Knowledge Brief

Quadrant Knowledge Solutions

Edgio is a Leader in SPARK Matrix: Commercial Content Delivery Network Services, 2022



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Commercial Content Delivery Network (CDN) Services are a set of services delivered to the users using a CDN. CDN services help deliver web content to users more quickly and reliably by putting the content as close to the end user as possible. Commercial CDN services cater to video streaming, live events, gaming, downloads, cloud storage, and other value-added services. However, CDN services have now grown to include everything from text, scripts, graphics, and media files to software downloads, documents, portals, e-commerce, live streaming media, on-demand media, and social media sites. CDN services help overcome the problem of network congestion normally associated with the delivery of rich web content, such as graphics and video, over the internet by using CDNs.

A CDN is a group of geographically distributed servers that speed up web content delivery by bringing it closer to where the users are located. CDNs cache content like web pages, images, and videos in proxy servers near the physical location of users. This allows users to watch a movie, download software, check bank balances, post on social media, or make purchases without waiting for content to load.

Commercial CDN services also cater to the internet of things (IoT) over-the-air (OTA) updates to any device at scale with high transfer rates. Video streaming services include transcoding, server-side ad insertion, live operations management, and monetization, offering the full suite of processing as well as delivery.

Value-added CDN services comprise managed integration, application development, and security and security operations center (SOC) management. Many companies also offer CDN solutions to business scenarios such as e-commerce promotions, online education, application store downloads, financial security, social communication, game acceleration, and multimedia streaming. Reliable content delivery, programmable edge, zero buffering, and acceleration service are some of the plus points associated with commercial CDN services.

Commercial CDN services improve website and application performance, reduce website loading times, increase content availability and redundancy, reduce bandwidth costs, and improve website security by providing distributed denial

of service (DDoS) mitigation. It ensures static and dynamic content delivery. Moreover, most CDN service providers permit users to leverage raw log data from web assets on their network as per their wish. This allows users to oversee their data and leverage them to derive valuable insights that help to improve the efficiency of their services. The popularity of CDN services is on the rise, and today, most web traffic is served through CDNs. This includes traffic from major social media and video streaming companies such as Instagram, Facebook, Amazon, and Netflix.

CDNs improve website load times or reduce latency primarily through their private backbone with globally distributed points of presence (PoPs), reducing the distance between users and website resources. CDNs let users connect to a geographically closer data center instead of a website's origin server if it is located far from the data center. Other measures like efficient load balancing through hardware and software optimizations, reduction in file size through tactics such as minification and file compression, and speeding up of sites that use TLS/SSL certificates by optimizing connection reuse also help improve website load times.

CDN services ensure network security, content security, and bot management by incorporating various security solutions. CDN services reduce the bandwidth costs for enterprises by caching content and making round trips to the origin server unnecessary. Some of the key capabilities offered by Commercial Content Delivery Network Service providers include scale, global reach, reliability, faster load times, high performance, superior network performance and resiliency, round-the-clock customer support, proven expertise, and reporting & visibility.

Many Commercial CDN Services vendors provide comprehensive functionalities that support different use cases; however, their service excellence, technology, and customer value proposition may differ depending on customer size, industry vertical, geographic location, and organization-specific needs. Some of the key competitive technology differentiators offered by various Commercial CDN Services providers include multi-device distribution, origin storage, dynamic mapping, standard caching, adaptive media delivery, advanced caching, support for edge computing, elastic load balancing, support for multiple streaming formats, personalized services, network security and content security, channel assembly and personalized ad insertion, uptime guarantee, access to raw log data, firewall analytics, network prioritization, granular visibility, support for HTTP/3, smart

purge, flexible content management, live clipping, digital video recorder (DVR), and archive, session management and global traffic management, media analytics and scalable infrastructure & cost efficiency.

Quadrant Knowledge Solutions' <u>SPARK Matrix</u>: <u>Commercial Content Delivery Network Services</u>, <u>Q4 2022</u> research includes a detailed analysis of the global market regarding emerging technology trends, market trends, and future market outlook. This research provides strategic information for technology vendors to better understand the existing market, support their growth strategies, and for users to evaluate different vendors' capabilities, competitive differentiation, and market position.

The research includes detailed competition analysis and vendor evaluation with the proprietary SPARK Matrix analysis. SPARK Matrix includes the ranking and positioning of leading Commercial CDN Services vendors with a global impact. The SPARK Matrix includes an analysis of vendors, including Akamai, Alibaba, Amazon, Cloudflare, Edgio, Fastly, Lumen Technologies, StackPath, and TATA Communications.

SPARK Matrix Analysis of the Commercial Content Delivery Network Services Market

Quadrant Knowledge Solutions conducted an in-depth analysis of the major Commercial Content Delivery Network Services vendors by evaluating their product portfolio, market presence, and customer value proposition. The Commercial Content Delivery Network Services market research provides competitive analysis and a ranking of the leading vendors in the form of a proprietary SPARK MatrixTM. SPARK Matrix analysis provides a snapshot of key market participants and a visual representation of market participants. It provides strategic insights on how each vendor ranks related to their competitors based on their respective technology excellence and customer impact parameters. The evaluation is based on primary research, including expert interviews, analysis of use cases, and Quadrant's internal analysis of the overall Commercial Content Delivery Network Services market.

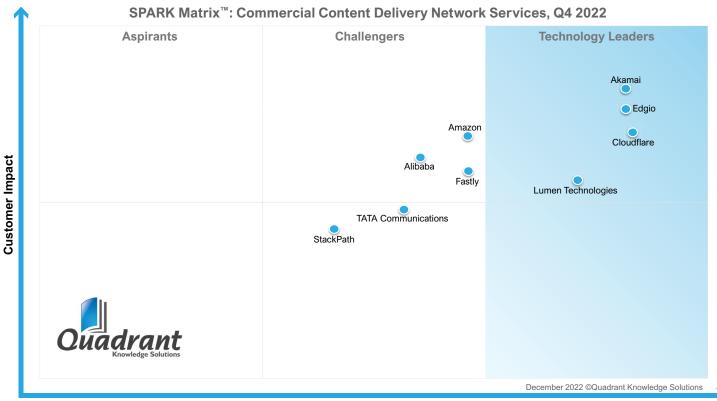
Service Excellence	Weightage	Custon
Sophistication of Service Capabilities	25%	Diversit
Competitive Differentiation Strategy	25%	Market
Industry Experience & Domain Knowledge	25%	Proven
Global Reach & Service Capabilities	15%	Custom
Vision & Roadmap	10%	Unique

Customer Impact	Weightage
Diversity of Client Base	25%
Market Presence	25%
Proven Record	25%
Customer Service Excellence	15%
Unique Value Proposition	10%

According to the SPARK Matrix analysis of the global Commercial Content Delivery Network Services market, "Edgio, with robust functional capabilities of its Commercial Content Delivery Network Services offerings, has secured strong ratings across the performance parameters of service excellence and customer impact and has been positioned amongst the leaders in the 2022 SPARK Matrix of the Commercial Content Delivery Network Services market."

Figure: 2022 SPARK Matrix™

(Strategic Performance Assessment and Ranking) Commercial Content Delivery Network Services



Service Excellence

Edgio in the Global Commercial Content Delivery Network Services Market

Founded in 2001 and headquartered in Phoenix, AZ, USA, Limelight Networks was rebranded as <u>Edgio</u> in 2022 after the company's acquisition of Edgecast Inc. and Layer0.

Edgio is a globally scaled, edge-enabled solution and application software provider specializing in cyber security, content delivery, video streaming, web applications, and software developer tools. Edgio also has a content delivery network (CDN) with a large capacity and multiple points of presence (PoPs) worldwide that offers a faster, smarter, more secure, and easy-to-use experience. Edgio leverages its CDN to offer commercial delivery services to users and businesses worldwide.

Edgio's key commercial CDN services include video streaming, live events, downloads, and cloud storage. The Edgio suite comprises Edgio Media and Edgio Application solutions. Edgio Media solutions enable the company to deliver various CDN services such as media delivery, origin storage, low latency streaming, transcoding & ad insertion, live events, and video-on-demand (VOD). Edgio Application solutions enable the company to deliver CDN services related to security, performance, and web application security. Expert CDN services from Edgio consist of managed integration, application development, and management of security and security operations center (SOC).

Edgio's commercial CDN services support over-the-top (OTT), live, social, gaming, software downloads, and other value-added services. Edgio's online video platform (OVP) business offers services such as transcoding, server-side ad insertion, live operations management, and monetization, offering the full suite of processing as well as delivery. Security services from Edgio consist of distributed denial of service (DDoS) protection, web application and API protection (WAAP), web application firewall (WAF), and bot management, along with a suite of other professional services.

Edgio also resells its CDN and security solutions as part of Microsoft Azure. Verizon also sells Edgio's security solutions within its broad security portfolio.

Analyst Perspective

Following is the analysis of Edgio's capabilities in the global commercial CDN services market:

Edgio's commercial CDN services help enterprises reach almost every part of the world in milliseconds, mitigate security exploits faster, and build and release web applications in less time. The CDN services enable enterprises to operate, deliver, and monetize videos to millions of global viewers as well as attract, retain, and grow customer satisfaction and loyalty. It also helps enterprises in reducing infrastructure costs and simplifies change management. It offers a flexible and user-friendly platform and takes all the guesswork out of deployments and caching. It gives enterprises full control over caching and traffic routing over their network. The platform's CDNas-JavaScript caches dynamic content at the edge and streams it to the browser before it is requested, helping enterprises deliver an exceptional and instant experience. The speed offered by Edgio's CDN Services is much faster than its competitors. The application services offered by Edgio not only help websites load quickly but also streamline and quicken the overall development process. Edgio simplifies the process of building, testing, optimizing, and running large e-commerce websites. It allows e-commerce websites to add and amend functionality and endpoints in a fraction of the time it used to take them. Edgio allows users to monitor the performance easily and caching of their sites in various levels of granularity so that every optimization effort is maximized. Advanced technologies built into Edgio's application services, such as auto-AMP and serverside rendering support for portable frontends, predictive prefetching, and CDN-as-JavaScript, help enterprises make the maximum out of every speed optimization effort. Edgio helps manage, store and secure live and on-demand video for all live broadcasts. The company also provides good customer service and technical support. Edgio's commercial CDN services supercharge video delivery, remove download restrictions, expand internet service provider (ISP) and telecom reach, and support online gaming in a big way. The company's ISP strategy enables it to expand capacity with minimal CAPEX while bolstering its relations with networks worldwide.

- Some of the key capabilities of Edgio's commercial CDN and storage services include scale, global reach, high-performing storage, high performance, customer support, multi-device distribution, proven expertise, optimized performance, reduced app, video, or live event risk, and development of innovative products.
- Edgio's CDN services offer elastic bandwidth to businesses to cater to the unpredictable demand as and when traffic spikes occur.
- Edgio CDN services' global reach through its points-of-presence (PoPs) across multiple geographies helps companies to expand their businesses into new markets easily.
- Edgio Origin Storage offers automated regional replication that places content close to users and retrieves it from the nearest and fastest location. This ensures rapid storage retrieval and delivery on a cache miss, providing the best possible experience for users.
- High performance ensures fast delivery of digital services such as video streaming, online gaming, and downloads with the least buffering. It helps businesses easily upload, store, and deliver videos without buffering.
- Edgio provides round-the-clock customer support throughout the year. Customer support is available at every stage of the customer journey, from evaluation to implementation to day-to-day assistance.
 Edgio's customer support team is open to exchanging ideas and offering advice to its clients.
- Multi-device distribution enables Edgio to consistently deliver content to anyone, anywhere in the world, on their device of choice. Multidevice delivery capability helps enterprises to reach customers anywhere, any time, on any device.
- Edgio's commercial CDN services support enterprises by leveraging the company's CDN capabilities and qualified workforce.
- Edgio optimizes the performance of businesses by setting up and configuring products for customers' most valuable key performance indicators (KPIs).

- Edgio reduces app, video, or live event risk through planning, preconfiguring, testing, troubleshooting, and analyzing projects.
- Edgio uses cutting-edge technologies to develop innovative products that help businesses step into the future. The company has developed a new headless front-end that enables instant page loads.
- Some of the key differentiators of Edgio's commercial CDN services include the deployment of technologies such as session management, SmartPurge, Dual WAF, and domain name system (DNS). Other differentiators include an integrated solution suite, faster solutions, security built on machine language (ML), a full-stack solution set, and the company's focus on outcomes. Edgio also facilitates CDNas-code (EdgeJS), allowing developers to build CDN caching into their web application code and integrate throughout the development workflow, enabling next-gen features like caching of dynamic data and prefetching into the browser Edgio's session management technology. Smartplay helps enterprises deliver & monetize live events for millions of concurrent streams. Flexible solutions from Edgio integrate seamlessly with customer workflows with all the features they need to power global video streaming services. SmartPurge from Edgio helps enterprises remove any unwanted content in seconds. Edgio's commercial CDN services offer amazing scalability that enables enterprises to deliver live broadcasts to thousands of viewers confidently. Dual WAF from Edgio ensures that the enterprises availing Edgio's commercial CDN services are secure and fast. The Dual WAF minimizes false positives by using an exclusive parallel firewall instance, enabling enterprises to rapidly test and propagate rule updates on production traffic without impacting users. Dual WAF and rate limiting reduce malicious traffic and the load on back-end infrastructure, improving the efficiency of enterprise operations. The deployment of a route DNS, one of the fastest DNS available, improves the speed of DNS resolution while maintaining the Domain Name System Security Extension (DNSSEC) to perform health checks and real-time routing decisions.
- Some of the top use cases of Edgio's commercial CDN services include over-the-top (OTT), software downloads, gaming & sports, and video delivery. Edgio helps in the transition of local television broadcasters to OTT streaming. Edgio reduces the inefficiencies

created by disparate and complex workflows by standardizing the workflow across different TV stations of a broadcaster. It eliminates complexity by working with a single and integrated media platform and scales streaming operations across different TV stations and technologies. Edgio's CDN and Storage services facilitate easier and faster software downloads, help businesses deliver high-quality video, and expand into new markets around the world. Edgio delivers high-quality video streaming to audiences on any device, anywhere in the world, ensures a TV-like quality experience for users, and caters to unpredictable demand. Edgio's CDN and storage services help gaming companies handle peak traffic and offer a reliable delivery experience, ensuring performance and reliability.

- In addition to the media use cases mentioned above, Edgio commercial CDN services' application use cases include websites, web applications, and the APIs that power mobile applications. eCommerce sites see significant revenue growth due to sub-second performance, which draws more visitors by improving search rankings and decreases friction once visitors are on the site. The use cases for the developer team include improving release velocity (2x typical), observability, branch management, image optimization, GraphQL caching, A/B testing, and routing. Headless re-platforming use cases leverage patented iterative migration. Security use cases include Bot Management, WAF, WAAP, managing DDoS attacks, and Managed Security Services.
- Edgio has a significant geographical presence in North America, South America, Europe, the Middle East, Africa, and Asia Pacific. The company holds a strong customer base, including leading brands across industry verticals such as media & entertainment, e-commerce & retail, banking & financial services, internet service providers (ISPs), travel & transportation, high-tech, education, and government & public sectors.
- Edgio's primary challenge includes the habitual discounts that customers are used to getting from different vendors offering commercial CDN services. However, Edgio tides over this challenge by offering more than just CDN to their customers. The company believes that its wide and deep product portfolio comprising of

streaming services, edge computing and web CDN, security offerings such as WAF, Dual WAF, DDoS, and Bot Management, developer tools and capabilities for customers to create and change web apps fast and securely are capable enough to win customer loyalty irrespective of the discounts offered by other vendors. The company may focus on catering to mid-market to small enterprise needs and supporting more use cases. The company may also look at expanding its geographical presence. However, with its sophisticated technology platform and comprehensive functional capabilities, Edgio is well-positioned to expand its share in the global commercial CDN services market in the near future.

 Edgio's strategic roadmap for the next few years includes continuous investment in emerging technologies and enhancing the capabilities of its existing media and applications platform. The company also wants to improve its outstanding commercial CDN services' security, performance, and team velocity offerings. Additionally, Edgio aims at the further convergence of value-added services such as security, edge computing, and enablement of web applications and developer tools.