event to maximise participation and engagement.

80. Sunlight.io

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Design & engineering)

Notable achievements in 2022: In 2022 Sunlight launched new products, entered new partnerships and won a number of awards.
Sunlight launched the first full hyperconverged edge stack to support the Arm-CPU-based NVIDIA Jetson™. Sunlight NexVisor coupled with the Lenovo SE70 support the deployment of AI applications anywhere at the edge.
Sunlight launched an Edge-as-a-Service solution that provides Sunlight's channel partners with a portal to order pre-configured edge infrastructure solutions, complete with hardware, software, and centralized management, to any location across EMEA with Sunlight distributor, Avnet Integrated.
Sunlight is now a Lenovo Innovator Program partner, an NVIDIA Inception member, and Avnet integrated Distributor partner. Sunlight also has reseller partnerships with 3i, Alchemy, Atom IT, Avnet Integrated, Insight, ITSS, Lunarweb, P1 Technologies, Paladin, Recarta, Safozi, and Veristor. In addition, Sunlight have partnered with the following ISVs: Avassa, Ori, Litmus, Onteon, WaitTime

An edge computing use case they help to enable: Sunlight is working with 5G Open Innovation Labs, including the Lab's telco and corporate partners on 6 Edge Computing projects that require a distributed, small-footprint computing infrastructure platform that can enable the real-time processing of Computer Vision data, close to source, with a tiny footprint in retail and transportation environments.

81. Supermicro

Company type: Established

Position in edge ecosystem: Facility (Data centre, Rack systems, Power & cooling); Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor); Network (IoT platform, Edge gateway, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration);

Notable achievements in 2022: Supermicro provides server and storage solutions for high computationally intensive workloads across various verticals. In 2022, Supermicro announced that their platform would support new releases from Intel, AMD, and Nvidia, boosted by the growing interest in AI and video analytics solutions. They continue to focus their efforts on TMT, retail, and smart city verticals where intense workloads are likely to accelerate in popularity.

An edge computing use case they help to enable: One major use case for Supermicro is retail. Their edge server can provide the edge server and AI processing platform to run multiple container-based workloads for large franchise chains and hospitality customers.

82. Telco Systems

Company type: Growth stage

Position in edge ecosystem: Hardware (Server, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Professional services)

Notable achievements in 2022: In 2022 Telco Systems achievements include deploying Edgility, their smart, open platform for Edge Computing, that accelerates multiple services deployment, across a variety of customers. They onboarded their first Enterprise customer, CEMEX - a European Global Construction Materials Company, and have since expanded into the Enterprise space with POCs and trials at large Retail and Manufacturing organizations.

They launched their Managed Services offering with E-Qual, a French MSP that operates in more than 50 countries. They are helping global operators and service providers enhance their virtalization capabilities across their networks. One example is CityFibre, the UK's largest independent carrier-neutral Full-Fibre platform, that is deploying Edgility across the UK as part of their nationwide Full Fibre network rollout, replacing legacy customer edge devices with small-footprint white-box, multi-purpose appliances, operated and fully managed by Edgility.

In other areas, they signed a partnership with Advantech to provide an enhanced joint solution based on Edgility pre-installed in Advantech universal edge network appliances and have been working closely with them to demonstrate the solution at a variety of industry events.

And finally, Telco Systems was shortlisted for the objective Layer123 Network Transformation Awards, under the Cloud and Edge Excellence category.

Key financial milestones reached: In 2022 the accumulated investment in Edgility reached was over $40m. They intend to continue with future investments to grow their market differentiation, customer adoption and competitive advantage.

An edge computing use case they help to enable: One of the complexities generated by edge computing is in its economies of scale. The process of deploying, managing, and operating a huge amount of edge devices, must be perfect each time. Manual intervention consumes tremendous resources from the technical workforce, causing operational efficiency to plummet. Edgility is a smart and open platform for edge computing that simplifies the deployment, management, and operation of complex workloads on a diversity of edge devices on thousands of sites. Built from the edge up, Edgility enables CityFibre to increase operational efficiency by automatically deploying, managing, and operating a large number of edge devices at the customer premise, from remote without manual intervention. To create a unified system to shorten the time it takes to deploy edge devices at scale, CityFibre integrated Edgility with its OSS/BSS to provide 360° automation to lower the cost of deploying edge devices at scale.

83. TELUS

Company type: Established

Position in edge ecosystem: Facility (Rack systems, Site maintenance & operations); Hardware (Switchers & routers, End-device); Network (Edge gateway); Edge Cloud Infrastructure (Multi-cloud platform); Application/Software (PaaS); Integration & Services (Design & engineering)

Notable achievements in 2022: TELUS are enabling MEC capabilities in their Hub350 & UofA Innovation Hubs to drive and accelerate the adoption of innovative MEC use cases in various enterprise verticals. They also launched a 5GAA Live Trial of 5G Connected Car Concept.

An edge computing use case they help to enable: Connected ambulances empowered by TELUS's 5G & MEC will enable high bandwidth, low latency, and ultra-reliable connectivity that will provide benefits in improving rescue efficiency. Emergency Medical Technicians will be able to send vital signs and high definition videos and images in real time thus reducing lag time to just a few milliseconds. These high-resolution video calls between the ambulance and the hospital staff will be reliable enough for doctors who are remote in an emergency situation to be able to provide pre hospital treatment.

TELUS are also working with AirMarket, a 5G-connected drone company working on using high-definition onboard cameras to stream video data to aid with things like wildfire prevention. These solutions still face

some policy challenges including access to the necessary bands of 5G spectrum, the airwaves on which wireless data travels. For drones to function seamlessly, especially in rural areas, users need spectrum and MEC for ultra-low latency (or no lag time) to communicate with the technology.

84. Trilogy Networks, Inc.

Company type: Start-up

Position in edge ecosystem: Network (IoT platform, Edge gateway); Edge Cloud Infrastructure (IaaS); Application/Software (Software application);

Notable achievements in 2022: Trilogy and Veea has partnered with Microclimates to package their combined precision agriculture solution with Microclimates's affordable, scalable universal control system that monitors temperature, humidity, CO_2, watering and ambient light using hundreds of sensors, with 24/7 monitoring and alerts.

An edge computing use case they help to enable: Trilogy Network's product FarmGrid is a digital agriculture platform that simplifies data access from the ground and other sources on a single private cloud. It standardises deployment and operations of precision agriculture solutions allowing customers to manage their operations with accurate real time data and insights on a single pane of glass. FarmGrid provides a private network for the farm and abstracts all the complexities of access and transport of data from different networking technologies.

85. Unmanned Life

Company type: Start-up

Position in edge ecosystem: Application/Software (Software application);

Notable achievements in 2022: In 2022, Unmanned Life developed an autonomous drone-based security surveillance application on the Unmanned Life platform, and worked with hyperscalers, and several telcos including new European telco partners.

Key financial milestones reached: Unmanned Life more than tripled their previous year's revenues in 2022.

An edge computing use case they help to enable: As part of the development of Unmanned Life's mapping & monitoring applications, Unmanned Life, together with a Canadian Telco and their remote network, deployed autonomous drones for reforestation applications in Canada.
This included:
Flying swarms of autonomous drones with high-definition camera payloads over a reforestation site to provide details of the area, from checking access roads to identifying planting areas, utilising a mobile network and edge capabilities to send data in real-time.

Flying the swarm to capture video data around the growth of vegetation. To do this, the Unmanned Life platform plugged into a third-party analytics software capable of identifying canopy layers, vegetation densities, crop health-rates, and more.
By utilising edge computing capabilities to handle key computational tasks and using a mobile network for autonomous command & control, and real-time streaming, drones and data flows can be efficient. Enabling more applications on the platform is a key path to building the autonomous future around sustainability, security, and supply chain logistics.

86. Valqari

Company type: Start-up

Position in edge ecosystem: Facility (Real estate, Data centre); Hardware (End-device); Network (IoT platform, Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering)

Notable achievements in 2022: Valqari released their Drone Delivery Station V2, which provides support for drone cargo delivery at scale and has won several prestigious awards, including the 21st Annual Chicago Innovation Award, and 2022 Urban Air Mobility innovation Award.

Key financial milestones reached: Closed two bridge rounds of financing.

An edge computing use case they help to enable: Valqari's drones and drone delivery stations rely on layers of edge computers to perform the complex control, AI and machine vision algorithms required to safely and efficiently carry cargo between Drone Delivery Stations. The system includes three edge computers in each delivery station, two edge computers in our drone, and a rich set of interconnects to connect them to the cloud.

87. Vantiq

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Design & engineering, Professional services)

Notable achievements in 2022: Vantiq have launched new strategic partnerships with NVIDIA, IBM, Dell, Advantech, PWC, NEC, and NTT to support the development and commercialization of edge use cases globally. Vantiq were also granted a patent for the way applications can be automatically partitioned and distributed.

Key financial milestones reached: Vantiq was acknolwedged by INC 5000 as one of the fastest growing companies in America with more then 1000% growth over the last 3 years and are in the top 12% of the fastest growing American companies.

An edge computing use case they help to enable: Vantiq have partnered with Casne Engineering to build an edge application for their customer Fugro to monitor and service platforms for deep sea wind farms. The solutions uses 10+ sensors on each platform to track the real-time status of each individual windmill, automatically detect potential issues, and provide insights to service crews such as when it's safe for a helicopter to land. This information is being processed and collected on edge devices with the whole application not requiring any cloud connectivity. This solution has resulted in increased efficiency servicing offshore windmills, thereby decreasing downtime and operating costs and increasing the viability of renewable energy markets.

88. Vapor IO

Company type: Start-up

Position in edge ecosystem: Facility (Data centre, Rack systems, Power & cooling, Site maintenance & operations); Hardware (Switchers & routers); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration); Integration & Services (Professional services)

Notable achievements in 2022: In 2022, Vapor IO expanded the availability of its Kinetic Grid to 32 US markets, with live deployments in 6 and 26 additional markets ready for customer deployments. The company also expanded its edge computing grid to Europe through a partnership with Cellnex. Additionally, Vapor IO partnered with Hypersive to offer Hypersive's suite of security services delivered via Vapor IO's Kinetic Grid in six US cities, starting in Las Vegas. Additionally, Vapor IO and Arrcus partnered to package Vapor IO's Synse software, embedded tooling for creating real-time network observability data, with Arrcus' ACE platform on network switches. This created a new Observability Data Plane for large-scale networks, improving the economics, reliability, performance, and environmental sustainability of the Internet.
Additionally in 2022, Vapor IO and DISH Wireless,successfully demonstrated the world's first private 5G CBRS network doing real computer vision at the edge in Las Vegas. They accomplished this by coordinating the integration of over 20 partners to develop an end-to-end monetizable service built atop its Kinetic Grid platform. Vapor IO is the first company to successfully monetize services at the edge, at-scale.

Key financial milestones reached: 2022 marked Vapor IO's transition from R&D to commercial revenue. The company also closed an additional round of financing.

An edge computing use case they help to enable: In October 2021, led by Vapor IO, the INZONE Las Vegas program was announced with Michael Sherwood, the City of Las Vegas' CIO. INZONE is a privately funded public/private partnership program bringing critical infrastructure and applications to forward-looking regions, enabling the municipalities and private enterprises in those markets to accelerate their digital transformation. The city of Las Vegas and surrounding Clark County was the first official INZONE, hosting applications and services designed to benefit manufacturers, retailers, hospitals, hotels, convention centers, casinos, telecom service providers and other nearby businesses, as well as to local governmental entities, residents and schools. At its core, the Las Vegas INZONE locates neutral-host infrastructure near high-density residential, industrial and retail zones. Locations within an INZONE can leverage Open Grid technologies to implement Industry 4.0 solutions—including private 5G, IoT, video analytics, smart retail, and cloud robotics, and others. On the heels of this, the Open Grid Alliance (OGA) announced in September that Las Vegas would be its first official Grid Innovation Zone - a multi-vendor production-grade implementation of an Open Grid, and a market-driven platform for incubating next-generation services. The launch of the Grid Innovation Zone further transformed the economics of in-demand applications, such as video analytics, business continuity, and 5G wireless connectivity.

89. Varnish Software

Company type: Growth stage

Position in edge ecosystem: Network (Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (Software application); Integration & Services (Professional services)

Notable achievements in 2022: Within 2022 Varnish launched Varnish Enterprise 6, their latest iteration which features Varnish Edge Cloud and whose software can provide an edge runtime environment, enabling operators to write and execute compute logic as close to the end user as possible. It can be installed in front of any server that speaks HTTP/HTTPS to speed up content delivery by 300 – 1000%, and reduce backend server load by up to 99%. Varnish also made a number of updates to their platform to bring capabilities to the edge, including a new way to extract statistics from the cache and offer improved performance for HTTP communication to other services. In 2022, Varnish also partnered with SixSq, an Ekinops Company, to integrate Varnish Software's solutions into SixSq's Nuvla Edge platform and marketplace.

100 edge computing companies to watch in 2023

An edge computing use case they help to enable: They partnered with Tesla Motors provide a flexible, robust and highly scalable CDN and caching solution. In this use case Tesla realized it wasn't using resources on its website optimally, and the same content was transferred repeatedly, leading to having to store large files and causing customer delays. They used Varnish Software to build a private CDN that provided a caching engine, a robust Geo-DNS, and service discovery that performed consistently across the globe. Additionally, Tesla is taking further action to have Varnish as their on-prem Edge Platform.

90. Verizon

Company type: Established

Position in edge ecosystem: Network (IoT platform, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration); Application/Software (Analytics & APIs); Integration & Services (Design & engineering, Professional services)

Notable achievements in 2022: Verizon launched Private MEC with AWS Outpost and with Microsoft Azure Stack Edge. Verizon launched several new MEC Solutions: Crowd Analytics, Cashierless Checkout, Accelerated Access, AGV Management, QA for Production, and QA for Warehouse
Verizon also expanded 5G Edge Public MEC with AWS Wavelength in 19 US metro markets and has partnerships with the following Sis: IBM, Deloitte (Smart Factory), KPMG, Capgemini, BOSCH, Tech Mahindra.

An edge computing use case they help to enable: Cashierless Checkout use case
Verizon developed the Cashierless checkout use case which uses computer vision and machine learning to enable in-person shopping and payment facillitation without the involvement of a cashier. The solution leads to an increase of 78% to transactions and 80% to basket size which drives 139% revenue increase with a 50% reduction in transaction time and 67% less staff required.

91. Vertiv

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Network (Interconnect, IoT platform, Edge gateway); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: In 2022, Vertiv was recognized as a Sample Vendor for micro data centre solutions in two Gartner® Hype Cycle™ reports for Edge Computing and Midsize Enterprises, and in the Gartner report, Emerging Tech Impact Radar: Communications.
To support the increasingly complex computing environments at the edge of the network, Vertiv launched their multiple new Lithium-Ion UPS and Cooling Solutions for Edge Applications. Vertiv also introduced the Vertiv™ Liebert® PSI5 Lithium-ion Short Depth, a new, shallower configuration of the rackmount, line-interactive Liebert® PSI5 UPS system.
Vertiv™ Liebert® ITA2 UPS provides reliable operation in edge environments with temperatures up to 50 degrees C (122 degrees F) and also offers best-in-class energy efficiency. The Vertiv™ Geist™ Rack Transfer Switch allows distributed IT and edge sites to reliably transfer to a connected, alternate power source when the primary source fails or is unavailable, in a space-saving form factor. Vertiv introduced two models of the Vertiv™ Liebert® XDU Coolant Distribution Unit, Vertiv's, drop-in liquid cooling solution for high-density computing environments at core and edge sites.

100 edge computing companies to watch in 2023

In 2022, Vertiv also released an application brief for broadcast and government production and post-production at the network edge. Vertiv continues to participate and contribute to product development in partnerships such as the Open Compute Project (OCP), the RISE partnership and the E2P2 Tech Consortium, working to provide efficient, next-generation solutions for data centres of every size.

Key financial milestones reached: Vertiv had net sales growth of 20.5% and organic net sales growth of 20.1% compared with third quarter 2021.
Third quarter orders were up 15% (excluding foreign exchange) compared to third quarter 2021. and orders backlog at the end of September 2022 was $4.7 billion, an increase of 46%, from the end of 2021

An edge computing use case they help to enable: As a developing country in the southwestern Pacific, the country of Papua New Guinea (PNG) must support its rapidly growing infrastructure, including power networks, telecommunications and schools. A small university in the eastern portion of this island nation has doubled its degree programs and increased student enrollment by 25%. To accommodate this growth, the university decided to invest in a new, highly reliable and quality data center infrastructure — one that could support the new IP phone system the university needed to deploy. The solution had to be reliable, energy efficient, and easy to deploy, to address the local challenges of an unstable power grid, high electricity costs, and limited local IT expertise.

Vertiv SmartCabinet is a data center-in-a-box solution that includes highly reliable rack, power, cooling, security, and monitoring in one integrated package. The preconfigured system reduces planning and building efforts, simplifies operation and saves space. The components are designed to work together for energy efficiency.

The results are:
• Off-site commissioning for savings in time and money
• Expected payback within six months of purchase
• No IT expertise needed on site to manage the system
• Far fewer instances of unplanned downtime

92. Vmware

Company type: Established

Position in edge ecosystem: Network (Edge gateway, Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Multi-cloud platform, Virtualisation & containers);

Notable achievements in 2022: VMware launched the second version of Edge Compute Stack in August 2022. Edge Compute Stack 2.0 brings enhancements in efficiency, AI/ML support, increased density of real-time workloads, and support for non-x86 IT/OT hardware. VMware sold the Edge Compute Stack to enterprises through partners as a managed service and partnered with Zededa to bring edge computing to more customers and devices. With VMware Cloud Director, service providers can offer Edge Compute Stack as an Infrastructure-as-a-Service with multi-tenant billing. VMware and Zededa partnered to bring edge computing to more customers and applications by extending Edge Compute Stack to small node devices and specialty interfaces for IoT devices.

An edge computing use case they help to enable: VMware helped JBS Foods, a global food company, to implement an edge computing solution for reduced waste and increasing yields in poultry processing. The solution uses computer vision and AI to examine chicken bones and determine which ones need additional processing, resulting in increased efficiency and helping JBS meet their sustainability goals. VMware provided JBS with its Edge Compute Stack, making it easy to manage and deploy applications across multiple edge sites.

100 edge computing companies to watch in 2023

93. Vodafone

Company type: Established

Position in edge ecosystem: Facility (Real estate, Data centre, Rack systems, Power & cooling, Site maintenance & operations); Hardware (Server, Switchers & routers, Hardware maintenance & operations, Processor, End-device); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (Analytics & APIs); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: Vodafone made several advancements in edge computing in 2022 including winning the 'Mobile Innovation of the Year' award at the National Technology Awards. Vodafone also opened the UK's first Edge Innovation Lab, creating the opportunity to support the growth of digital industries in the Greater Manchester area.The Irish Manufacturing Research (IMR) centre now has Dedicated MEC. They also launched an AWS Wavelength zone in Manchester and launched Edge Innovation Programme 2.0 transitioning to a try before buy/try before sell model for enterprises and customers.

An edge computing use case they help to enable: Vodafone is enabling a use case for edge computing in the Smart Rail Connectivity Campus (SRCC), a joint project between Chemnitz University of Technology and Deutsche Bahn, with the goal of establishing a center for research and development in the field of intelligent rail transport. Vodafone is providing a complete solution including a mobile private network and a dedicated MEC based on Microsoft Azure Stack HCI technology, to automate and digitize rail traffic with low latency and high security. The solution aims to increase train punctuality, reduce energy consumption, prevent accidents and allow for safer and more efficient control of trains from a distance.

94. VoerEir AB

Company type: Start-up

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Systems integration, Design & engineering, Professional services)

Notable achievements in 2022: VoerEir AB signed new customer contracts with leading telco operators such as Telefonica and Vodafone. In addition, with Deutsche Telekom an existing customer, they now work with some of the most important telcos in the world. On the product side, VoerEir AB have delivered important capabilities to support Open RAN and Public cloud for telcos at the edge. They also signed achieved partnership agreements with Ericsson and Mobileum in 2022.

Key financial milestones reached: VoerEir completed a successful funding round in Q2 2022 and have achieved their financial goals for 2022. During the year they also doubled their R&D staff.

An edge computing use case they help to enable: VoerEir AB created specific new test suites and capabilities to verify and optimize Open RAN both in the Private and Public clouds. As a new member of O-RAN alliance, their product, Touchstone, has been used to run verification and optimization of O-Cloud which will be an essential component of the edge. Their participation in O-RAN PlugFest Fall 2022 in Berlin i14y lab has been publicly recognized by O-RAN alliance members.

95. Volt Active Data

Company type: Growth stage

Position in edge ecosystem: Network (Interconnect, IoT platform, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers); Application/Software (Software application); Integration & Services (Systems integration, Design & engineering)

Notable achievements in 2022: In 2022, Volt Active Data has formed a partnership with Databricks and Red Panda, enhancing its offerings with new product capabilities that meet the growing market demands for cloud-native solutions. The company has also seen a surge in deployments from clients such as Amdocs, the Korean government, Dream11, etc.

Key financial milestones reached: While Volt is a private company, they are excited to have grown by over 65% year-over-year in 2022.

An edge computing use case they help to enable: The national government of South Korea deployed Volt to power their smart road traffic management. The system uses AI and Image Processing to identify different kinds of road user and create 'calm zones' near schools at opening and closing times.

96. weeve

Company type: Start-up

Position in edge ecosystem: Application/Software (PaaS); Integration & Services (Professional services)

Notable achievements in 2022: In the summer of 2022, weeve launched the Beta version of their platform. All core features were released to enable customer projects and make the platform available for trials and testing. They also launched a pilot project program called 321 Connect to explore the power of a solution-enabling collaborative platform

Key financial milestones reached: Weeve closed a seed round of €1.2 Million and another research investment from a public fund of €800k.

An edge computing use case they help to enable: Weeve is helping a Swiss textile manufacturer in overcoming a data privacy and processing challenge. The manufacturer was facing difficulties in obtaining performance data from customers due to data regulations and processing the large amount of data with different protocols, hindering R&D efficiency. Weeve offered a secure channel for data exchange, resulting in improved business outcomes for the manufacturer including increased customer value, engagement and reduced defects in the quality sensors.

97. Zadara Cloud Services

Company type: Growth stage

Position in edge ecosystem: Facility (Rack systems); Hardware (Server, Switchers & routers, Hardware maintenance & operations); Network (Cloud connect); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform); Integration & Services (Design & engineering, Professional services)

Notable achievements in 2022: Zadara entered into an agreement with Green Mountain to support Zadara's strategic markets in the Nordics and enable clients to choose a flexible and secure platform, simplifying operational complexity through automated end-to-end infrastructure provisioning of compute and storage resources. Finally, Zadara was recognized by IoT Evolution World magazine as a recipient of a 2022 IoT Edge Computing Excellence Awards.

An edge computing use case they help to enable: Zadara's zStorage and zCompute services are key technologies for metropolitan video surveillance solution developed in partnership with Fusus.

98. Zeblok Computational

Company stage: Start-up

Position in edge ecosystem: Hardware (Server); Network (Interconnect, IoT platform, Edge gateway, Cloud connect, Content & application delivery); Edge Cloud Infrastructure (Edge aggregation & orchestration, Multi-cloud platform, Virtualisation & containers); Application/Software (PaaS); Integration & Services (Design & engineering, Professional services)

Key financial milestones reached: Zeblok has increased revenues each year since its 2019 inception and raised additional capital in 2022.

An edge computing use case they help to enable: Zeblok Computational software enables rapid provisioning and deployment of AI inferencing engines to the edge via automation, with full lifecycle management -- not low latency, but near zero latency, since the inferencing is executed at the edge server, rather than just backhauled for processing at their own cloud/data center. Zeblok provides both orchestration at the edge and the capability to extend enterprise security and AI workloads to edge servers anywhere, with multi-tenancy. Telcos can leverage their edge networks to offer a comprehensive AI platform to their customers. Taking AI to the edge is a challenge for companies that must leverage AI for their mission-critical processes and Zeblok addresses this, for both cloud/on-prem and last mile AI.
One of their customers, a global chemical company, is using their product to reduce wastage and improve quality control, with inference engines at four geographically dispersed adhesives manufacturing plants.
They are also working with SIs installing edge servers for municipalities to execute smart cities use cases requiring inferencing at the edge.

99. ZEDEDA

Company type: Growth stage

Position in edge ecosystem: Edge Cloud Infrastructure (Edge aggregation & orchestration, IaaS, Operating system, Multi-cloud platform, Virtualisation & containers);

Notable achievements in 2022: New customer acquisitions for ZEDEDA included VMWare, Rockwell Automation and enterprise customer Emerson, who are also a strategic investor. ZEDEDA also saw a 4x YOY growth of the number of edge nodes under ZEDEDA management. They also launched the ZEDEDA Edge Academy, a free source of educational content on edge computing, EVE-OS, and ZEDEDA's solution.
Key financial milestones reached: Series B funding of $36.3M closed with all existing investors participating plus new investors Porsche Ventures, Emerson Ventures, Chevron Technology Ventures, and Coast Range Capital joining.

An edge computing use case they help to enable: For PV Hardware, a manufacturer of solar trackers, ZEDEDA has enabled them to operationalise energy production optimization at scale. They make a smart tracker that is installed on solar panels globally that runs applications that turn the solar panels to optimise production. They may have a gap as long as six months between when the device leaves the factory and is installed in the field, and have no IT technicians in the remote solar farm locations. With ZEDEDA, that device calls home once installed and powered, receives its updates, and can be remotely updated (both apps and OS) with automatic testing and fail-back without requiring any onsite IT skills, and they also have a foundation to remotely deploy

future applications for additional use cases. Since implementing ZEDEDA, they've seen a 75% reduction in provisioning and field installation time of these devices.

100. Zizo

Company type: Start-up

Position in edge ecosystem: Application/Software (Analytics & APIs);

Notable achievements in 2022: Zizo acquired several new customers for their Edge platform, including BAT (British American Tobacco) & Safran Landing Systems

An edge computing use case they help to enable: At British American Tobacco Zizo are providing their edge solution to support the development and deployment of connected experimental devices, providing point solutions for the analysis and transfer of data between systems. This approach has reduced development time by a 1/3rd and reduced the workload on technical staff.

The list was created by asking companies to submit themselves, therefore this may not be comprehensive and representative of the full spectrum of edge companies making waves in 2023.
Companies are listed alphabetically.

Matt Bamforth is a Senior Consultant at STL Partners, specialising in edge computing, private networks, and 5G.

Get in touch with the author to learn more
matt.bamforth@stlpartners.com

Or visit STL Partners' Edge Hub
www.stlpartners.com/edge-computing