~ ~ Q \$44 532.35 +12.30% \$10 222.22 \$8 432.44 ↑ Income \$\$ Expense \mathbf{Q} $\stackrel{\scriptstyle \land}{\not\leftarrow}$ 8

Content Delivery Network

Buffer Free Experience For The Most

Demanding Customers





What is CDN

Content delivery networks (CDN) - The Transparent Backbone of the Internet in charge of content delivery



Cache

Thousands of proxy-cache servers spread over the world

Route

Helps a user to make its request to the nearest caching server

Network

Reserved bandwidth capacity on multiple Carriers & ISPs ensures high speed between caching server and user

Global CDN Market

The global content delivery network (CDN) market reached a value of US\$ 14.3 Billion in 2020. Looking forward, IMARC Group expects the market to grow at a CAGR of 17.6% during 2021-2026.

Driver

Increasing demand for enhanced video content and latency-free online gaming experience

Challenge

Data security and privacy concerns

Restraint

Complex architecture and concern about QoS

Opportunity

Growing interest of consumers in OTT platforms and VOD for entertainment





Current Challenges

Content delivery networks (CDNs) serve up a large portion of internet content today

As the M&E industry evolves, users expect everimproving experiences on their streaming devices.

Congestior

Congestion is caused due to huge traffic from various parts of the world at the same time

Latency

Latency in returning the content requested is caused due to Congestion

Performance

Performance of content is affected due to high Latency





Solution - Deep Edge

Lower Latency

A CDN that Assures Lower Latency

Lesser Congestion

A CDN that Ensures Lower Congestion



About PicoNETS

Founded in 2017, we are a Deep Edge Content Delivery Network working with Carriers and Content Partners

- Partnering with 2 of the top 3 global Video streaming companies
- ✓ Delivering upto 14X faster performance on 5G
- ✓ Working with Telcos and ISPs in US, Japan, Singapore, India, Africa and SEA
- ✓ Part of HPE Digital Catalyst, AWS Activate, Microsoft for Startups, KGAP+ (Japan), Mainstage Hub









Our Super Team



Prakash Advani Chief Executive Officer



Ashish R Bedekar Chief Operation Officer



Rajeev RK ef Technology Officer (F) (5)



Jaimon Jose Advisor





How Typical CDNs Work



User request sent to a CDN or origin server

Transits the entire Telco-core / Gateway network infrastructure Multiple user for the same content will independently use Backhaul / Transit Bandwidth Request Latency typically measured in 100's of Milliseconds

Challenges with handling High bandwidth cases like Live Events

How It Works with PicoNets



User request served by a CDN Node @ the eNB/gNB Local Breakout point Breakout can be Native (5G-NGC/UPF), CUPS (4G-R14+) or Bumpin-the-Wire (3GPP Pre R14) Edge served requests skips the entire Telco core/gateway network infrastructure Request Latency typically measured in 10's of Milliseconds Supports large scale Live Events and other High Bandwidth use cases

Multiple user for the same content will not stress Backhaul/Transit Bandwidth





Features

Business Model Differentiation Revenue share with Networks (Telco, DC, ISPs) Protection From Patent Trolls picoNETS is a part of OIN and LOT Network





Advantages

Lower TCO	
Cost savings and lower power consumption	Lowe

Media Delivery

r latency and faster downloads, we offer an unmatched performance

Scalable Software

Runs on Cloud, VMs and standard off the shelf hardware



Benefits



Low Latency Closer to Customer Buffer free Experience

Software Based

Runs on off the shelf hardware

Edge Node API

Granular control and visibility of Content at the edge

Agile & Flexible

Multiple models for OTT and networks, From DC to Edge, Public and Private CDN





Our Eco System

Content & Ecosystem Partners

N50 | Disney Hotstar | Envoi | Mozark | Streaming Video Alliance

Cloud and Edge Providers

AWS | RCI

MEC

INTEL Smart Edge Open HPE

Hypervisors and Containers

VM WARE | KVM | KUBERNETES

Hardware Infrastructure

JMA | DELL | INTEL | HP







Deployment Architecture





Telco Network

A telecommunications network is a group of nodes interconnected by telecommunications links that are used to exchange messages between the nodes.



5G Next Gen Core

A cloud native dual-mode 5G Core that combines EPC and GGC network functions into a common cloud native platform or efficient TCO and smooth nigration to 5G.

Telco RAN Segment

A 5G Radio Access Network (RAN) uses 5G radio FDD frequencies to provide wireless connectivity to devices to deliver these incredible applications.

Use Cases

ISPs

- picoNETS CDN nodes can be set up in the ISP network at various ISP aggregation points example City level or Locality level as the case may be
- \blacktriangleright ISPs can save on the bandwidth cost and reduce the backhaul traffic
- Improved customer experience
- > Opportunity to upsell subscriptions
- > picoNETS can be installed on spare servers via an software installer
- > Overall this presents a unique opportunity for ISP to up their game!





THANK YOU

piconets



www.piconets.com



