

# The 5G Redemption: From Connectivity Provider to Experience Enabler

How the convergence of advanced networks and cloud gaming creates the first true 5G monetization engine.

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# Telcos Invested \$144 Billion Annually in 5G, But Risk Repeating the 4G Era

**\$144  
Billion**

Annually



**TelcoFutures.net**

According to the GSM Association, telecom carriers are investing \$144 billion annually until 2025 to build out 5G networks. The critical challenge is avoiding a repeat of the 4G era, where tech companies generated the lion's share of value-added income while telcos were relegated to collecting network fees.

# Cloud Gaming is the Most Immediate and Monetizable 5G Application

## \$218.8 Billion

**Total Gaming Market**

Projected for 2024, from \$180.3B in 2021

## 52%

**Mobile Gaming Dominance**

Share of the global market in 2021

## \$6.5 Billion

**Cloud Gaming Growth**

Projected for 2024, up from \$1.6B in 2021, representing a **61% CAGR**



While the metaverse evolves, gaming is the foremost driver and the application that can immediately take telcos closer to lucrative businesses.

Remotely accessible, low-latency cloud gaming is the future, powered by 5G and edge computing.

# Gamers Are a Niche, Premium Segment Willing to Pay for a Better Experience

95%



Are willing to pay more for a better gaming experience.

79%



Would switch their existing home broadband and mobile connectivity for a 5G subscription with “high-quality” gaming services.

58%



Already pay a premium to their operators.

This is a clear market signal. Gamers can be treated as a priority group that demands and values premium, customized services in bandwidth, edge capabilities, and network slicing.

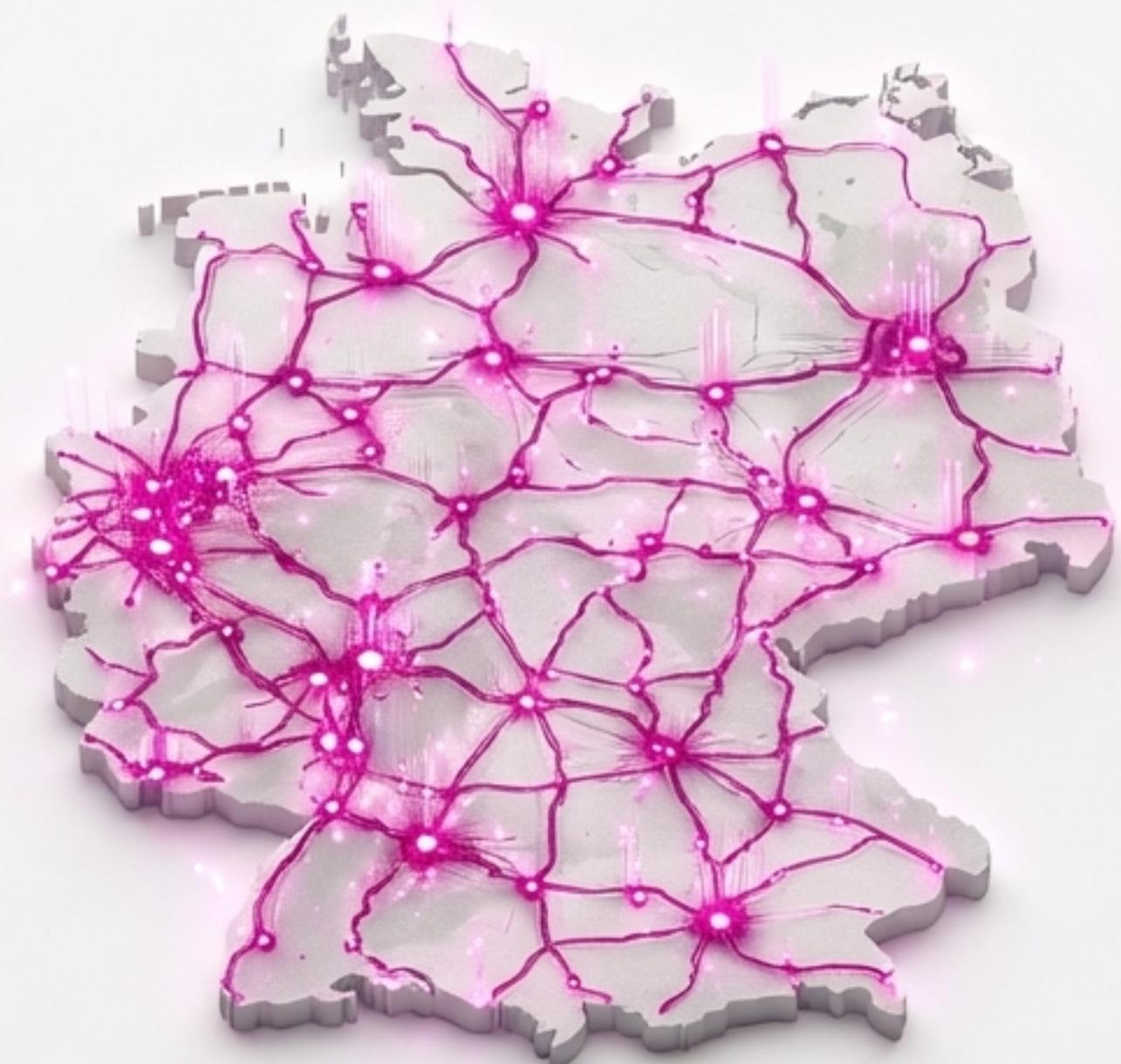
Source: Data from a 2020 Ribbon Communications study.

# The Blueprint: Deutsche Telekom and NVIDIA Are Delivering Europe's First 5G SA Mobile Cloud Gaming Service

At Gamescom 2025, the partners unveiled a collaboration to bring latency-optimized cloud gaming to smartphones at a national scale in Germany.

*"With 5G+ Gaming in Germany's largest 5G+ network, players can enjoy high-performance, seamless gameplay on the go... No downloads, no lag. Together with NVIDIA, we're delivering the best gaming experience on the best network."*

— Wolfgang Metze, Head of Consumer Business, Telekom Deutschland.



# A Console-Like Experience is Achieved Through a Combination of 5G SA, Network Slicing, and L4S



## Network Slicing

Divides the network into virtual "slices" for specific applications, guaranteeing resources and prioritizing short, predictable response times for gaming.

## L4S (Low Latency, Low Loss, Scalable Throughput)

A standardized IETF technology that uses Explicit Congestion Notification (ECN) to detect imminent overload and adapt data rates, ensuring stable, low latency and minimal jitter even in a busy cell.

# The '5G+ Gaming' Option Packages Advanced Technology into a Clear Consumer Value Proposition



## Service Name

5G+ Gaming Option

## Launch

Autumn 2025

## Cost

Free add-on for eligible MagentaMobil customers (plans from August 2024 onwards).

## Platform

Integrates NVIDIA GeForce NOW.

## Access

Easily booked via the MeinMagenta App.

## Initial Device Support

Samsung Galaxy S24 Ultra and the S25 series, with more to follow.

## GeForce NOW Details

### Content Library

Access to over 2,300 supported titles from Steam, Epic Games, Xbox Game Pass, etc.

### Access Model

Day passes available for Performance (€4,39) and Ultimate (€8,79) tiers for a 24-hour premium experience.

# A Successful 5G Service Requires an Ecosystem of Partners, Each Playing to Their Strengths

## Deutsche Telekom (The Experience Deliverer)

Controls the network infrastructure.

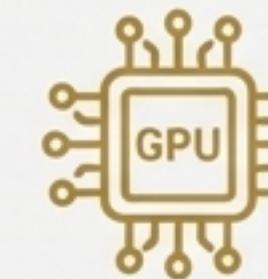
- 5G Standalone Network
- Network Slicing & L4S for QoS
- Customer Billing & Relationships
- Device Certification



## NVIDIA (The Experience Creator)

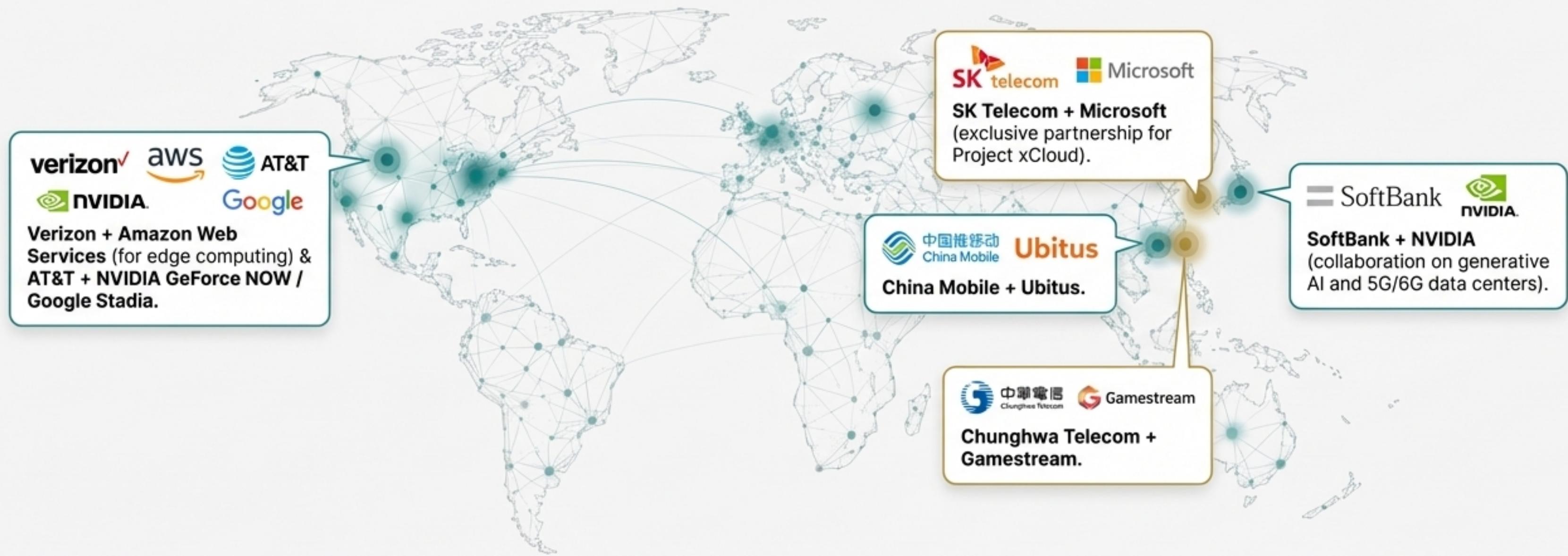
Provides the cloud platform and content.

- GeForce NOW Cloud Gaming Service
- Cutting-Edge GPU Hardware (RTX/Blackwell)
- Game Publisher Relationships (2,300+ titles)
- Client App



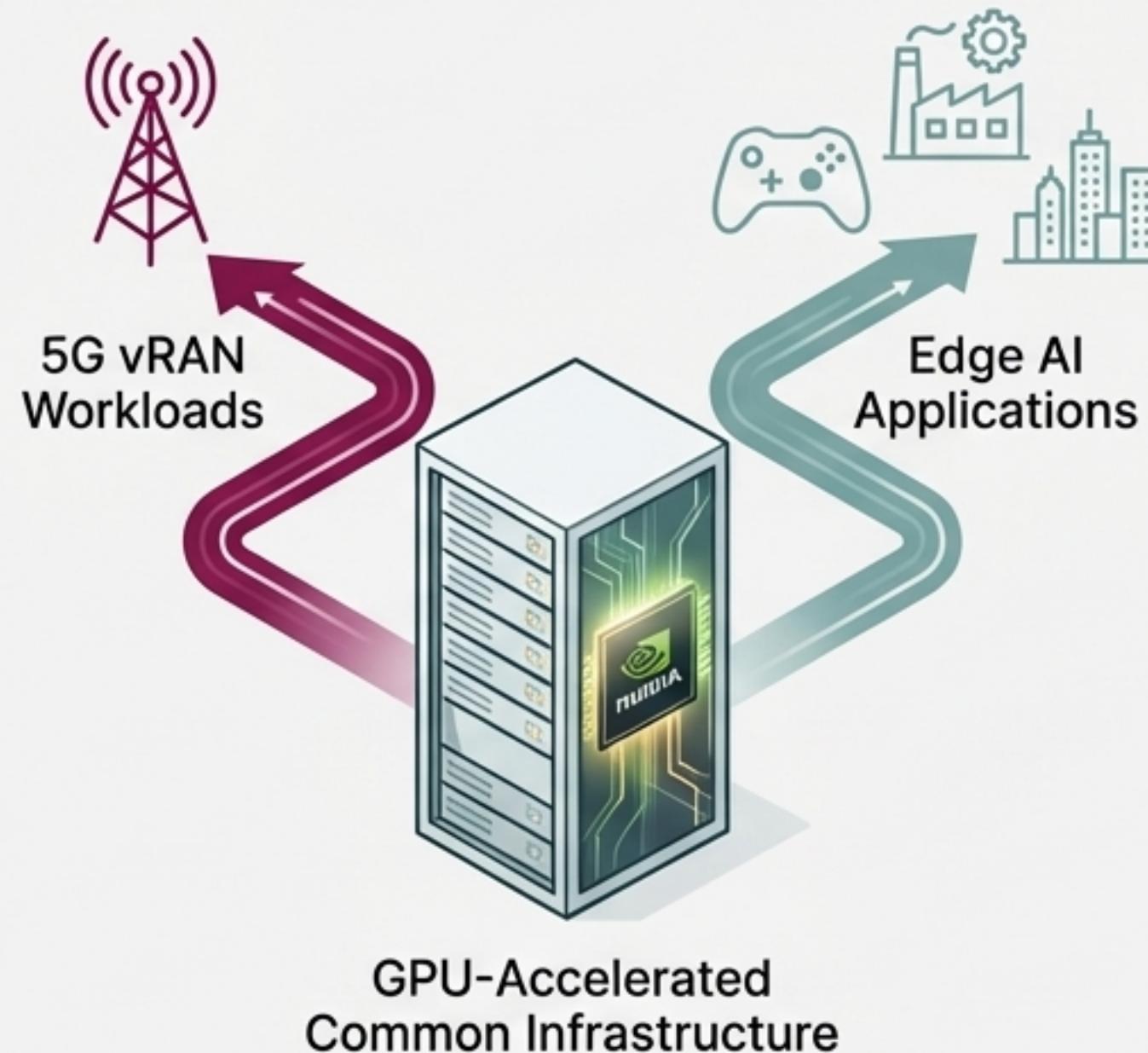
This model reframes 5G from commodity bandwidth to **application-grade performance**, allowing the operator to monetize the **network's quality** while the partner handles the content layer.

# The Telco-Cloud-Gaming Partnership Model is Being Validated by Industry Leaders Globally



Telcos worldwide recognize they cannot build these capabilities alone. **Strong partnerships are the fastest, most effective way to create customized offerings and shift market positioning** from a standard network provider to a **strategic enabler of new-age experiences**.

# AI-RAN is the Foundational Platform for the Next Generation of Wireless Networks



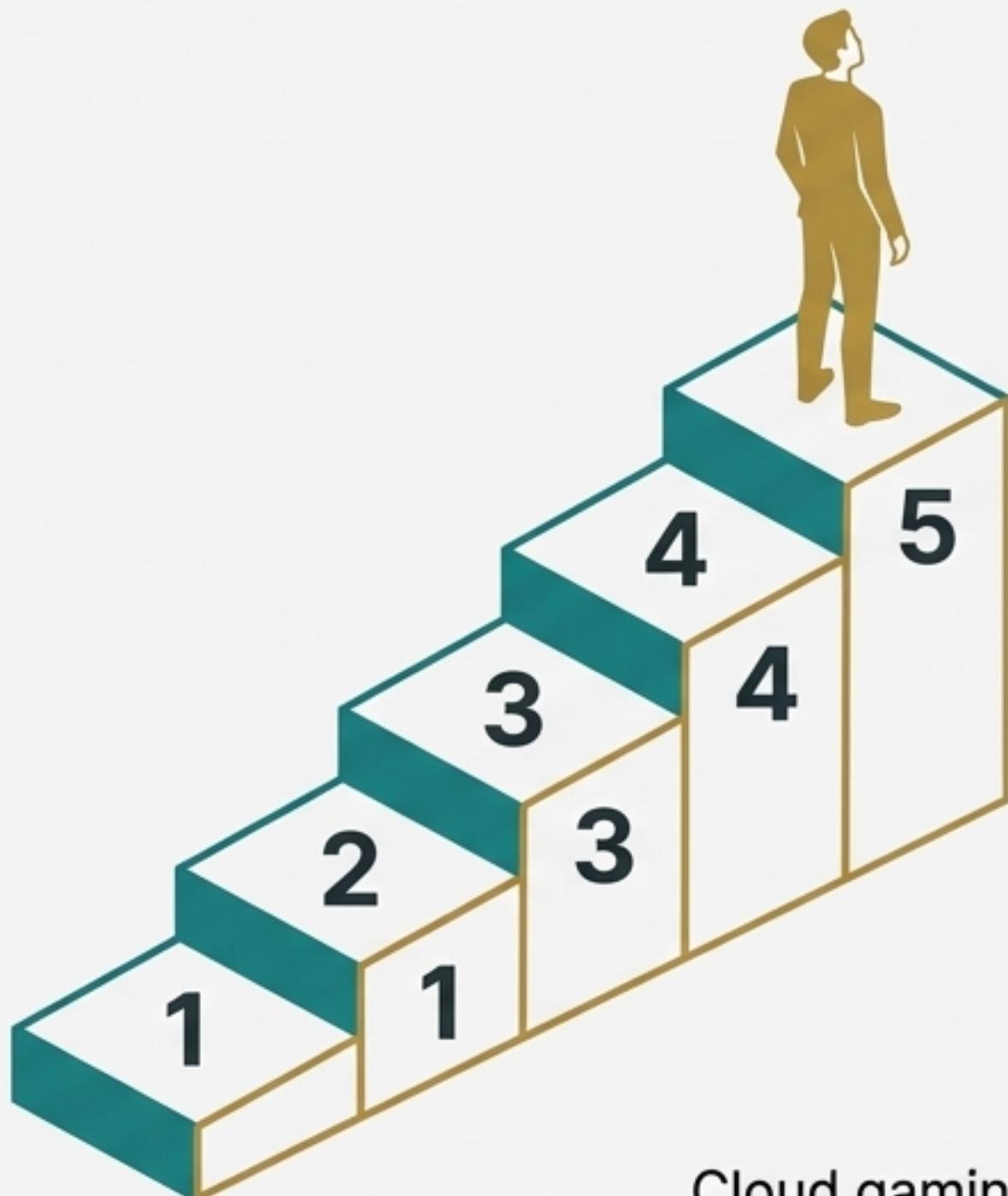
## What is AI-RAN?

A software-defined architecture that fuses RAN and AI workloads on a common, GPU-accelerated infrastructure.

## Key Benefits of NVIDIA's AI-RAN Platform (NVIDIA Aerial)

- 👉 **Unlock New AI Services:** Run generative AI, AI factories, and other AI applications on the same infrastructure, creating new monetization opportunities (e.g., GPU-as-a-Service).
- 👉 **Maximize Resource Utilization:** Dynamically allocate GPU resources for 5G and AI workloads, increasing capacity utilization by 2-3x and improving energy efficiency.
- 👉 **Boost Radio Performance:** Use AI algorithms to improve spectral efficiency and support more connections at higher performance.
- 👉 **Prepare for AI-Native 6G:** A software-defined path to 6G without hardware swaps.

# The Playbook for 5G Redemption is Clear



- 1. **Move Beyond Connectivity:** Stop selling bandwidth and start selling guaranteed, application-grade performance for premium use cases.
- 2. **Target a High-Value Niche:** Identify and cater to a premium-paying customer base like gamers, who can validate the business case for quality-of-service products.
- 3. **Leverage 5G's Unique Capabilities:** Industrialize a playbook around 5G Standalone, Network Slicing, and L4S to create tangible, differentiated experiences.
- 4. **Build a Powerful Ecosystem:** Partner with cloud and content leaders to deliver a complete solution that plays to each partner's strengths.
- 5. **Invest in a Future-Proof Platform:** Adopt an AI-RAN architecture to reduce TCO, improve efficiency, and build the foundation for future 6G and AI-driven revenue streams.

Cloud gaming is not just an application; it is the first step in transforming the telco into the central enabler of the real-time, AI-native digital future.