The cloud-gaming opportunity for operators

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RESEARCH

About this report

Consumers spent USD130 billion on digital gaming worldwide in 2019. However, few operators are receiving any of this revenue, despite their core business being adjacent to the gaming market. Operators have the opportunity to secure a share of this revenue by entering the cloud-gaming (or game-streaming) value chain and embracing the new way of gaming.

This report:

- sizes the consumer spend on digital- and cloud-gaming services, including forecasts up to 2024
- describes the role of operators in educating consumers on the cloud-gaming value proposition
- provides examples of operators' branded cloud-gaming services and outlines the role of these services in operators' consumer strategies
- describes the cloud-gaming value chain and lists the potential partnerships that are available to operators.

KEY QUESTIONS ANSWERED IN THIS REPORT

- How big is the cloud-gaming opportunity in the context of the digital-gaming market?
- In which areas of the world will cloud gaming reach a significant scale in the medium term? What are the main drivers for this?
- Do operators already have the key assets for the launch and delivery of cloud-gaming services in their market?
- Can operators play a role in providing infrastructure-as-a-service (IaaS)?
- Can operators launch their own cloud-gaming services, or should they partner with third-party service providers?

WHO SHOULD READ THIS REPORT

- Product managers and strategy teams working for operators that are looking for new revenue streams or new value-added services to support their core services.
- Marketing executives and product managers for operators that are making decisions about content strategy and consumer service design.
- Senior strategy or CTO executives within operators that are formulating strategies for IaaS product and service models and need to understand the implications of gaming services and consumption models.
- Strategy and business development executives for edge cloud and 5G equipment vendors.

Executive summary

Operators risk missing out on the opportunities in the cloud-gaming market as it grows out of its niche. Operators can enter the cloud-gaming value chain and benefit from its growth by acting as infrastructure service providers or sales channel partners, or by launching their own services.

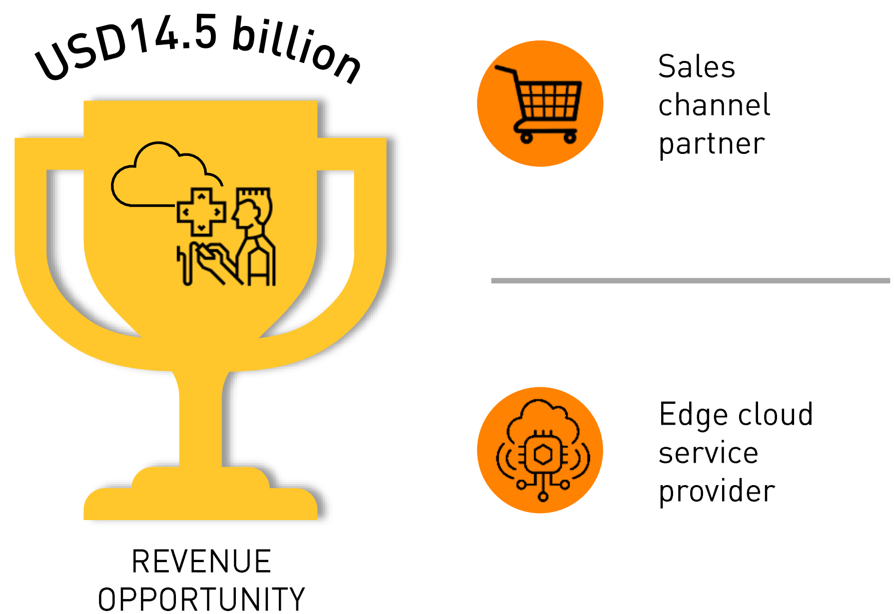
The digital gaming market is a high-growth, high-margin sector that most operators are not able to penetrate, despite it being adjacent to their core business. Cloud-gaming (or game-streaming) services are expected to be the next disruptive force in this market.

Operators can engage in various parts of the cloud-gaming value chain, and can monetise their assets while stimulating market growth.

KEY RECOMMENDATIONS

1. Operators should use their connectivity and edge cloud assets to secure a share of the growth in the cloud-gaming value chain.
2. Operators with digital service and content ambitions should work with partners to bundle cloud-gaming services with connectivity plans to address different consumer segments.
3. Operators with ambitions to be edge cloud service providers should use cloud gaming as one of the first large-scale consumer applications.

Figure 1: Operators' opportunities in the cloud-gaming value chain



Source: Analysys Mason

Challenge: operators risk missing out on opportunities in the cloud-gaming market as it enters a period of sustained growth

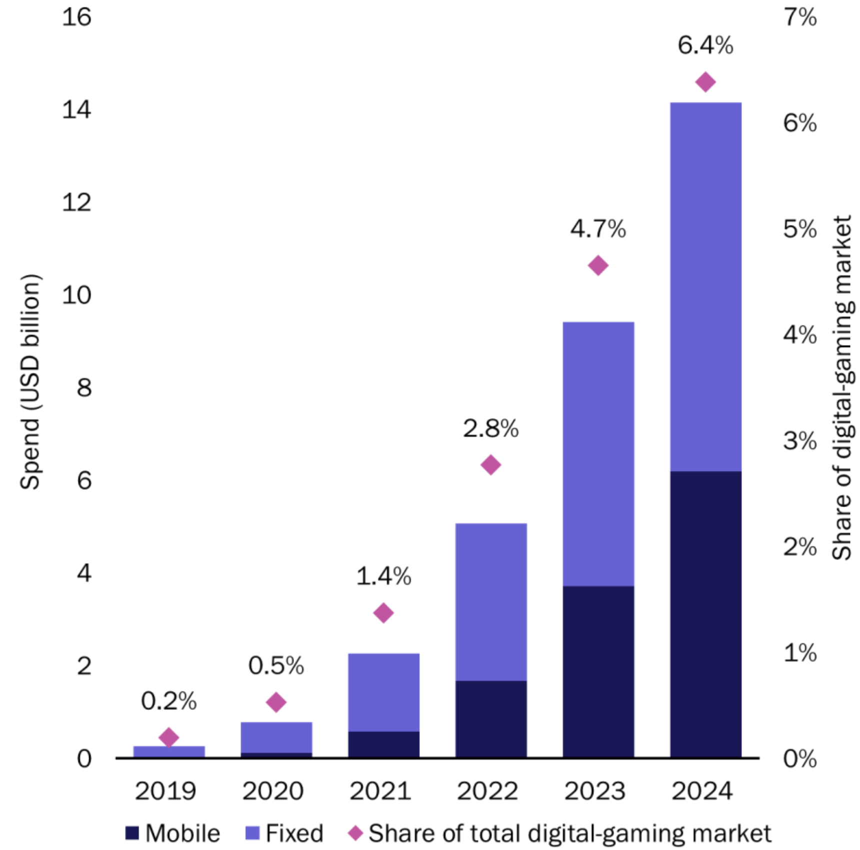
The cloud-gaming market will be worth USD14.5 billion worldwide by 2024. However, operators are currently at risk of missing out on this revenue growth opportunity.

On-demand cloud-based gaming services open the doors to digital gaming for new segments of users. It lowers the access barriers for gaming and allows subscribers to play games without having to purchase titles and consoles. Cloud gaming targets casual and social gamers (such as young adults or families that play together as a social activity), as well as those that cannot afford to buy consoles, hardware and titles. It also has the potential to innovate the gaming habits of experienced players.

Cloud gaming is 'crossing the chasm'; the largest gaming publishers, tech companies and console manufacturers are now launching consumer services. The cloud-gaming market is set to grow from being worth USD265 million and having 3 million active users in 2019 to being worth USD14.5 billion and having 177 million active users in 2024. Cloud gaming has the chance to become one of the principal modes of digital gaming; it will account for the majority of consumer gaming spending and will disrupt the digital-gaming value chain.

Operators that do not enter the cloud-gaming market will miss the chance to strengthen their relationship with millions of gamers, and to demonstrate the value of their premium mobile and broadband plans.

Figure 2: Consumer spend on cloud-gaming services by type of connectivity and as share of the total digital-gaming market, worldwide, 2019–2024



Source: Analysys Mason

Solution: operators should consider the potential roles that they can play to enter the cloud-gaming value chain and capture part of its growth

Operators can bundle their own or third-party cloud-gaming services in their consumer service portfolios and/or can position themselves as edge cloud service providers.

Operators' control over key assets of the cloud-gaming value chain makes them good potential partners for cloud-gaming service providers. Together, they can lower the barriers to market development by providing consumer access to high-performance connectivity, educating consumers about the cloud-gaming value proposition and enabling server infrastructure.

At the most basic level, operators can offer tailored broadband packages to gamers. The close relationship between cloud gaming and connectivity represents an opportunity for operators to bundle gaming services with broadband and/or mobile plans, thereby generating additional revenue, increasing satisfaction and potentially reducing churn. To do this, operators should define their role in the value chain, identify which customers they want to address and offer fixed, mobile or both services accordingly. Several routes are available to operators including reselling third-party services or developing their own branded services, depending on their objectives, assets, resources and capabilities.

Operators with their own edge location and edge computing assets can become infrastructure service providers to enable the streaming of high-end content on a large scale, thereby unlocking additional revenue opportunities.

Figure 3: Potential roles for operators in the cloud-gaming ecosystem

Role	Description	Example operators
High-end connectivity provider	Roll out FTTx and 5G networks and bundle cloud-gaming services with premium connectivity.	Proximus (Belgium), Orange (France), TIM (Italy), Vodafone (Europe), Sunrise (Switzerland), Ooredoo (Qatar) and KT (South Korea)
Consumer educator	Run marketing campaigns designed to educate consumers about the cloud-gaming value proposition.	
Edge infrastructure enabler	Provide edge computing and co-location.	SK Telecom (South Korea), Telekom Deutschland (Germany)

Source: Analysys Mason

Figure 4: Models for operators' cloud-gaming services

	Cloud gaming to the TV	Fixed cloud gaming	Mobile cloud gaming
Partnership model	Fixed cloud-gaming services delivered through a set-top box	Fixed cloud gaming bundled with a fixed broadband plan	Mobile cloud gaming bundled with a 5G contract
Main device	TV set and set-top box	PC/ laptop	Smartphone (5G)
Target gamers	Casual	Casual, core and hardcore	Casual and core
Service partners	Playgiga, WiziTV and Gamestream	Shadow and Stadia (Google)	Gamestream, XCloud and Hatch
Example operators	TIM (Italy), Orange (France), Etisalat (UAE) and Ooredoo (Qatar)	Proximus (Belgium) and Verizon Fios (USA)	Vodafone (Europe), Sprint (USA) and Sunrise (Switzerland)

Source: Analysys Mason

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Recommendations

1

Operators should use their connectivity and edge cloud assets to secure a share of the growth in the cloud-gaming value chain.

Operators have the potential to be cloud-gaming service providers' key business development partners: they are their natural sales channel partners, they have the necessary marketing capabilities to educate consumers about the value of cloud gaming and they can play the role of infrastructure service providers. Operators should choose the partnership role that suits them best in order to secure a key position in the cloud-gaming value chain.

2

Operators with digital service and content ambitions should work with partners to bundle cloud-gaming services with connectivity plans to address different consumer segments.

Fixed operators and pay-TV providers can use cloud gaming to the TV as a way of entering the cloud-gaming value chain. Mobile-only operators should consider offering mobile gaming services using 5G. Operators can resell third-party services or partner with B2B cloud-gaming specialists to design and deliver branded services that meet the local demand in terms of game titles and performance.

3

Operators with ambitions to be edge cloud service providers should use cloud gaming as one of the first large-scale consumer applications; the business case for edge will rely on more than just this application, though.

Operators can offer co-location and edge processing services to cloud-gaming service providers in those regions where the public cloud infrastructure is not yet sufficiently developed. However, they need to act quickly: private edge location providers (such as data centre companies) can rival operators' co-location offers, and public cloud providers can easily take over the role of edge computing providers once they have extended their footprints.

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About the authors

Giulio Sinibaldi (Senior Analyst) is a key contributor to Analysys Mason's *Consumer Services* and *Digital Economy* research practices. He is interested in mobile strategies, over-the-top (OTT) platforms, Internet regulation and consumer behaviour, and his skillset includes quantitative forecast modelling and big data analytics. Giulio holds a BSc and an MSc in Economics from Bocconi University.

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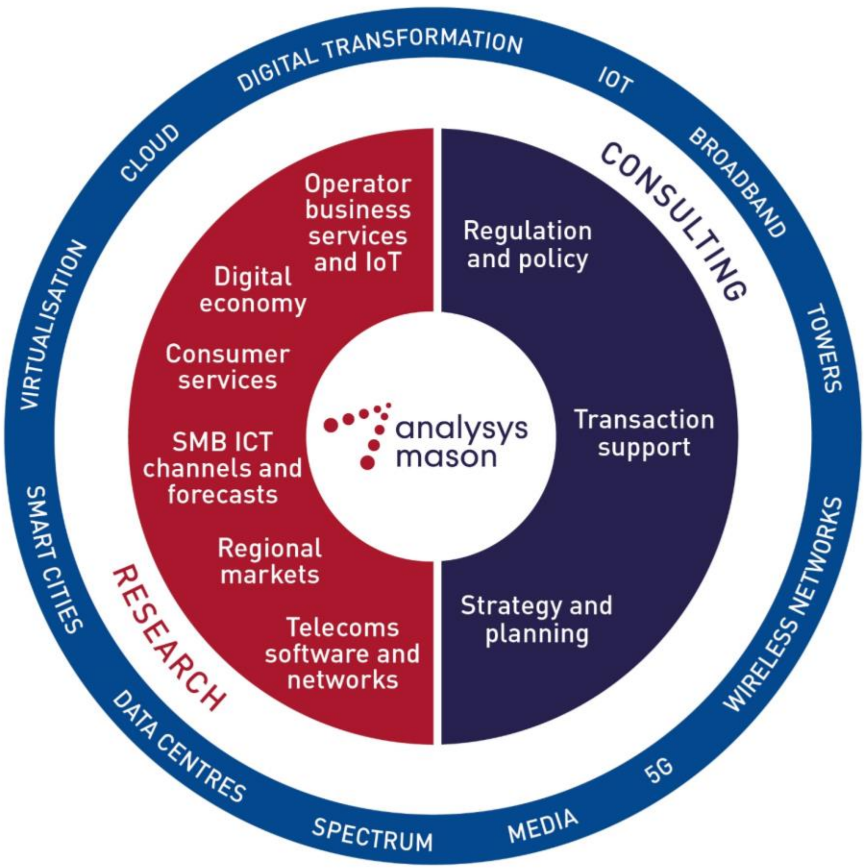

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