

There is No Such Thing as a Free Lunch

(Almost) New Financing approach and model for Infrastructure Build

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800+ Employees



300€M+ Revenues (2024 est.)





OTTs/Hyperscalers Growth and Requirements

YESTERDAY

- Constant double-digit growth of cloud services
- Limited scalability of infrastructures
- Few regions, almost no edge
- No regulation
- Limited competition
- Few suppliers



TODAY

- Growth still robust but slower
- Demand for high scalability (AI is there)
- Many active regions, new regions and DCs far away from dense Metro network
- Massive regulation (e.g. data residency)
- High competition (local supplier, hybrid services). Data center are more expensive
- New suppliers



OTTs/Hyperscalers Finance and Inventory

YESTERDAY

- OTTs fully pay for the infrastructure construction
- Large part of the infrastructure are vacant and so available to sell
- Timeline not so stringent

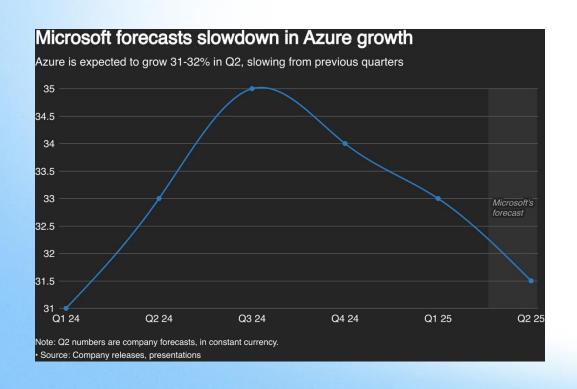
TODAY

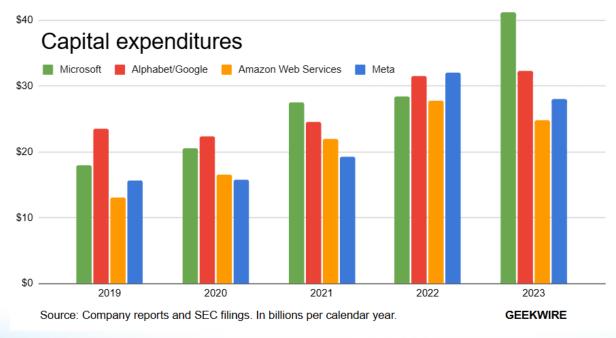
- OTTs do not fully pay the infrastructure anymore
- OTT uses or reserves rights of use on all newly build infrastructure
- Timeline has become very stringent





Some visuals... Revenues and Capex trends









Vendor Challenges



Longer payback > 2 years

customers do not pay anymore in full



More complex business cases

- more fiber, more distance
- more routes, more complexity



Forecasting is more difficult

- less infrastructure to sell (larger use by the Customer)
- more competition (more carriers and operators are now qualified vendors)





Infrastructure but what infrastructure...

Focusing on our turf (Italy and telco infra) – DF example

OTTs consume DC sqms, MWs, #DF pairs

New Region in Milan: Infrastructure requirements from a large OTT

- 2014- 2020 Initial request of #DF pairs: 3 to 8 DF pairs for the new Region in Milan
- 2020-2024 top up of existing Region with few additional DF pairs
- **2024** new leaf add > 6 DF pairs initial scalability up to dozens
- **2025...** Long distance network requirements will grow accordingly to the size of the Regions

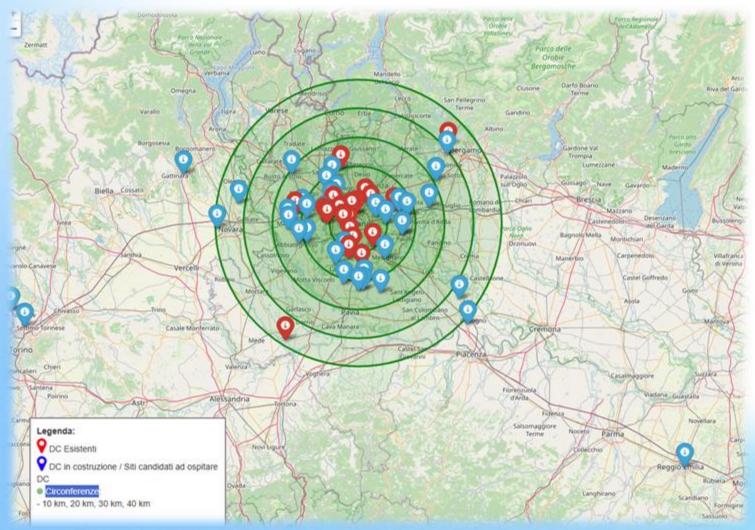
Specific requirements:

- Optimized fiber distance
- Minimized loss (splicing/ no MMR)
- Great diversity grade (at least triversity)
- Newer fiber (less than 2 Years)





Data Centers in Milan area







Vendor Answers

Premium pricing

on upselling of leftover infrastructure

Focus on pre-sale booking

to take advantage of the new ecosystem

Cross selling

with a different Go-to-market (Enterprise/Public Sector)

Focus on Financing

national recovery plans (PNRR, 1 G America, 1 G Italy) other public funding (e.g. Connecting Europe Fund)





CEF Program (1)

Discover the programme

€1.6 billion

To be implemented by HaDEA between 2021-2027

75

Projects awarded so far

€800 million

For 5G coverage along transport corridors

€142 million

For 5G for Smart Communities

€389 million

For Backbone connectivity for Digital Global Gateways

€100 million

For Backbone networks for pan-European cloud federations

For Backbone connectivity for Digital Global Gateways between 2021-2023.

The digital strand of the Connecting Europe Facility (CEF Digital) is part of the second generation of the Connecting Europe Facility . CEF-Digital aims to leverage public and private investments in digital connectivity infrastructures of common European interest.





Not only EU funding - some Chat GPT help

Program Name	Agency	Type of Funding	Purpose	Eligibility	Key Details	Current Status
Broadband Equity, Access, and Deployment (BEAD) Program	NTIA (National Telecommunications and Information Administration)	Grants	Expand broadband access in underserved areas	States, territories, tribal governments, and nonprofit entities	\$42.45 billion allocated for broadband expansion	Active, ongoing (state planning phase underway)
Middle Mile Broadband Infrastructure Grant Program	NTIA	Grants	Support middle-mile broadband infrastructure to improve regional connectivity	State and local governments, nonprofit organizations, cooperatives	\$1 billion for middle-mile infrastructure	Active, applications being processed
Digital Equity Act	NTIA	Grants	Promote digital literacy and access	States, local governments, nonprofits, tribal entities	\$2.75 billion for digital equity projects	Active, funding in stages
Rural Digital Opportunity Fund (RDOF)	FCC (Federal Communications Commission)	Reverse Auction Grants	Provide broadband service to rural areas	Broadband providers, rural service areas	\$20.4 billion over 10 years for rural broadband	Active, ongoing deployment
Community Connect Grant Program	USDA (United States Department of Agriculture)	Grants	Fund broadband service in rural areas where there is no broadband service	Local governments, nonprofit organizations, and private entities	Up to \$3 million for infrastructure in rural areas	Active, annual funding
Connecting Minority Communities Pilot Program	NTIA	Grants	Expand broadband and increase digital literacy in	Minority- serving institutions (HBCUs, Tribal Colleges, etc.)	\$268 million for broadband access and digital	Active, applications open
			and a mother		There are	

Program Name	Agency	Type of Funding	Purpose	Eligibility	Key Details	Current Status
Virginia Telecommunication Initiative (VATI)	Virginia Department of Housing and Community Development (DHCD)	Grants	Expand broadband access in unserved and underserved areas	Local governments, nonprofit organizations, cooperatives, and private broadband providers	Provides funding for last-mile broadband infrastructure	Active, annual funding
Virginia Telehealth Network (VTN)	Virginia Telecommunication Initiative	Grants	Expand telehealth services through broadband access	Healthcare providers, including hospitals, clinics, and local health departments	Aims to improve access to telehealth services, especially in rural areas	Active
Virginia Community Broadband Pilot Program	Virginia DHCD	Grants	Fund broadband deployment and digital equity projects	Local governments, private entities, and nonprofits	Supports projects to extend broadband infrastructure to underserved communities	Active, ongoing
Broadband Innovation Fund	Virginia DHCD	Grants	Promote innovative solutions for broadband expansion	Local governments, nonprofit organizations, and broadband providers	Focuses on fostering creative approaches to broadband deployment in pural or	Active, competitive funding





Conclusions

There is still a lot of digital infrastructure to build

No single company has anymore the financial power to build large infrastructures alone

Government and an *healthy* go-to-market are the ready-to-use solution





Some Reference

- Microsoft pricing practices and competition in Europe: https://cispe.cloud/new-evidence-selling-microsoft-software-destroys-profit-margin-for-cloud-service-providers-in-europe/
- <u>Microsoft investors report 2024:</u>
 https://www.reuters.com/technology/microsoft-beats-quarterly-revenue-estimates-2024-10-30/
- META Q3 reports:
 https://www.cnbc.com/2024/10/30/meta-q3-earnings-report-2024.html
 "Facebook-owner Meta (META.O), opens new tab, which reported results ahead of analyst expectations as well, warned of "significant acceleration" in AI-related infrastructure expenses, sending its share price down 3.1% in after-market trading."
- <u>CEF Digital</u> <u>https://hadea.ec.europa.eu/programmes/connecting-europe-facility_en</u>
- <u>CEF awarded project 2024:</u>
 https://hadea.ec.europa.eu/news/53-projects-selected-eu274-million-under-third-cef-digital-calls-2024-10-15 en
- NTIA Broadband program: https://www.ntia.gov/funding-programs/internet-all/broadband-infrastructure-program





THANK YOU



