



# Modernizing Vietnam's Internet: Cloud, Data Centers, CDN and Towards an IPv6-only Future

APNIC 60

DA NANG,  
VIET NAM

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#apnic60

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**Vietnam Internet Association**

[via.org.vn](http://via.org.vn)

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Call for Collaboration





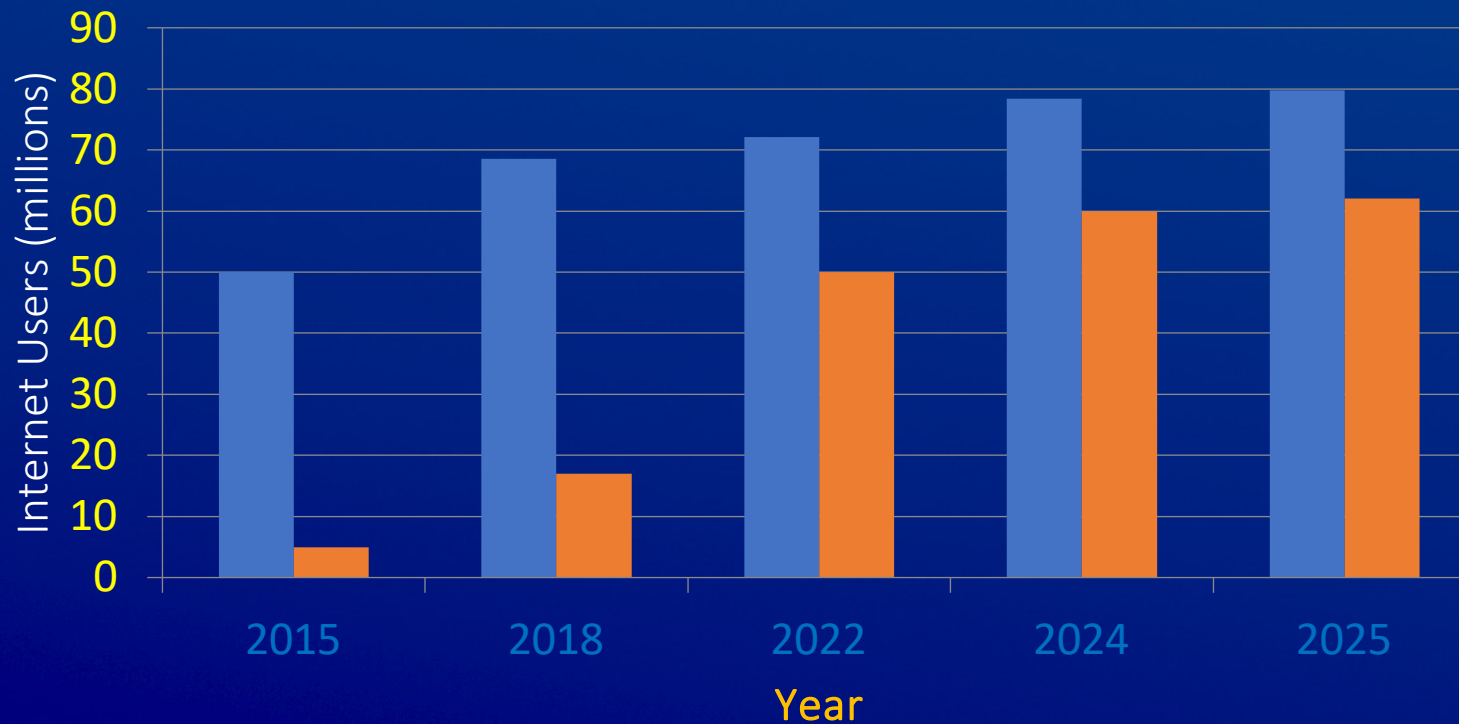
***Modernizing  
Vietnam's Internet:  
Cloud, Data Centers,  
CDN and Towards an  
IPv6-only Future***



- ❑ Alignment with APNIC priorities: *focus on IPv6 deployment, network infrastructure, and emerging technologies*
- ❑ Vietnam's strategy: *Cloud, Data Centers, CDN, and IPv6 are key pillars for digital transformation*
- ❑ Regional relevance: *Shared challenges and lessons for the Asia-Pacific community*
- ❑ Future vision: *Towards an IPv6-only, secure, and sustainable Internet*

## Internet Users &amp; IPv6 Adoption in Vietnam (2015–2025)

## Internet Growth &amp; IPv6 Deployment



\* Source: DataReportal, APNIC Labs, APNIC Blog

### Vietnam's Internet Today

- Over 80 mil users, a top market in Asia
- IPv6 adoption > 60%
- Strong growth in mobile broadband, FTTH, and online services.

### Why Modernization Matters

- **Capacity & performance:** Rising traffic demands need Cloud, DC, and CDN
- **IPv6-only future:** Essential to overcome IPv4 scarcity and sustain growth.
- **Digital backbone:** Foundation for smart cities, digital government, and 5G/IoT.
- **Regional role:** Position Vietnam as a potential ASEAN **digital hub**



# DETAILED INSIGHTS

- Data Center
  - CLOUD
  - CDN
  - IPv6
- 



## Vietnam Data Center Landscape 2024

- **Total revenue:** over VND 3,000 billion (~US\$ 120 million)
- **Growth rate:** 20% in 2024 (16% in 2023)
- **Providers' performance:** major providers grew strongly (~20%), while smaller ones grew at ~14%

(VNCDC Report 2024)



Scan for  
VNCDC Report 2024



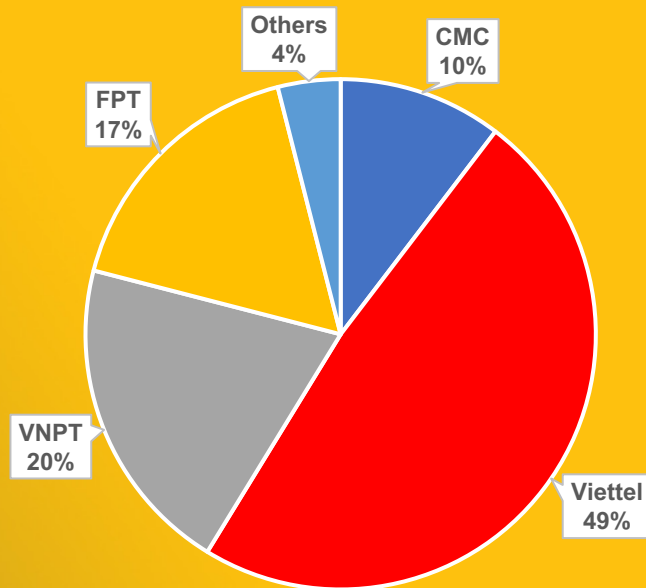


## □ Detailed Insights into DATA CENTER

### Vietnam Data Center Landscape 2024

- Vietnam (2024): ~19,000 racks, 45MW capacity,
- Top providers: Viettel 48.4%, VNPT 20.3%, FPT 17%, CMC 10%.

Data Center Market Share in Vietnam 2024





## Vietnam Data Center Landscape 2025

### Newly Announced Data Center Plans

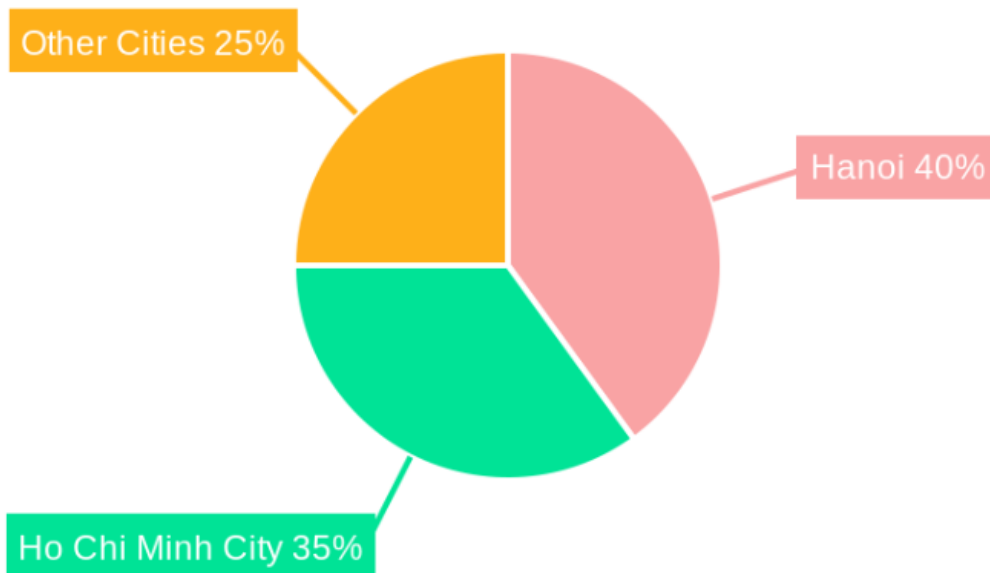
Company	Project Description & Timeline
Viettel	140 MW hyperscale campus, 10,000 racks, operational from 2026, total 560 MW by 2030
CMC	US\$250M hyperscale data center (30 → 120 MW), start in 2026; plus US\$500M expansion to 100 MW by 2028
FPT	Inaugurated LEED-certified HCM02 (3,600 racks); total cap >7,000 racks across 4 DCs
Others	Multiple new DC projects by various operators in 2025 across HCMC & Hanoi and Da Nang

### Emerging Trends in Vietnam Data Center Market

- **Green data centers**
- **Hyperscale data centers**
- ***Edge data centers***
- ***Software-defined data centers (SDDCs)***
- ***Artificial intelligence (AI) and machine learning (ML)***

<https://www.datainsightsmarket.com/>

Vietnam DC: by geography

□ Detailed Insights into **DATA CENTER****Vietnam Data Center Landscape 2025****Updated summary of key metrics**

- Existing DCs: 22 (HCMC, Hanoi, Da Nang)
- Upcoming DCs: 12 (mostly in HCMC & Hanoi)
- Market Capacity (2025): 524.7 MW, projected to 950.4 MW by 2030
- Colocation Revenue (2025): USD 588.9M, projected to USD 1,403.4M by 2030
- Key Operators: Viettel, VNPT, FPT, CMC Telecom, etc.



## Data Center Landscape – Vietnam vs Region

### ■ Regional Comparison (VNCDC/APAC):

- VN: 45MW (2024) → projected 525MW (2025), 950MW (2030)
- TH: ~100MW (2024)
- SG: >1,000MW (2024, new licenses restricted due to power and carbon limits)

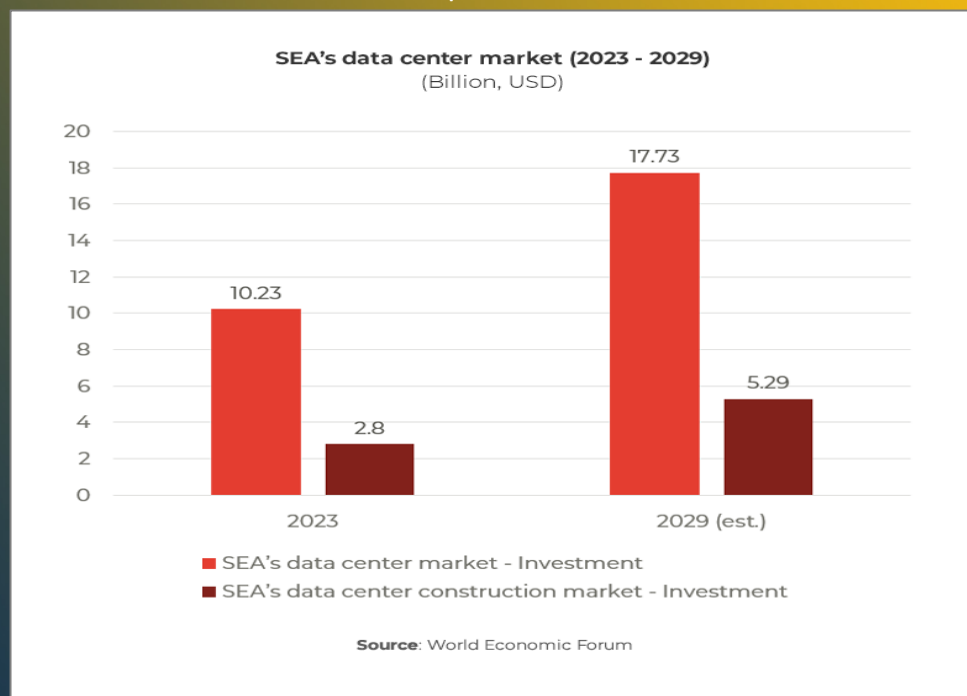
- ### ■ Challenges: Power supply, intl' connectivities, green standards (PUE <1.5)



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VNCDC Report 2024



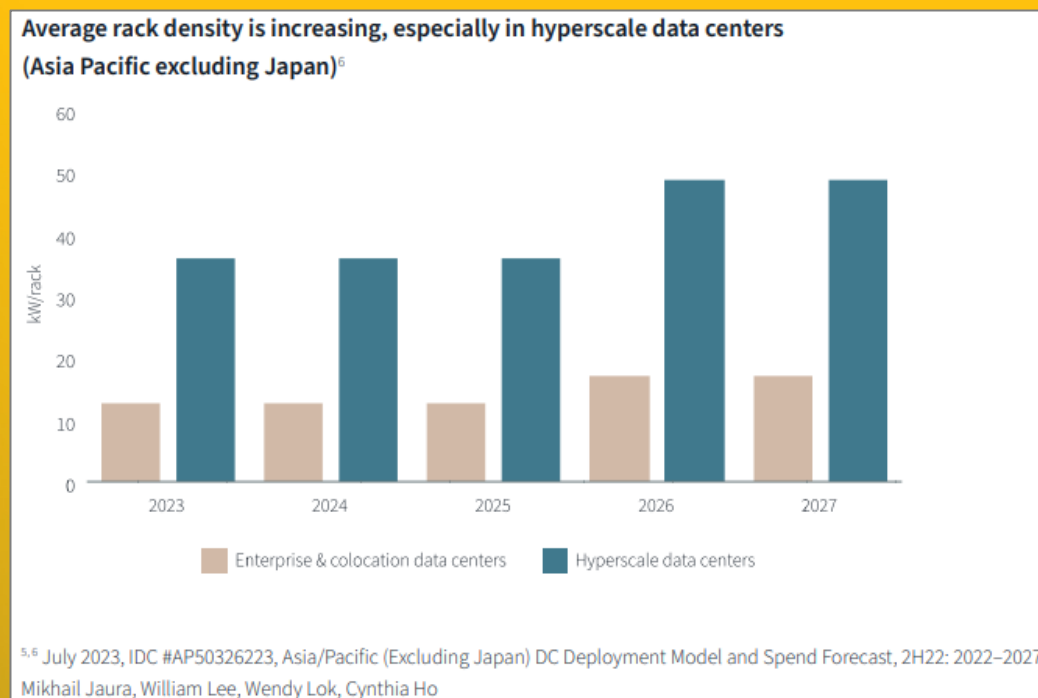
- APAC will contribute 30% of global new data center capacity in the next five years (DC Byte)
- SEA is emerging as a major hotspot for data center investment and development



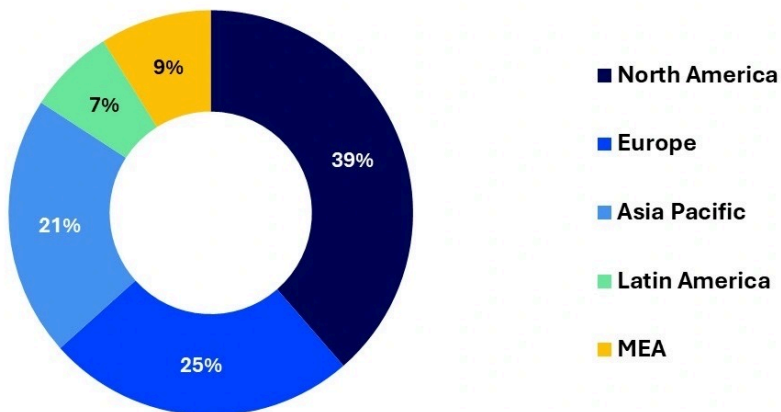
Scan for  
VNCDC Report 2024

## Asia-Pacific Data Center Landscape

- Rising rack power density fueled by AI-driven hyperscale DC investments
- IDC: Hyperscalers **CAGR 7.8%**; rack power rising from 36kW (2024) → 50kW (2027)



## Cloud Computing Market Share, By Region, 2024 (%)

Source: <https://www.precedenceresearch.com/cloud-computing-market>

- In APAC, the public cloud market is expected to reach USD 172 billion by 2025 (Statista)
- Global cloud market to sustain growth in 2025, fueled by AI adoption and sustainable expansion

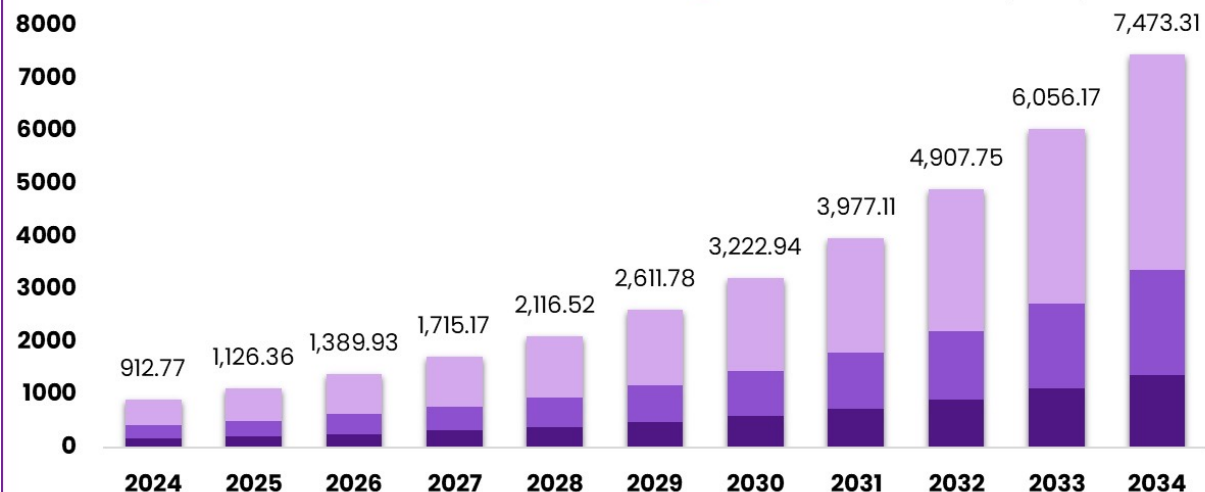
## Detailed Insights into CLOUD

- The global cloud computing market is projected to grow at a **CAGR of 23.4% during 2024–2034**

## Global Cloud Computing Market

Size, by Service Type, 2024–2034 (USD Billion)

Infrastructure as a Service (IaaS)  
Platform as a Service (PaaS)  
Software as a Service (SaaS)



The Market will Grow  
At the CAGR of: **23.4%**

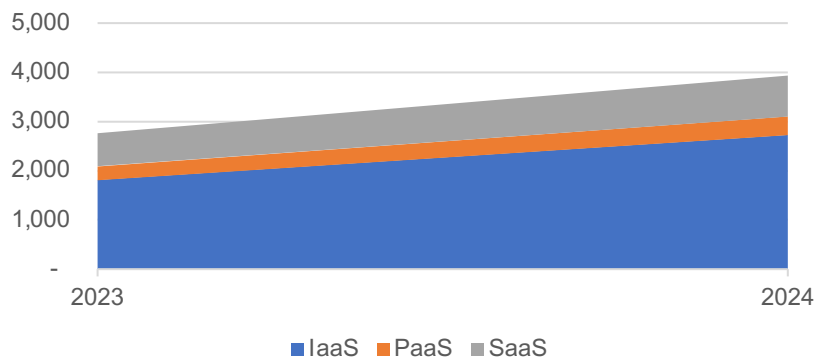
The Forecasted Market  
Size for 2034 in USD:

**\$7,473.31 Bn** market.us  
ONE STOP SHOP FOR THE REPORTS

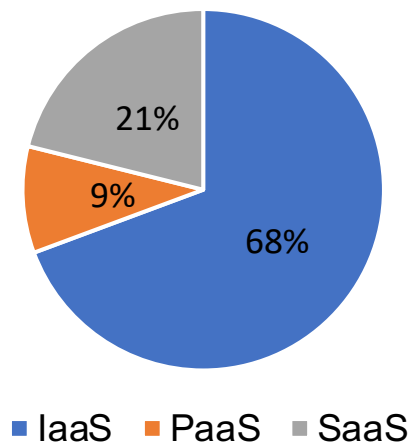
☐ **VN cloud market** reached over **VND 4,000 billion** in 2024. Top 04 (Viettel, FPT, CMC, VNG): **>80%** market share. Overall **growth exceeded 30%**.

☐ **IaaS: 68% of total revenue**. Market share: **Viettel 39%**, **CMC 20%**, **FPT 14%**, & **VNG 14%**.

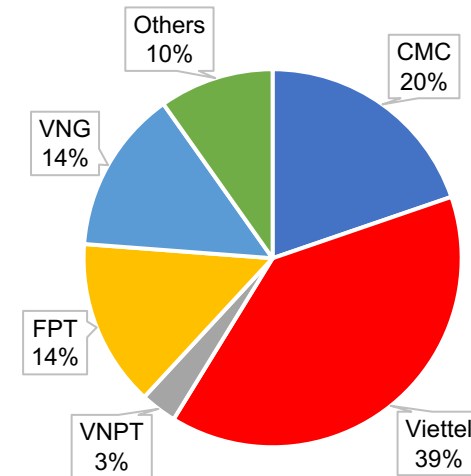
**Vietnam Cloud Market Size**  
(in VND billion)



**Cloud Service Breakdown**



**IaaS Market Share 2024**

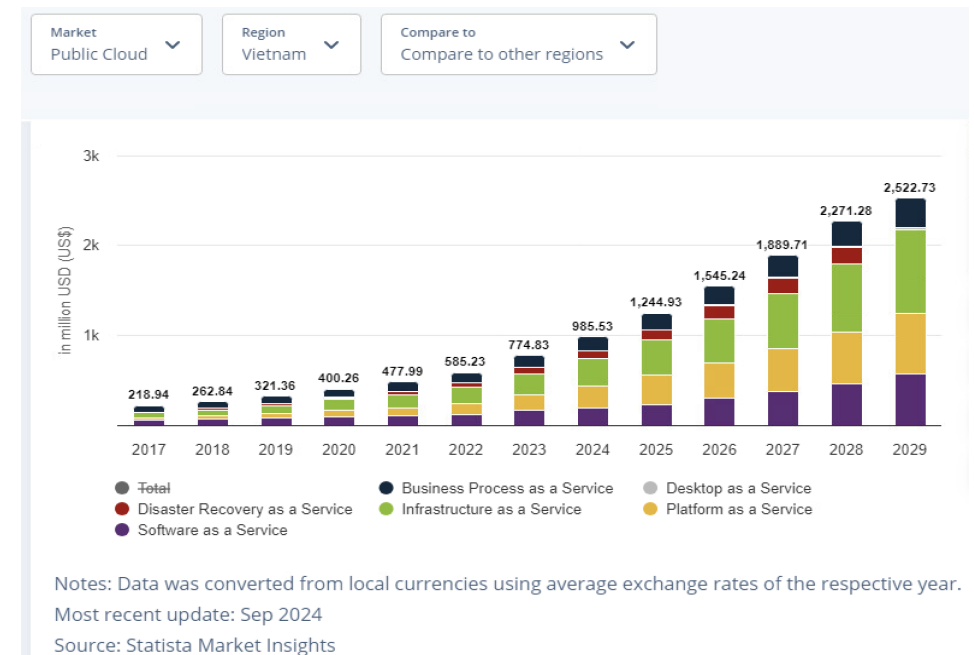
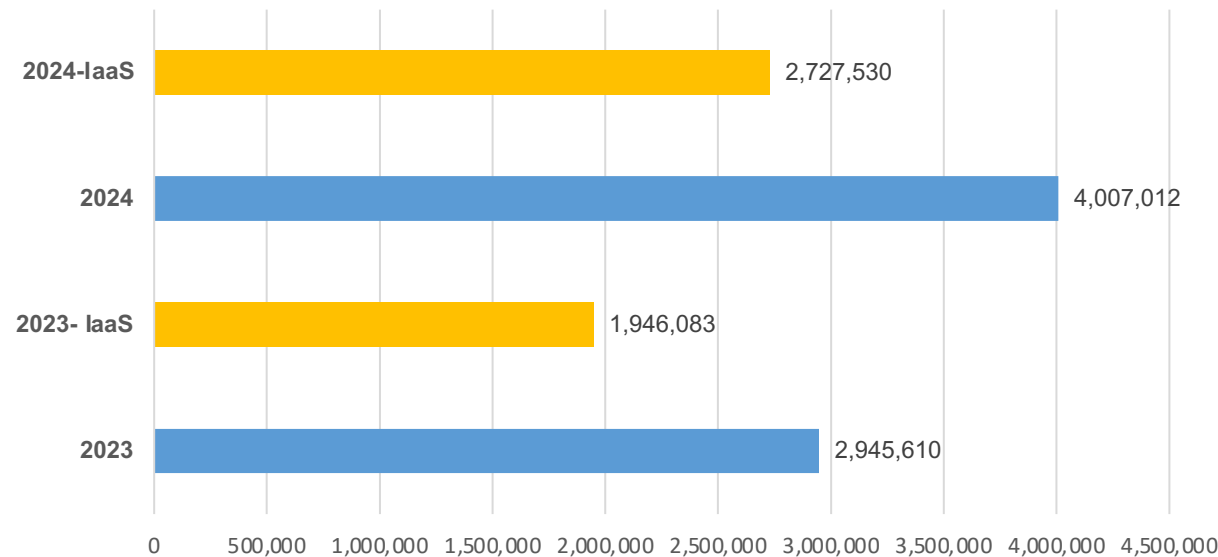




## Cloud Market in Vietnam

- According to Statista, Vietnam's cloud computing market revenue reached VND 19,375 billion (USD 775 million) in early 2024, is projected to reach USD 1.24 billion in 2025, and is expected to double by 2029 to USD 2.5 billion.
- Growth rate of local providers: 37.4% (2020–2022); 20% YoY in 2023; 27% YoY in 2024

Total Revenue of Domestic Cloud Providers (VND million)



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VNCDC Report 2024

# Vietnam Cloud Computing Market 2025-2033

**10.94%**  
CAGR (2025-2033)

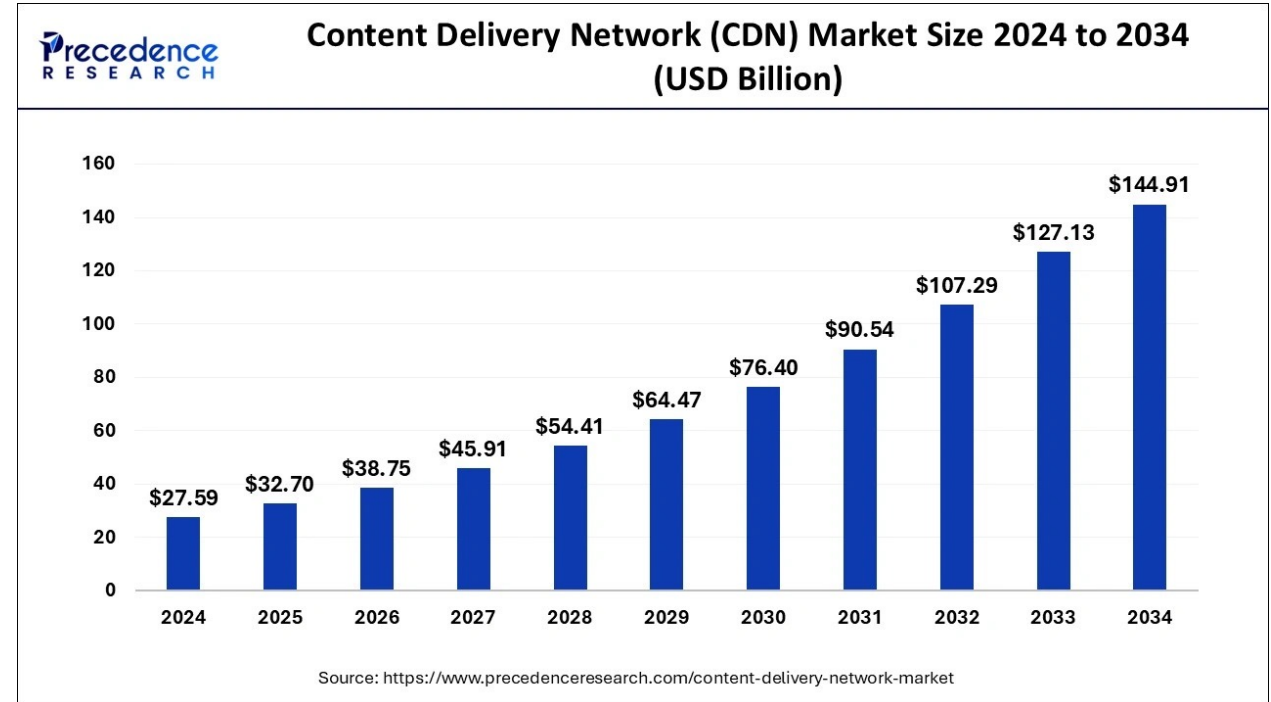


## Content Delivery Network (CDN) Market

- The global content delivery network (CDN) market size accounted for USD 27.59 billion in 2024 and is expected to exceed around USD 144.91 billion by 2034
- Growing at a CAGR of 18.04% from 2025 to 2034



## Detailed Insights into CDN





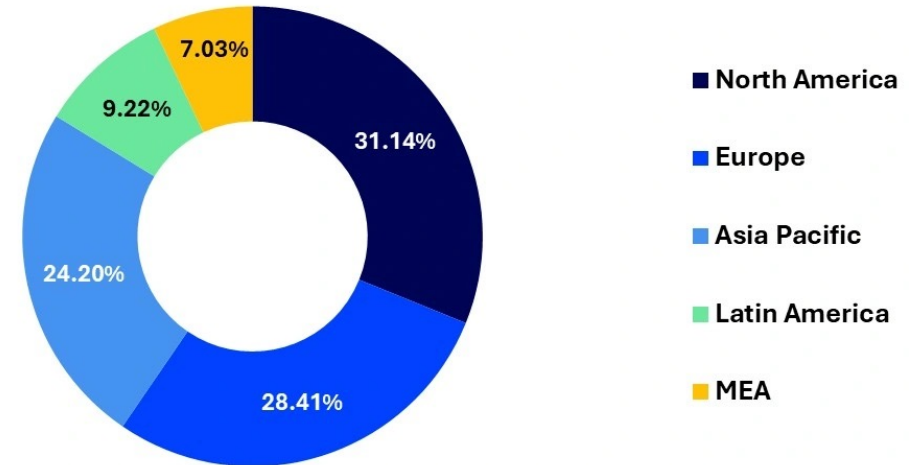
## Content Delivery Network (CDN) Market

- With growing economies such as Japan, China, India, and South Korea, the APAC region is anticipated to experience high growth in the content delivery market.
- **APAC CDN market**  
Rapid Growth: APAC CDN market is the fastest-growing globally
  - Key Drivers:
    - Rising content consumption
    - Improving IT infrastructure
    - Need for the latest technology adoption
  - Result: Highest growth rate anticipated in the APAC region



## Detailed Insights into CDN

Content Delivery Network (CDN) Market Share, By Region, 2024 (%)



Source: <https://www.precedenceresearch.com/content-delivery-network-market>

## Content Delivery Network (CDN) Market

### What Makes a CDN a 2025 Market Leader?

#### Key Ranking Factors

- **Global reach:** Number, location, and interconnectivity of POPs.
- **Traffic capacity:** Consistent bandwidth at scale—even under DDoS or viral demand surges.
- **Edge computing:** Real-time function execution, custom logic, security operations at the edge.
- **Developer ecosystem:** Open APIs, integration with CI/CD, serverless functions, multi-cloud support.
- **Vertical solutions:** Custom offerings for industries—from video streaming and SaaS, to gaming and e-commerce.
- **Transparent pricing & support:** No hidden fees, 24/7 support, clear SLAs—critical for scaling organizations.



### Top CDN Providers Ranked by Traffic and Reach (2025)

With these industry shifts in mind, here’s an evidence-backed ranking of top CDN providers, reflecting both their total traffic (TB/month) and global reach (number of active POPs):

Rank	Provider	Global Traffic Share	Points of Presence (POPs)	Key Differentiators
1	Akamai	~35%	340+	Unmatched reliability; telecom partnerships; advanced security/scrubbing
2	Cloudflare	~24%	300+	Zero-trust security stack, developer-native edge platform, integrated DNS/WAF
3	Amazon CloudFront	~16%	300+	Deep AWS ecosystem integration, AI/ML edge compute, pay-as-you-go
4	Fastly	~7%	100+	Real-time streaming, programmable edge, developer agility
5	Edgio (formerly Limelight/Edgecast)	~5%	130+	Low-latency video, edge applications, carrier-grade coverage
6	StackPath	~4%	60+	API-centric, security-forward, mid-market price leader
7	BlazingCDN	~2%	25+	Transparent pricing, industry solutions, global low-latency, rapid onboarding

Data Source: Statista, IDC, provider annual reports (2025)

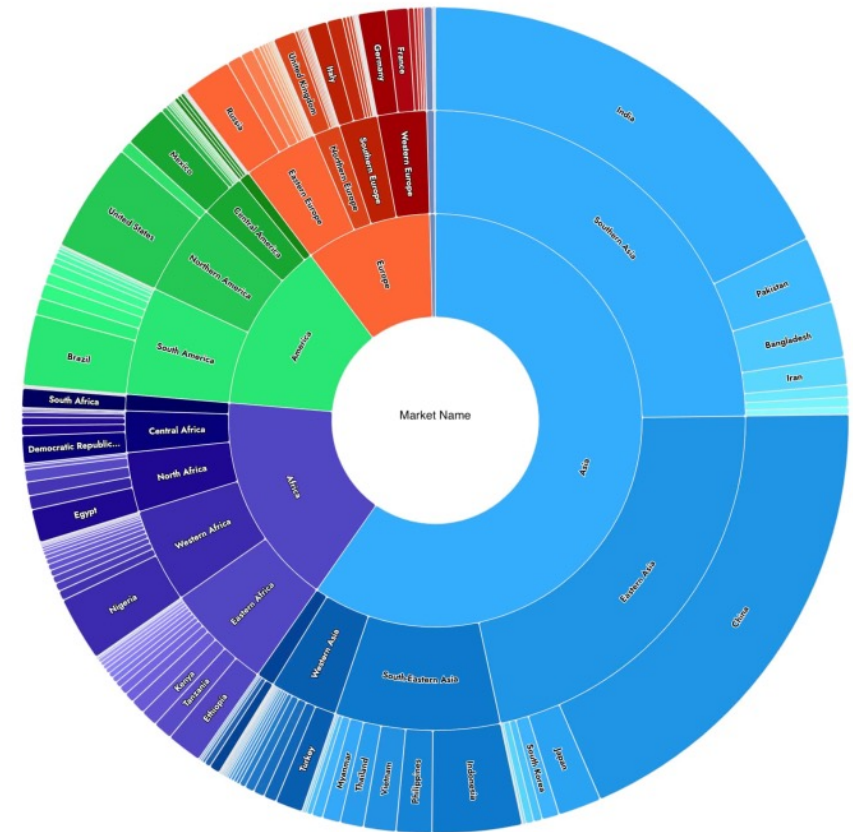
## Vietnam Content Delivery Network (CDN) Market

- expected substantial growth in the coming years: **CAGR of 13.2 %** from 2024 to 2032, to achieve market value of US\$ 69.3 million by 2032.
- **BFSI segment** is projected to be the largest end user with a market value of US\$ 13.9 Million in 2032.
- **healthcare sector** to remain fastest growing, with 14.4% CAGR.

*Datacube research*



## Detailed Insights into CDN

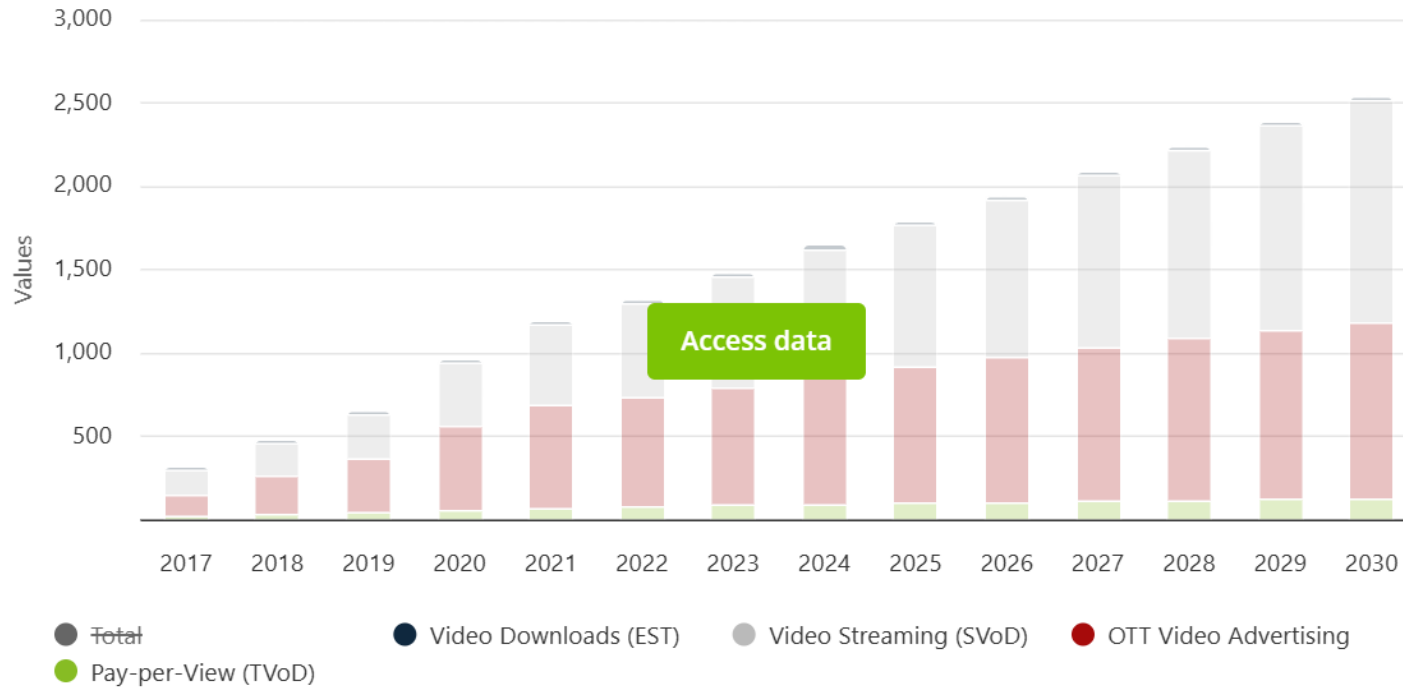


*Verified Market Research*



## Revenue

## Revenue Change



## Vietnam Content Delivery Network (CDN) Market

- OTT video market is projected to reach US\$ 596.23 million in 2025
- CAGR 2025-2030: 7.20%, projected market volume of US\$ 844.20 million by 2030
- The dominant market is Video Streaming (SVoD), projected at US\$ 283.39 million in 2025

<https://www.statista.com/>

Notes: Data was converted from local currencies using average exchange rates of the respective year.

Most recent update: thg 5 2025

Source: Statista Market Insights





## Vietnam Content Delivery Network (CDN) Market

**FEB  
2025**

### MEDIA USE

THE PERCENTAGE OF **INTERNET USERS AGED 16+** WHO CONSUME EACH MEDIA TYPE



VIETNAM

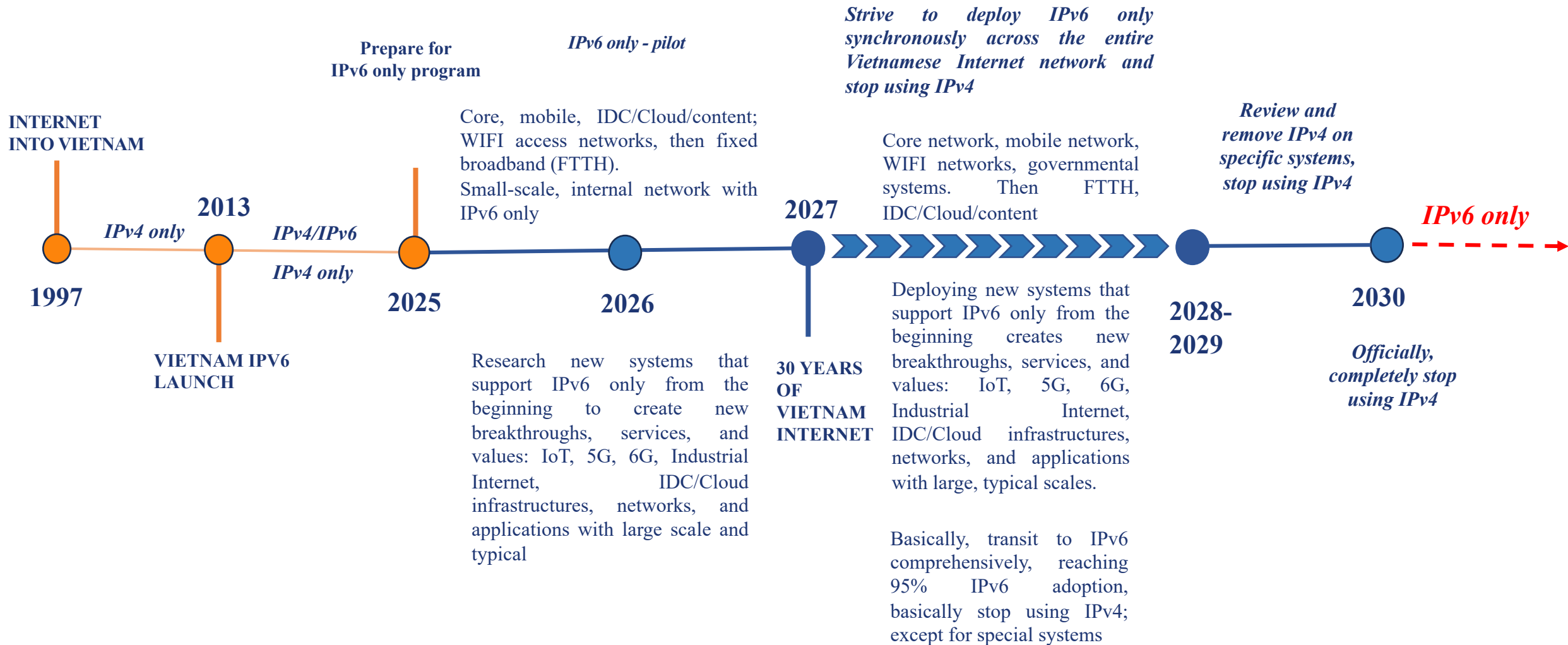


**Vietnam Content Delivery Network (CDN) Market****FEB  
2025****TOP WEBSITES: SEMRUSH RANKING**SEMRUSH'S RANKING OF THE MOST VISITED WEBSITES, BASED ON WEBSITE TRAFFIC IN **NOVEMBER 2024**

#	WEBSITE	TOTAL VISITS (MONTHLY AVE.)	UNIQUE VISITORS (MONTHLY AVE.)	AVERAGE TIME PER VISIT	AVERAGE PAGES PER VISIT
01	GOOGLE.COM	1.61B	80.5M	12M 39S	5.04
02	YOUTUBE.COM	997M	53.8M	22M 14S	6.65
03	FACEBOOK.COM	388M	38.5M	20M 31S	11.06
04	VNEXPRESS.NET	191M	15.4M	10M 10S	2.75
05	SHOPEE.VN	81.7M	24.5M	11M 15S	4.22
06	GOOGLE.COM.VN	80.4M	8.09M	8M 21S	4.12
07	ZALO.ME	79.7M	21.4M	14M 12S	2.26
08	24H.COM.VN	74.6M	8.41M	12M 06S	2.72
09	CHATGPT.COM	73.7M	8.25M	7M 45S	2.52
10	DANTRI.COM.VN	69.2M	9.31M	16M 40S	2.71

#	WEBSITE	TOTAL VISITS (MONTHLY AVE.)	UNIQUE VISITORS (MONTHLY AVE.)	AVERAGE TIME PER VISIT	AVERAGE PAGES PER VISIT
11	TRUYENFULL.IO	63.2M	3.14M	38M 07S	7.13
12	COCCOC.COM	53.9M	3.00M	15M 26S	3.02
13	TIKTOK.COM	51.0M	14.8M	14M 40S	10.78
14	KENH14.VN	49.8M	7.53M	7M 21S	2.34
15	VIETJACK.COM	49.4M	9.35M	14M 05S	3.29
16	WIKIPEDIA.ORG	48.2M	15.6M	9M 24S	2.33
17	THEGIOIDIDONG.COM	48.2M	18.1M	8M 20S	2.26
18	TUOITRE.VN	44.3M	8.39M	7M 22S	2.02
19	MSN.COM	40.6M	1.54M	21M 37S	4.10
20	THUVIENPHAPLUAT.VN	40.2M	13.4M	32M 08S	2.77

# IPv6, IPv6 only deployment Roadmap in Viet Nam





## IPv6 measurements in Viet Nam

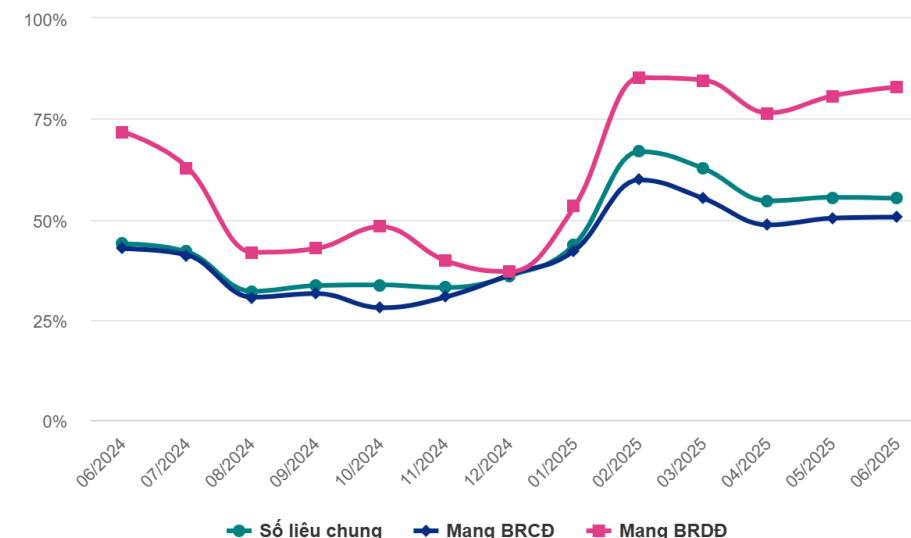
Use of IPv6 for Vietnam (VN)



*The use of IPv6 for Viet Nam (APNIC Lab)*

- By July 2025: 60%, 2nd place in ASEAN, 9th place in the world (source APNIC Lab)
- 82% IPv6 FTTH Subs and 83% IPv6 Mobile Subs
- VNIX, National DNS: 100% IPv6
- IPv6 For Gov: 95% Websites of Ministries, Provinces, cities enabled IPv6.

Tỉ lệ ứng dụng IPv6 trên cả nước



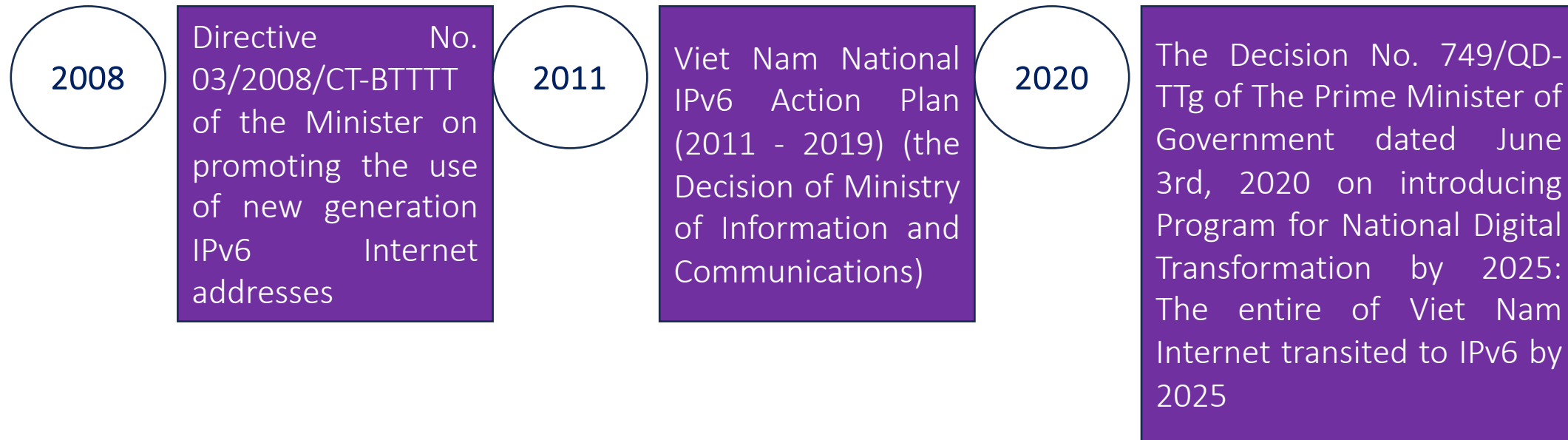
i-SPEED by VNNIC

*The use of IPv6 for Viet Nam (source: i-speed by vnnic)*

- The databases support to collect and measure the use of Ipv6 for Mobile network/ Fixed network/ Per big ISP, mobile operators/ every ward/district/ city in Viet Nam
- 55% IPv6 users (all)
  - 82% Mobile IPv6 subs
  - 50% FTTH IPv6 subs



## Vietnam IPv6 policies (1/3)



# Vietnam IPv6 policies (1/3)

2021

IPv6 For Gov Program (The Decision No. 38/QD-BTTTT dated 14th January 2021 of Ministry of Information and Communications)

1st stage (2021-2022): 50% Government Websites enabled IPv6

2nd stage (2023-2025): 100% Government Websites enabled IPv6/ Readiness to deploy IPv6-only

2022  
2023

The Directive No. 2/CT-TTg in 2022 and No. 3/CT-TTg in 2023 of The Prime Minister of Government: Ministries, Branches, Provinces deploy IPv6; priority Portals and E-public services enabled IPv6.

2024

The Decision No. 36/QD-TTg of the Prime Minister of Government on approving the information and communications infrastructure master plan for the period of 2021-2030, with a vision toward 2050:

The entire of Viet Nam Internet transited to IPv6

Deploying IPv6 for IoT, mobile IoT, smart home IPv6

# Vietnam IPv6 policies (1/3)

2024

Resolution No.57 of The Politburo on breakthroughs in science, technology, innovation, and national digital transformation, regarded as a resolution that aims to unleash Vietnam's technological potential:

IPv6 deployment is one of missions following up The Resolution No.57

2025

Decision No. 306/QD-BKHCN dated March 28th, 2025 on approving the 'The Plan of Vietnam IPv6 Transition and IPv6 For Gov in 2025

Main targets:

70%  
IPv6  
users

IPv6 only  
deploym  
ent Pilot

Approving the strategy of IPv6, IPv6 only in Viet Nam during 2026 – 2030 (end of this year)



## Promotion activities

### Planning/ Policies

- Releasing IPv6 plan yearly
- IPv6 was one of contents in Government policies (Resolution, Decree, Circular ..)

### Consultation meetings

- Large ISPs, Mobile operators and ICPs (yearly)
- Government Agencies.

### Training

- IPv6 training courses per year
- From basic to advanced/ Onsite and online (dual stack to IPv6 only)



### MST/VNNIC

- Leading
- Supporting

### Communications/ official letter

- Online News, Internet Report.
- Conferences:
  - IPv6 Forum
  - VNNIC Internet Conferences
  - IP member meeting
  - VNIX-NOG
  - ...
- Official letters from VNNIC/ Ministry



- **Data Centers:** High investment costs, regulatory gaps, and energy demands
- **CDN:** Limited local presence and interconnection inefficiencies
- **Cloud:** Concerns over data sovereignty and ecosystem maturity
- **Cybersecurity:** Escalating threats requiring stronger national defenses
- **IPv6-only:** Legacy system upgrades and application compatibility issues

- Limited R&D: *Weak R&D in core technologies (DC, cloud, CDN, IPv6); relies on global vendors*
- Insufficient Market Research: *Lack of systematic market intelligence leads to fragmented initiatives*
- Weak Industry Collaboration: *Limited local enterprise involvement; needs stronger ecosystem*
- Structural Barriers: *Power supply issues, data sovereignty concerns, limited CDN presence, cybersecurity threats*

- **DC and Cloud:** Expand domestic data centers and cloud services for sovereignty, scalability, and green growth
- **CDN:** Strengthen local CDN deployment and IXP interconnection to reduce latency and international transit.
- **Cybersecurity:** Invest in national SOC's, workforce training, and regional cooperation against cyber threats.
- **Digital Divide:** Extend high-speed internet to rural/underserved areas for inclusive digital access
- **IPv6-only:** Accelerate dual-stack to IPv6-only transition via national roadmaps, operator commitments, and app readiness

- ❑ **For the Government:** *Invest in R&D for core technologies, enhance data sovereignty policies, and boost cybersecurity frameworks; fostering the plan for intl' connectivities.*
- ❑ **For Local Businesses:** *Build market intelligence systems, foster industry collaboration, and expand local CDN presence.*
- ❑ **For Regional Internet Community:** *Promote knowledge sharing, coordinate standards development, and support sustainable infrastructure; fostering collaboration with IXPs, CDN, IPv6*





- ❑ Vietnam's Internet growth is powered by both strong national will and market demand.
- ❑ We call for APNIC community support: IPv6-only training & regional IXP/CDN collaboration.



*Thank  
You!*

**Vu The Binh**

*Vice President & Secretary General*

**Vietnam Internet Association**

*via.org.vn*