



ANALYSYS MASON

INTERNET AND TECHNOLOGY MONTHLY

Consulting specialists in telecoms,
media and technology

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Featured in this issue

TELECOMS OPERATORS' FOCUS ON DIGITAL INVESTMENTS

THE MENA GAMING INDUSTRY, AND KSA AS THE KEY DRIVER

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FOREWORD

Welcome to the November 2023 edition of Analysys Mason's newsletter on the internet and technology markets.



Dear All,

I hope you enjoyed reading the previous editions of our newsletters. I am pleased to share our latest edition of the monthly newsletter with you.

In this edition of our newsletter, we assess two topics in the Middle Eastern markets that have significant potential for further growth, and have attracted interest from investors and telecoms operators from across the Middle East and North Africa (MENA). At Analysys Mason, we have been fortunate enough to have supported some of the recent marquee transactions in these verticals in the MENA region and elsewhere and we aim to share some of the non-confidential insights from our work with this broader group.

1. Telecoms operators' focus on digital investments
2. The MENA gaming industry, and KSA as the key driver

Telecoms operators' focus on digital investments – As telecoms markets become ever-more saturated, telecoms operators are increasingly looking for growth opportunities in adjacent areas. Leading telecoms players in the MENA region have forayed into digital services across verticals such as fintech, edtech, e-commerce, Internet of Things (IoT), digital infrastructure, and AI, exploring both synergistic and tangential opportunities to their core business. This has not only enabled them to preserve core telecoms revenues, add new revenue streams, and reap financial benefits from the valuation upside of these digital assets, but also facilitated overall digital ecosystem development in the region.

The MENA gaming industry, and KSA as the key driver – In recent years, the digital gaming market in the MENA region has experienced a significant surge in popularity and growth. The gaming industry in the region is expected to amount to ~USD4.0 billion in 2023 – mobile gaming accounts for ~80% of this market. KSA is the leading gaming market in the region, accounting for ~40% of MENA's overall market share, followed by the United Arab Emirates (UAE). KSA has made a significant push in the gaming industry through government initiatives and sector investments. Additionally, telecoms operators like stc, e&, Zain, Mobily have also acted as key facilitators in this booming market, through efforts like establishing their own gaming arms or platforms and investing into the industry.

We dive deeper into such aspects in the subsequent sections, and hope you enjoy reading the latest edition of our newsletter and continue to find our insights interesting and useful!



Rohan Dhamija
Managing Partner, Director
Head - Middle East and South Asia

Telecoms operators' focus on digital investments

As telecoms markets become ever-more saturated, telecoms operators are increasingly looking for growth opportunities in adjacent areas to create new hooks to drive growth and diversification. Leading telecoms players in the MENA region have been amongst the frontrunners, globally, foraying into digital services, through in-house development, mergers and acquisitions (M&A) or partnerships with digital solution providers across verticals such as fintech, edtech, e-commerce, Internet of Things (IoT), digital infrastructure, and AI. They have actively explored both synergistic and tangential opportunities to their core business across multiple digital verticals. This has not only enabled them to preserve core telecoms revenues, add new revenue streams, and reap financial benefits from the valuation upside of these digital assets, but also facilitated overall digital ecosystem development in the region.



Digital services landscape for telecoms operators

The digital services sector is thriving globally, including in MENA, in recent years communication service providers (CSPs) have been the key facilitators of this digital revolution. CSPs actively pursue digital opportunities which lie on the spectrum of being directly synergistic or tangential to their core telecoms business for a number of reasons.

'Synergistic' digital services, like mobile wallets, gaming, and OTT streaming, can enable CSPs to leverage their existing business lines and capabilities

(underlying infrastructure, existing customer base) to create new offerings or improve their existing ones. These can produce synergies for CSPs by enabling them to bundle services and offer discounts to customers who subscribe to multiple services. Operators can therefore enhance customer experience, while also increasing their revenue and profitability.

Digital sectors where operations are not directly related to the CSP's core business or capabilities can be categorized as 'tangential'; for a telecoms operator this could look like edtech, healthtech, or travel.

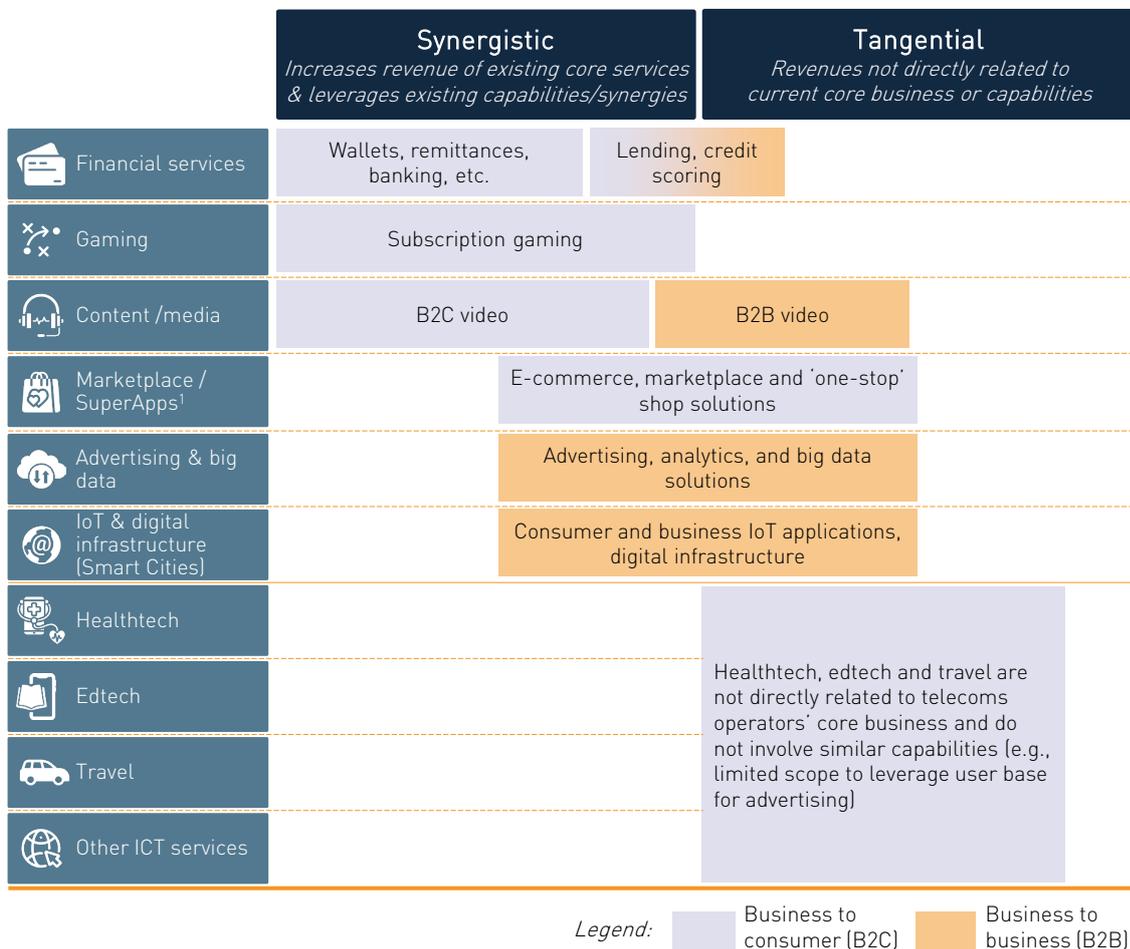


FIGURE 1: CATEGORIZATION OF DIGITAL SERVICES AS SYNERGISTIC VS TANGENTIAL FOR CSPs [SOURCE: ANALYSYS MASON, 2023]

¹ SuperApp refers to a mobile or web app that can provide multiple services including e-commerce, hyper-local delivery, payment and financial transaction processing, among others

The above diagram categorizes different digital service sectors as synergistic or tangential from a CSP's perspective. However, it is important to note that interconnections may exist among various digital products and services. For example, digital wallets and payments may have e-commerce and travel as their primary use cases, and success in digital payments may enable these tangential services for an operator.

Operators around the world have been pursuing these digital opportunities since the inception of the sector. As seen in Analysys Mason's Digital Economy Readiness Index (DERI), 32 of the largest telecoms groups worldwide already own/operate more than 340 digital economy initiatives across various domains –

cloud services, mobile financial services (MFS)/fintech and healthtech are currently the most-explored digital verticals by operators.

Based on an Analysys Mason study, more than 60% of operators have already started at least one initiative in each of the following digital service sectors: healthtech, MFS/fintech, cloud services, e-commerce, adtech, and edtech. In the healthtech and MFS/fintech sectors, this number increases to more than 80% of operators. The key takeaway from this trend is that operators are actively exploring both synergistic and tangential domains. It is surprising to see many telecoms operators investing in healthtech, which is not directly related to any of their core capabilities.

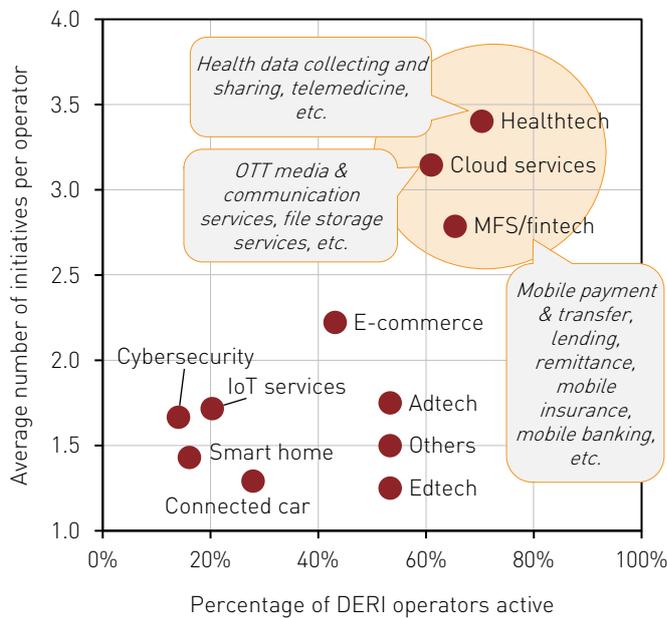


FIGURE 2: AVERAGE NUMBER OF INITIATIVES ACROSS VERTICALS AND SHARE OF ASSESSED DERI OPERATORS ACTIVE IN THE DIGITAL VERTICAL [SOURCE: ANALYSYS MASON, 2023]

Digital services are gaining importance for operators globally, the revenue split of select telecoms operators by their core telecoms and digital services revenue shown in the following chart highlights how digital offerings now contribute a significant proportion of overall revenue.

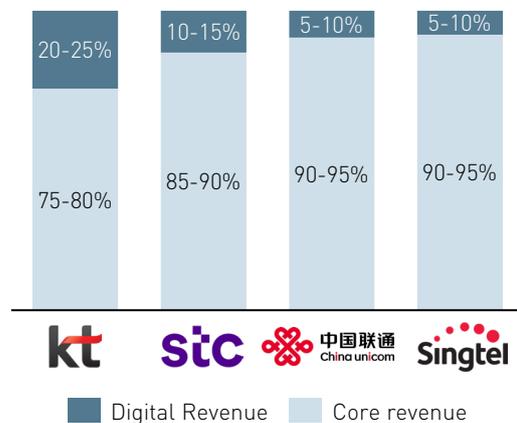


FIGURE 3: REVENUE SPLIT OF SELECT TELECOMS OPERATORS BY CORE TELECOMS VS DIGITAL SERVICES² [SOURCE: ANALYSYS MASON, 2023]

² Digital services for stc include revenues from stc solutions, stc bank, Intigral, Sirar, and other specialized services

Rationale for telecoms operators to enter the digital services space

In the previous section, we looked at the digital services landscape for telecoms operators and how they have been exploring this opportunity. The motivation for operators to enter the digital services market can largely be classified as either a **strategic** or **financial** play.

- **Strategic play:** Adding digital services to their existing offerings, or operating them separately, can provide direct monetization through new revenue streams, or indirect benefits, such as preserving core revenues

(through churn reduction, growth in data usage), and development of the overall local digital ecosystem.

- **Financial play:** Operators are also investing at the growth stage and making acquisitions in tangential verticals for pure financial upsides. Even though investments in verticals like healthtech, edtech, e-commerce, and travel may not have synergies with existing telecoms operations, the growing penetration of digital services across verticals can create huge financial upsides on investments over the medium to long term.

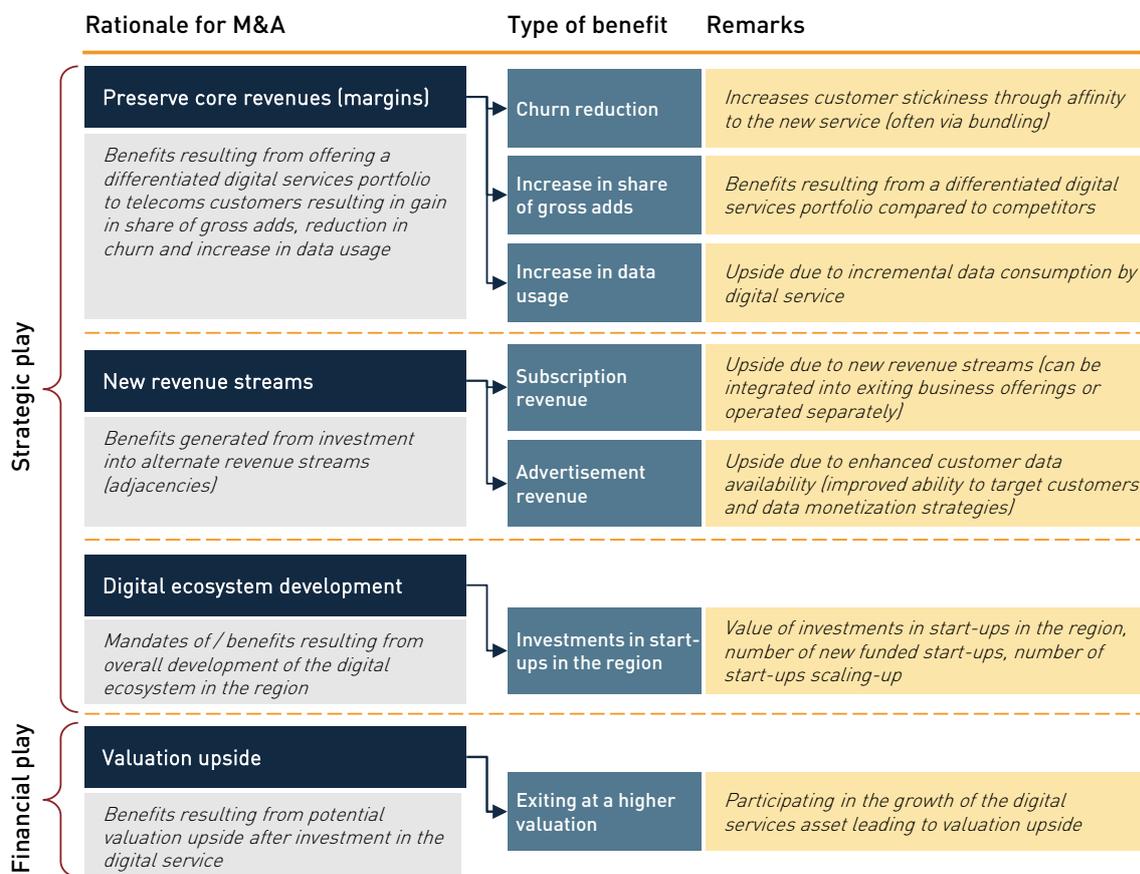


FIGURE 4: RATIONALE FOR OPERATORS TO EXPLORE DIGITAL SERVICES AND OPPORTUNITIES [SOURCE: ANALYSYS MASON, 2023]

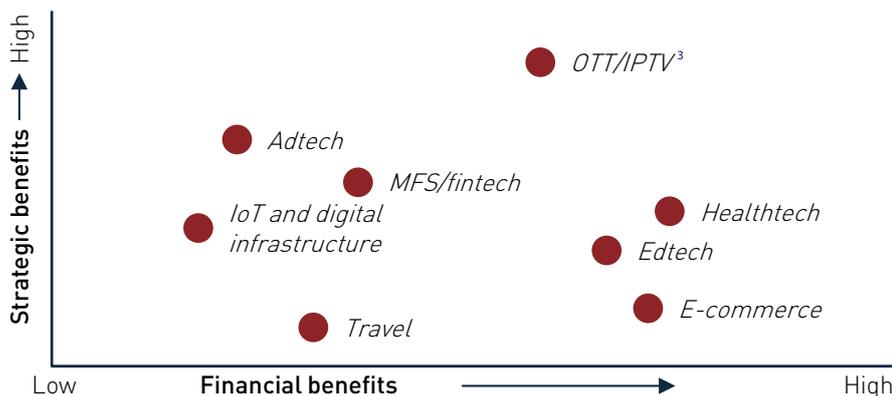


FIGURE 5: ILLUSTRATIVE STRATEGIC VS FINANCIAL BENEFITS OF VARIOUS DIGITAL SERVICES FOR OPERATORS [SOURCE: ANALYSYS MASON, 2023]

³ OTT are 'over-the-top' services, IPTV are 'internet protocol television' services and both provide content by using the internet to transmit it.

Telecoms operator approaches to building a digital services portfolio

Telecoms operators adopt various approaches in developing their digital portfolios. The approaches can be broadly categorized into three – **in-house development**; **M&A**; and **partnerships** with other

companies. The most suitable approach for the operator depends on their existing capabilities, the type of digital sector being explored, where the digital sector lies on the synergistic vs tangential spectrum, and the key objective for entering the sector.

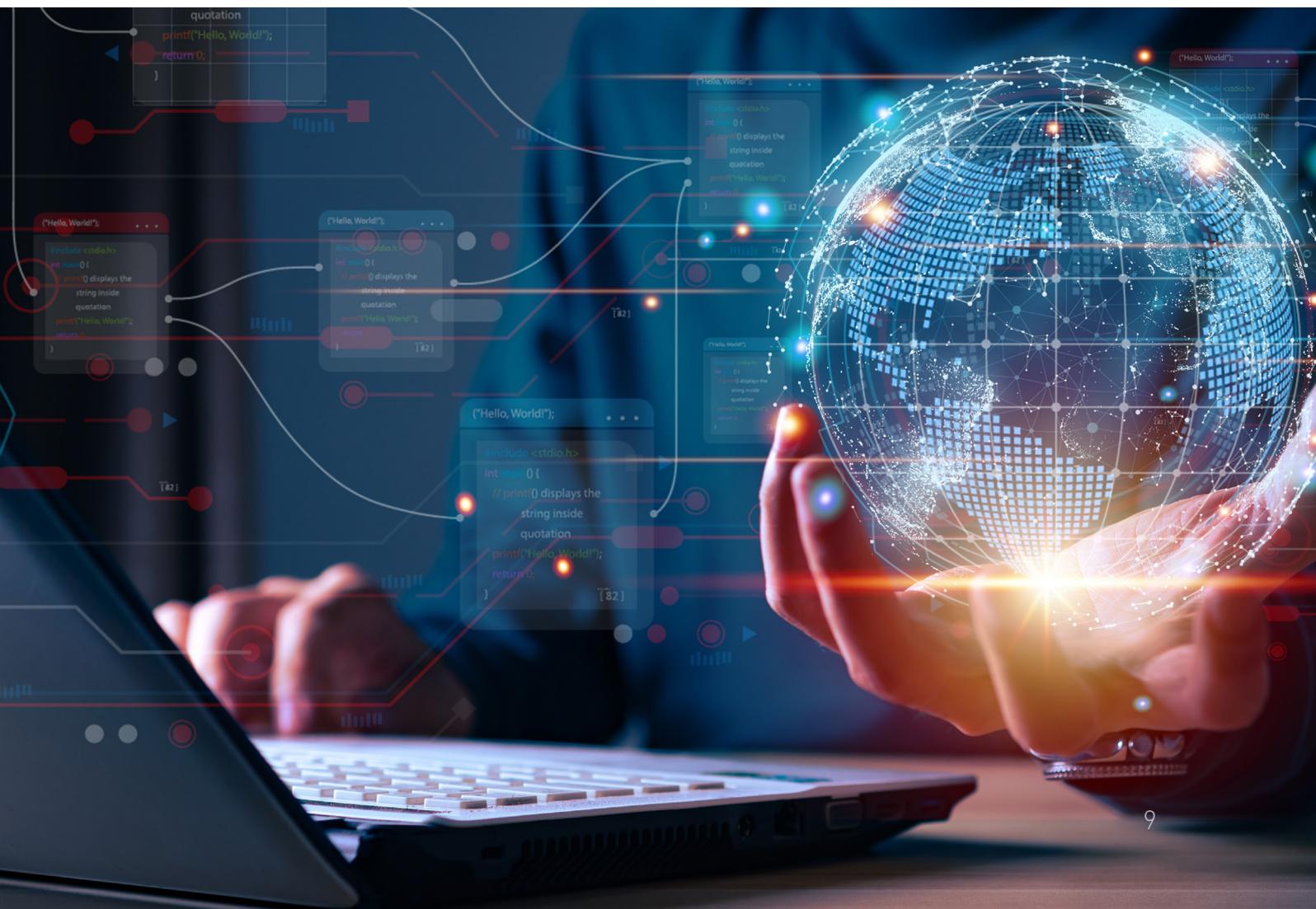
	In-house development	M&A	Partnership (reseller model)			
Decision factors and examples	<p>Potential to leverage internal resources (e.g., customer access) and capability development and hiring</p> <ul style="list-style-type: none"> MFS (e.g. stc pay, Zain Tamam) Gaming (e.g., stc play) IoT solutions (e.g. Telefonica AI of Things) Virtual reality (e.g. Orange VR Experience) 	<p>Early action in a fast-growing and dynamic market, where innovation is crucial</p> <ul style="list-style-type: none"> Marketplace (e.g., e& – Careem) Content (e.g., e& – STARZPLAY) IoT solutions (e.g. TIM – Mindicity) Digital solution provider (e.g., Singtel – ARQ Group) 	<p>Requires expertise in niche areas and significant capital, but targets expansion with minimum effort</p> <ul style="list-style-type: none"> Smart home network tools (e.g. DT – Qivision) Web / hosting services (e.g. Turk Telekom – Wix) Online conference services (e.g. DT – Zoom) Business software (e.g. Ooredoo – Microsoft) 			
Advantages	<ul style="list-style-type: none"> Full control over development and operations Customized solution development for target segments Full intellectual property (IP) ownership 	<ul style="list-style-type: none"> Potentially shorter time-to-market Established customer base of the target Effective risk management, with tangible product 	<ul style="list-style-type: none"> Short time-to-market Reduced cost via use of partner's expertise and resources 			
Drawbacks	<ul style="list-style-type: none"> High initial development and establishment costs Limited existing technology capabilities and expertise Delayed time-to-market 	<ul style="list-style-type: none"> Complex IT integration between telecoms operator and target High acquisition costs for established services, especially in case of a top performer acquisition 	<ul style="list-style-type: none"> Limited level of control, dependency on partner's capabilities, resources and decisions Revenue-sharing / volume-based commission models without attractive profit margins 			
Operating model options	 <p>Traditional in-house development model</p> <p><i>Dedicated internal team responsible for entire development lifecycle</i></p>	 <p>Agile development model</p> <p><i>Agile approach, forming cross-functional teams that work collaboratively</i></p>	 <p>Integration and synergy model</p> <p><i>Integration of acquired company's digital services into existing operations</i></p>	 <p>Stand-alone management model</p> <p><i>Operating as a separate entity, maintaining own management structure</i></p>	 <p>JV management model</p> <p><i>Joint management team responsible for the partnership and delivery</i></p>	 <p>Lead operator model</p> <p><i>Handling E2E marketing, sales, and customer support operations</i></p>

FIGURE 6: DIGITAL SERVICES DEVELOPMENT AND OPERATING MODELS FOR TELECOMS OPERATORS [SOURCE: ANALYSYS MASON, 2023]

- **In-house development**, an approach mostly seen if operators are entering a digital sector where they can leverage their internal resources (i.e. synergistic sectors). Different digital services developed by the incumbent operator Jio in India (Jio Money, Jio Cinema, Jio TV, etc.) or by stc (stc pay, stc play, etc.) and Zain (Tamam) in Saudi Arabia are such examples. Operators can use the **traditional** model, assigning a dedicated internal team for the project, or can opt for an **agile approach**, forming cross-departmental teams that work collaboratively. Alternatively, they can form a hybrid model, which can be more productive than either separate models, if run successfully.
- **M&As**, on the other hand, provide a quick entry to the sector, with established operational capabilities and customer base. However, this can come with challenges, such as complexities and conflicts of post-merger integration, and high acquisition cost.

Such M&As usually are driven by: 1) Potential synergistic benefits (through integration with existing businesses), 2) Development and uplifting of the digital ecosystem in the region, and 3) Valuation and financial upside as the businesses grow. Select examples of such a model include e&s acquisition of elGrocer and majority stake in Careem; stc's investment in firms like Zenda, tweek, qlub and others; and TIM's acquisition of Mindcity.

- **Partnerships** are the third main approach. Either a **joint venture management model** where a combined management team is responsible for the project delivery, or a **lead operator model** where the operator handles end-to-end (E2E) marketing, sales, and customer support operations by using existing resources and capabilities. For examples of operators partnering with tech companies see the Turk Telekom–Wix, DT–Zoom, and Ooredoo–Microsoft partnerships.



Saudi Telecommunication Company (stc) is the leading Saudi Arabian CSP and one of the leading operators in the region for explorations into various digital services. stc supports a broad range of investments across digital verticals through its multiple strategic investment vehicles, such as:

- **inspireU** – provides early-stage funding and incubation program which has 100 companies graduated so far



- **Corporate Investment Fund (CIF)** – focusses on growth investments and has made two investments so far: Nile and Rewaa
- Additionally, stc makes direct corporate investments.

		Description	Sector	Investment round (USD Million / % acquisition)	Rationale
2019		Formerly known as Qualitynet (rebranded to solutions by stc) was a specialized Oracle integrator for businesses operating in Kuwait	ISP	~93 (100% acquisition)	Significant synergies with stc in the ICT sector which enabled stc to provide fully integrated products and services; solutions by stc was listed on the Tadawul stock exchange in a move to divest and create higher shareholder return on account of asset appreciation
2022		Giza Systems is a systems integrator in the MEA region. It designs and deploys industry-specific technology solutions for asset-intensive industries	Others (Enterprise systems integration)	~158 (~90% acquisition)	Significant synergies with stc Solutions as a leading systems integrator in MENA (especially Egypt and KSA) through a joint GTM. Helps cross-sell stc Solutions' services to Giza's clientele and vice versa
2022		e-Portal Holding Company is a group of ICT companies and a systems Integrator providing end-to-end ICT & security system solutions	ICT	~74 (100% acquisition)	Significant synergies with stc in the ICT sector to enhance its digital capabilities further through owning a specialized arm in the ICT, IOT and Cloud Services aimed at offering business solutions to the enterprise segment in Kuwait
2023		TAWAL acquired the 4800-tower portfolio of United across Bulgaria, Croatia and Slovenia for USD1.33 billion	Telecoms towers	100% acquisition	Supports TAWAL and stc's international expansion strategy in key markets with growth potential
2023		Devoteam is a leading consulting firm focused on digital strategy, technology platforms, data and cybersecurity	Others (digital consulting)	~40% acquisition	Strengthen its leadership in the ICT market and complement its current offerings with digital consulting and business transformation capabilities
2023		Leading IoT solutions provider offering Smart City, Smart Mobility and Smart Building Solutions	IoT	100% acquisition	Accelerate KSA's digital transformation using stc's network and machinestalk's IoT services across Smart Cities, Smart Mobility and Smart Buildings
2023		Large Spanish converged telecoms operator with opcos in Europe (5 countries) and the Americas	Telecoms operator	~2,250 (~10% acquisition)	Portfolio expansion (revenue diversification) to other markets enabled by strong balance sheet Also, a "compelling investment opportunity" or financial upside play, given the low share price in recent times
2023		Network-as-a-Service solutions provider to manage network performance, secure connectivity, network lifecycle management, etc.	Others (emerging technologies)	~175	Investment through CIF. Additionally, significant synergies with stc solutions as a leading systems integrator in MENA. Helps cross-sell stc solutions' services to Nile's clientele and vice versa
2023		Contact Center Company (ccc) is one of the leading business process outsourcing (BPO) service providers in KSA	Others (BPO)	~450 (100% acquisition)	Significant synergies with stc solutions in the ICT sector; will enable expansion of stc solutions' BPO offering and provide customers with end-to-end services
2023		Rewaa provides retailers with a cloud-based integrated solution that synchronizes online and physical store inventory	E-commerce	~27	Early stage / growth investments in digital business through CIF for a financial upside as it grows its presence in the region

FIGURE 8: KEY RECENT INVESTMENTS BY STC GROUP [SOURCE: ANALYSYS MASON, 2023]

■ Synergistic
 ■ Tangential
 ■ Tangential/Synergistic

- Over the past five years, stc investments towards B2B sectors (Giza systems, Nile, etc.), including IoT, Smart Cities, and automation:
 - such investments are driven by identifying synergistic solutions to existing core business and diversification into other MENA regions
 - the investments position stc to better serve the wave of digital transformation and demand for more tech-enabled solutions across verticals, particularly in KSA and additionally, also cater to the recent regulatory advancements
- Investments in B2B verticals appear to be motivated by:
 - preservation of traditional core services revenues and margins (SIM penetration saturation and limited/no ARPU growth) as being witnessed in most developed markets globally
 - opportunity to divest and capitalize on the increasing penetration of digitalization across B2B verticals
- stc has also been focusing on the B2C space for over a decade, with its investment in Intigral back in 2011. However, stc has developed many of its B2C propositions in-house such as its gaming platform (stc play), payments platform (stc pay), OTT platform (stc tv), and logitech platform (stc dal)
- stc has also done multiple carve-outs & JVs for further strengthening its digital services ecosystem, such as:
 - Carve-outs of Tawal, Center3 & Sirar which are now fully owned entities by stc
 - JV with Public Investment Fund (PIF) for the creation of Iot Squared
 - JV with Alibaba Cloud, eWTP Arabia Capital, Saudi Company for Artificial Intelligence (SCAI), and Saudi Information Technology Company (SITE) for the creation of Saudi Cloud Computing Company (SCCC)
 - Data JV with Mobily & Zain for the creation of Fusion, which aims to support the government with data-driven insights
 - JV with The Greek Telecommunication Telephony Satellite Applications (TTSA), The Public Power Corporation of Greece (PPC) and The Telecommunications Provider of Cyprus (CYTA) to develop a subsea cable that connects middle east to Europe (fuelling the digital economy within the region)
- Additionally, stc has also done in-direct investments in the digital space through STV wherein, stc has invested USD500 million for digital investment with stv, with an additional follow-on funding of USD300 million

“Over the past years, stc prepared itself for scaling its business, following DARE strategy. The established investment vehicles are aimed to focus on growing stc within core, tech-enabled and digital strategic opportunities. The investment follows our dynamic approach to growth, whether M&A, venture investment or partnership, to ensure we maximize on the shareholders returns and sustain our leading regional position. We will continue focus on both B2B & B2C opportunities, in areas such as AI, Data, VerticalTech, Telco & Digital Infrastructure which will deliver against the scale and scope of DARE.”

- Suhail Al-Faris, Vice President, Corporate Development, stc

“Since 2017, stc has followed its “DARE” strategy (digitize stc, accelerate assets performance, reinvent customer, employee and partners experience, expand in scale and scope). The rationale of our strategy going beyond telco and focusing on digital plays came as result of the assessment of the evolution of the industry, the digital transformation of the MENA region and the resulting opportunities in this space.”

- Wijnand E. van Till, Group Strategy, stc

Case studies

Leading telecoms operators with a focus on significant digital services in MENA

etisalat and (e&) is the leading UAE-based CSP, with operations across 16 countries in Asia and MENA. e& has been one of the leading operators exploring various digital services through its multiple brands namely, etisalat, e& international, e& life, e& enterprise and e& capital.



		Description	Sector	Investment round (USD million / % acquisition)	e&'s investing entity	Rationale	Multiple
2021		Leading online marketplace for groceries operating across the UAE	E-commerce	100% acquisition	e&	In line with e&'s strategy to drive digital penetration in the region through their digital marketplace platform and diversification of the business	-
2022		Leading subscription video on demand (SVOD) and streaming service provider in the Middle East and North Africa	OTT/IPTV	130 (~57% acquisition with ADQ)	E-Vision	In line with e&'s strategy to drive diversification of the business by providing direct to consumer streaming services across MENA	~4
2022		UAE's leading technology solutions providers and systems integrators	IoT and digital infrastructure	100% acquisition	e& enterprise	Significant synergies with e& enterprise. Helps cross-sell e& enterprise's services to Smartworld clientele and vice versa	-
2022		E-learning provider for Telco Cloud offering hands-on labs platform and learning-as-a-service to cloud learners	Edtech	-	e& capital	Help e& expand its offerings and support the technology ecosystem in the region along with providing e& access to cost-effective, practice-focused labs for Telco Cloud technologies such as 5G, OpenRAN, OpenStack, SDN etc.	-
2022		Social media platform which offers ~20 000 hours of content covering entertainment, creators, sports and XR, VR and AR experiences	Others (social media)	20	e& capital	Help e& potentially expand its offerings and support the technology ecosystem in the region	-
2022		Leading telecoms provider with a range of mobile and fixed-line connectivity services	Telecoms operator	~4400 (~10% acquisition)	e&	Gain significant exposure to a world leader in connectivity/ digital services, and expand into new markets and related areas such as fintech	~25
2023		Dubai-based SuperApp with operations in over 100 cities, covering 12 countries across the Middle East, Africa, and South Asia regions	E-commerce (marketplace / SuperApp)	400	e&	Boost growth of e&'s consumer digital services, including expansion of fintech vertical, e& money, which will play an important role in the SuperApp vision by providing financial service offerings	~25
2023		Peer-to-peer (P2P) lending platform that uses technology to connect businesses looking for quick, low-cost financing with investors	MFS/fintech	~24 (~63% acquisition)	e& enterprise	e& enterprise will be able to provide an innovative lending solution to tap the USD250 billion small and medium enterprise credit gap in the GCC	~18
2023		Industrial digitalization and robotization solutions provider to enable smart and sustainable industrial enterprise	Others (digital and robotics)	~5	e& capital	Investments in emerging technologies may help e& expand its offerings and support the technology ecosystem in the region	~15
2023		Leverages generative AI to automate data-intensive business, finance, analytics, and supply chain operations	Others (generative AI)	~25	e& capital	Investments in emerging technologies may help e& expand its offerings and support the technology ecosystem in the region	-

■ Synergistic
 ■ Tangential
 ■ Tangential/ Synergistic

		Description	Sector	Investment round (USD million / % acquisition)	e&'s investing entity	Rationale	Multiple
2023	BESPIN GLOBAL an e& enterprise company	Provider of cloud management services and consulting – digital transformation, cloud consulting and managed services	Others (cloud management)	~10 (~65% acquisition)	e& enterprise	Enables e& to provide public cloud managed and professional services in the Middle East, Turkey, Africa and Pakistan	-
2023	PPF	Mid-sized operator within the CEE region with 18 million mobile subscribers and 1.1 million fixed broadband customers	Others (telecoms operator)	~2150 (51% acquisition)	e&	Enables e& to expand into Central and Eastern Europe (Slovakia, Hungary, Bulgaria, Serbia) through majority stake investment	-
2023	airalo	Marketplace for 200+ eSIMs operating across multiple countries, primarily targeting travel needs of customers	Others (eSIM marketplace)	~60	e&	Early stage / growth investments for financial upside as Airalo grows its presence globally	-
2023	TRAYDSTREAM	Traydstream is AI-driven platform which digitizes trade documents and automates the trade and compliance checking processes	Others (emerging technologies)	~21	e& capital	Early stage / growth investments for financial upside as Traydstream grows its presence globally	-
2023	almahealth	Alma Health is a digital health platform for people with chronic conditions which provides doctor consultation, delivery of medication and ongoing care	Healthtech	~10	e& capital	Early stage / growth investments for financial upside as Alma Health grows its presence in the region	-

■ Synergistic
 ■ Tangential
 ■ Tangential/ Synergistic

FIGURE 7: KEY RECENT INVESTMENTS BY E& GROUP [SOURCE: ANALYSYS MASON, 2023]

- e& Group, through its multiple entities/brands, has expanded into both digital B2B (IoT and cloud technologies) and B2C (edtech, social media, fintech) over the past few years
- B2B investments appear to be motivated by
 - preservation of traditional core services revenues and margins (due to market saturation, limited/no ARPU growth, reduced churn)
 - potential to integrate these services (e.g., STARZPLAY, Smartworld) into e&'s offerings
- Investments/acquisitions of tangential and synergistic businesses should help e& expand its offerings and support the technology ecosystem in the region

“We have invested in various verticals including E-commerce, Edtech, Fintech, etc. and over the next couple of years we would look to further expand into other interesting domains. In terms of geographical focus, approx. 30–40% of our investments have been in players based in the MENA region, and we continue to look out for opportunities which can target global markets and scale exponentially”

- Kushal Shah, Managing Director, e& capital

“STARZPLAY works closely with all leading [telecoms] operators like e&, stc, Ooredoo in the region and we have developed a win-win proposition and operating model for telcos and streaming services, we believe that partnerships with telco[s are] the best way moving forward as they bring in the right capabilities for mutual growth”

- Alessandro Masaro, Chief Strategy Officer, STARZPLAY

Impact of digital services portfolio on valuations

We are seeing digital services become an important contributor to the valuations of telecoms operators, especially for those that have focussed on building such a portfolio. Case in point, when Facebook invested in Jio Platforms in India (USD5.7 billion to acquire a 10% stake in 2020), the total enterprise value of Jio Platforms was estimated at USD70 billion, with ~USD20 billion (30% of the valuation) coming from Jio's digital apps business.

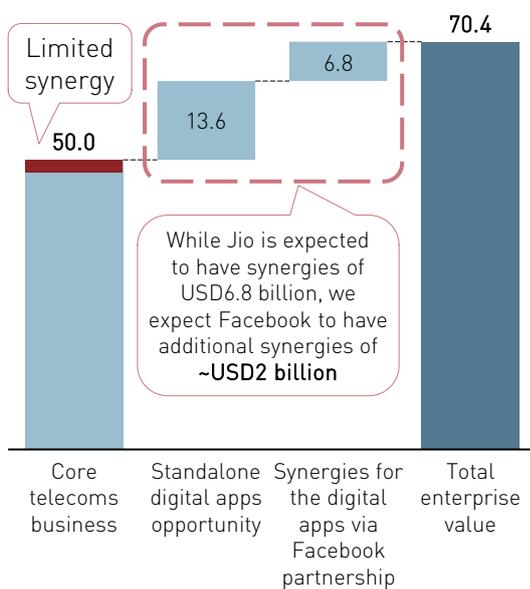


FIGURE 9: ENTERPRISE VALUE OF JIO PLATFORMS (USD BILLION) [SOURCE: ANALYSYS MASON, 2023]

The USD20 billion valuation of Jio's digital services included the synergies of ~USD7 billion to Jio and additional ~USD2 billion to Facebook from its investment in the Jio platforms. The partnership allowed Facebook to make a play in the connectivity (fixed and mobile broadband) market in India. For Jio, the partnership helped reduce churn and gain stickiness for the core telecoms business due to Facebook's superior digital apps portfolio.

The digital synergies for Jio and Facebook can be categorized as **1. Monetizing the B2C opportunity via a SuperApp, 2. Monetizing the B2B commerce opportunity, and 3. Increased share of the digital advertising market.** Combined, Jio and Facebook have the right ingredients to create a SuperApp:

- Ready user base between WhatsApp and Jio's wireless subscriber base
- Jio's e-commerce business and offline retail business
- Payments platform (WhatsApp Pay) – which is essential to a successful SuperApp
- High user engagement through Facebook.

The partnership will monetize the B2B opportunity by bringing the small 'mom-and-pop' retail stores online and offering these merchants the benefits of demand generation, digital payment, doorstep delivery, and fintech services (lending, inventory management, etc.). Furthermore, they can also monetize it through take-rate on the transaction and charges for point-of-sale (POS) machines.

The partnership will also help in achieving an increased share of the digital advertising market, because together the two platforms will create a larger pool of data in terms of activities and transactions. This can be leveraged for more advanced user-profiling and targeting, and therefore a higher share of the digital advertising market.

In summary, digital services have emerged as one of the key levers for telecoms operators to drive growth and diversification, and operators like stc and e& in MENA have been leading the charge into digital services' verticals such as fintech, edtech, e-commerce, IoT, digital infrastructure, and AI, to name a few. This is enabling them to preserve core telecoms revenues, add new revenue streams, gain benefits from the valuation upside of these digital assets, as well as act as the facilitator for overall digital ecosystem development in the region.

The MENA gaming industry, and KSA as the key driver

In recent years, the digital gaming market in MENA region has experienced a significant surge in popularity and growth. The gaming industry in the region is expected to amount to ~USD4.0 billion, with a total of ~380 million players (~65% of the region's population) in 2023 – projected to grow at a CAGR of ~12% to reach ~USD6.9 billion in 2028. Mobile gaming accounts for ~80% of this gaming market while PC and console gaming each account for ~10%.

KSA is the leading gaming market in the region, accounting for ~40% of MENA's overall market share followed by UAE. KSA has made a significant push in the gaming industry through government initiatives, such as establishment of the Saudi Esports Federation (SEF), development of national strategies to boost the industry, and sector investment. Additionally, major telecoms operators (i.e., stc, Zain, Mobily) have also acted as key facilitators in this booming market, through efforts like establishing their own gaming arms or platforms, and investing into the industry.

MENA gaming market size

The gaming industry, characterized by its dynamic and ever-evolving nature, has transcended its origins as a mere source of entertainment to become a significant cultural, economic, and technological force. With its global reach and an audience that spans generations, genders, and backgrounds, gaming has firmly entrenched itself as a cornerstone of contemporary entertainment. From the initial era of arcade cabinets and pixelated adventures to the immersive realms of virtual reality (VR) and the fiercely competitive world of e-sports, the industry's evolution serves as a resounding testament to both human ingenuity and the relentless progress of technology.

MENA is a unique market for gaming. Governments and industry players across the region have acknowledged the potential for gaming, making substantial investment in the sector and enacting strategies aimed at enticing gaming companies. These efforts have led to an estimated gaming industry size of ~USD4.0 billion in 2023, with a total of ~380 million players (~65% of the region's population). While prior to Covid-19 the industry was already growing strongly, the impact of the pandemic – lockdowns, remote working – has significantly accelerated the growth of the sector.

Some countries in the MENA region stand out as key contributors to the gaming market. Notably, KSA, UAE, and Egypt have emerged as pivotal players in the industry, driven by their commitment to fostering growth and nurturing a national gaming ecosystem. In particular, KSA has the largest gaming market (with a strong focus on e-sports), accounting for ~40% of MENA's overall market, driven by efforts including the development of national strategies (the National

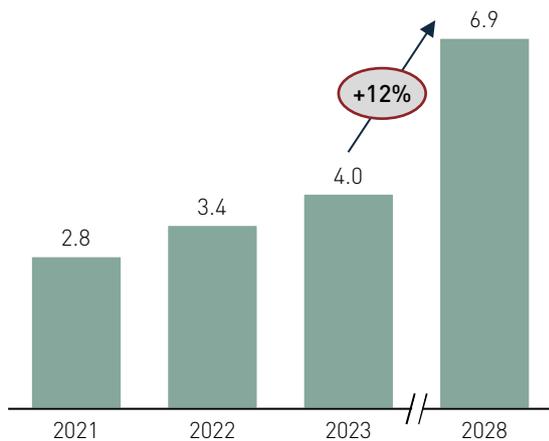


FIGURE 1: MENA GAMING INDUSTRY MARKET SIZE (USD BILLION)
[SOURCE: ANALYSYS MASON, 2023]

The gaming market in the MENA region is expected to reach USD6.9 billion by 2028, mostly driven by technological advances and new use cases. Immersive technologies (e.g., metaverse) provide unique capabilities whose advances will improve player experience and attract more gamers. The gaming ecosystem has lately enabled the development of new use cases through gaming events, e-sports teams and competitions, online streaming and broadcasting – ultimately driving growth in the gaming market.

Gaming strongly depends on the devices used, which leads to different types of gaming having its own trends and audiences. The three main gaming classifications based on the platform used are mobile, console (handheld and home console) and PC. Mobile gaming has been gaining popularity during recent years – both in the MENA region and worldwide, due to:

- high smartphone penetration providing ready access
- advancements in smartphones enabling high-quality graphics
- adaptation of popular PC/console games to mobile (e.g., League of Legends).

Gaming and Esports Strategy emphasizes local gaming companies and games development), deployment of government funds (e.g., via Public Investment Fund, PIF), and investments in integrated gaming companies (e.g., Nintendo), game developers and publishers (e.g., Scopely, Embracer Group). Further to this, KSA enjoys favourable in-country demographics as two thirds of the population is under the age of 35.

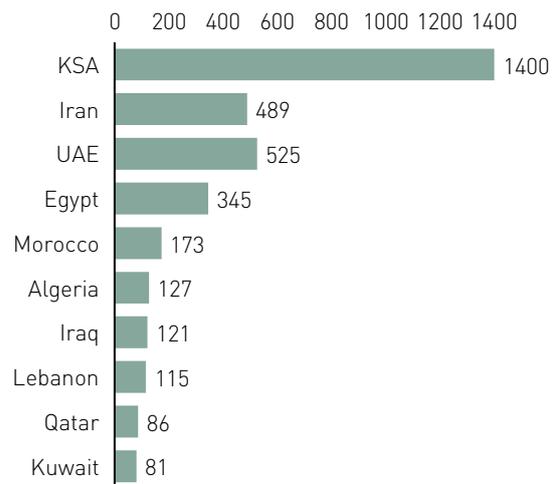


FIGURE 2: 2022 MENA GAMING MARKET SIZE BY COUNTRY (USD MILLION)
[SOURCE: ANALYSYS MASON, 2023]

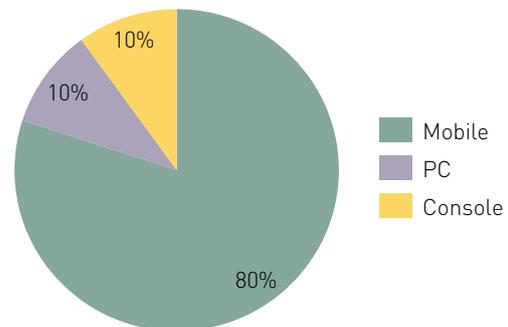


FIGURE 3: MENA GAMING INDUSTRY REVENUE MARKET SHARE
[SOURCE: ANALYSYS MASON, 2023]

Mobile gaming accounts for ~80% of the gaming industry market in 2023, given its ease of access driven by the ubiquity of smartphone devices and high-speed mobile networks. PC and console gaming each account for ~10% of the total industry market size and are preferred by core gamers as they provide a more immersive experience. Despite mobile gaming being the most popular, PC and console use is growing, primarily due to the rise of games-streaming as separate content and the more immersive experience they offer.

Based on an Analysys Mason survey of more than 18 000 participants from around the world, we have identified 3 clear and distinct 'gamer profiles': Casual gamers, Core gamers and Hardcore gamers. These player profiles are based on their engagement with different video games, number of hours spent on gaming, and the amount of money they spend.

Casual gamers, accounting for 38% of total gamers, mainly prefer mobile games while Core gamers (48% of total gamers) have a slightly higher preference for console-accessed games. Hardcore gamers, who are more dedicated to the gaming world and represent a smaller proportion of players, have no clear preference when it comes to access mechanisms to play games but have the highest propensity to play games.

Continuous advancements in technology (metaverse, AR/ VR/ XR, haptic equipment) and trends in the gaming industry (e.g., cloud gaming as a streaming service providing increasingly high-quality content, Netflix

offering gaming services) could lead to the emergence of new gaming types if they manage to attract and capture strong interest from players.

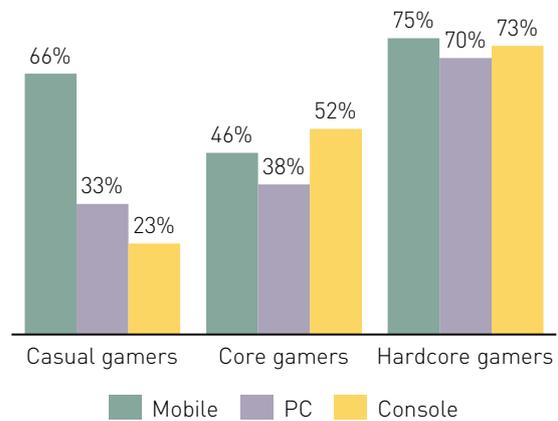


FIGURE 4: ACCESS PREFERENCES PER GAMER PROFILES [SOURCE: ANALYSYS MASON, 2023]

Value chain

The gaming industry value chain is comprised of five key components, as shown in Figure 5.

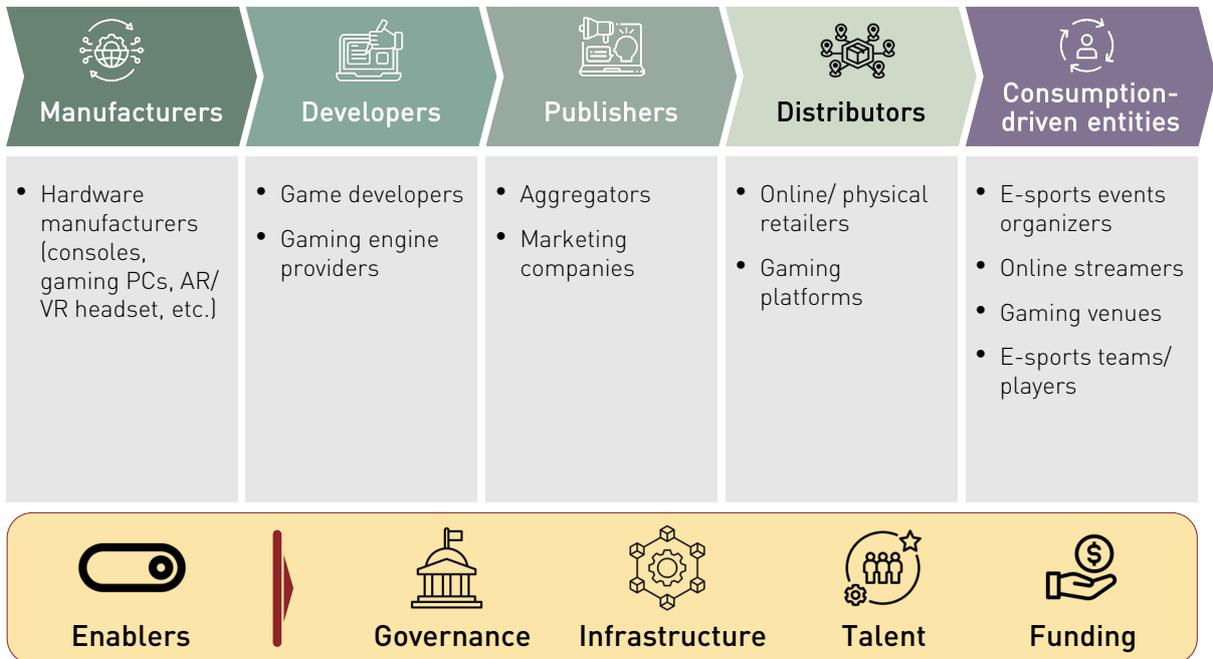


FIGURE 5: GAMING ECOSYSTEM VALUE CHAIN [SOURCE: ANALYSYS MASON, 2023]

Manufacturers are involved in the design and production of gaming hardware or equipment (consoles, gaming PCs, AR/ VR headsets, etc.) that enable the games to be created and played. Among the most popular hardware components in PC gaming are NVIDIA's GeForce graphic processing units (GPUs), especially their latest release (i.e., DLSS 3.5) which uses AI to make 3D graphics faster, AMD Radeon and Intel Arc. Regarding console hardware, the latest releases (e.g., PlayStation 5 and Xbox Series X) are mainly focused on providing better graphics/ resolution (games in 4K), higher processing capacity and faster storage compared to older versions.

Hardware enabling immersive experiences is evolving and improving; although Meta and Magic Leap's products did not gain significant traction upon release, Apple's market history suggests that the recent Apple Vision Pro – which promises a high-resolution immersive experience and usability improvements – could improve gamers' experience.

Developers are companies or individuals who focus on designing, programming, and producing video games for various platforms, working closely with their publishers who provide the necessary funding. They can be categorized into three different types: game studios (large companies dedicated to developing games, e.g., Unity, Juego Studios, Gameloft), independent game developers (individuals or small teams that create games outside of the traditional studio system), or in-house developers (developers which are part of a company's internal team, as opposed to external or third-party developers, e.g., Sony, Nintendo, Microsoft). Recently, game studios globally have been sought out by large publishers, media conglomerates, and other technology players for investment as they try to integrate themselves into the gaming value chain.

Publishers specialize in the marketing, localization and funding of video games, and usually hold the IP rights for them. Publishers maintain a close working relationship with game developers, collaborating on various aspects of the process, such as creative direction, release schedules, and updates. Recently, publishers have been acquiring game development studios or developing games by themselves, expanding across the gaming value chain.

Monetization strategies used by publishers vary, spanning from advertisements and in-game transactions in hyper-casual (one-off) games, to sequels from long-established franchises amassing significant sales from global fanbases. Particularly successful in recent years have been free-to-play games (e.g., Fortnite) that are monetized through in-game microtransactions (e.g., for customizations).

Publishers are also responsible for the localization of video games and their adaptation to specific markets. With the strong growth of the MENA gaming industry, especially in KSA, the need for regional game specificity has increased, leading to relevant players modifying selected global games and relaunching them in Arabic markets. For example, Ubisoft has released a version of Assassin's Creed that includes Arabic speech, subtitles, a localized user interface, and a protagonist named Itair Ibn-La'Ahad.

Distributors specialize in the sale and distribution of video games, serving various consumption entities including event organizers, teams, and end-consumers. There are several categories of distributors including online retailers (e.g., App Store, Google Play, stc play), physical retailers (e.g., GameStop) and dedicated gaming platforms (e.g., Steam, Epic Games, Ubisoft, EA). Recently, subscription gaming is increasing in popularity, used by >40% of adult gamers globally as of July 2023, where players can access a large number of games (typically over 100 games) for a fixed monthly fee. Major gaming platforms have successfully incorporated subscription gaming into their offerings and large streaming corporations are also exploring the market. For example, players like STARZPLAY and Netflix aim to take cloud gaming, with a payment model based on subscription gaming, to the TV set – targeting Casual gamers (unlike other cloud gaming platforms which target Core gamers) and offering it as a valued-added service. With video content piracy being a serious issue in the region, gaming could prove to be a lucrative proposition for streaming platforms.

"Gaming is definitely a big and attractive market in the region. STARZPLAY has already launched its own fantasy sports platform and we will continue to execute our wider gaming strategy for the region going forward"

- Alessandro Masaro, Chief Strategy Officer, STARZPLAY

Consumption-driven entities traditionally referred to gaming arcades and end-consumers. However, the last few years has witnessed the emergence of various other consumption channels, including online streaming and e-sports events, teams and players.

E-sports involves competitive video gaming where professional players or teams compete against each other in organized tournaments and leagues. These organized tournaments range from amateur competitions to multimillion-dollar prize events with huge audiences. With the rise of e-sports, the relevance of event organizers has been increasing as they structure the rules, processes and operations. It has also created new investment/business opportunities, attracting advertisers and sponsors outside the traditional groups (e.g., Saudi Aramco, PepsiCo, Red Bull).

Separately, the success of online streamers and broadcasters in engaging the audience has led to its expansion into the gaming industry, where players relay their gaming experiences. Twitch is among the largest online game-streaming platforms and has emerged as a key source of advertising over the last few years.

In addition to the value chain, which has various players across the different / integrated roles, several enablers are also required to establish the right ecosystem and capabilities to support the value chain – namely, governance, infrastructure, talent, and funding and M&A. The largest market in the MENA region, KSA, is currently focused on developing each of these enablers to drive strong growth in the gaming industry in the upcoming years.

Governance is comprised of the initiatives/actions (e.g., regulations) taken by the government or public entities to ensure a competitive environment for manufacturers, developers, publishers, and distributors, and differ based on the maturity of the ecosystem being governed. KSA has developed the National Gaming and Esports Strategy with four main goals to be achieved by 2030:

- becoming the top event host by organizing and hosting the most viewed e-sports events in the world
- establishing 250 gaming companies in the country
- being in the top three countries by number of e-sports athletes per capita
- developing over 30 games locally in KSA.

In addition, KSA has established the SEF as the regulating body in charge of coordinating government action, guiding investors and providing gamers with

platforms to compete and socialize. SEF has also been tasked with developing all levels of competitive gamers starting from the grassroots community level up to professional e-sports athletes.

Infrastructure entities provide the core infrastructure required to run the games and process the data. Traditionally, telecoms operators have provided connectivity to players' homes or gaming events, however, some of them are expanding their services as well. This is the case in KSA, where the major telecoms operators (i.e., stc, Zain, Mobily) are contributing effort and investment into the gaming industry. Specifically, stc, through its gaming arm (stc play), has established a gaming platform where players can access gaming events and acquire related gaming hardware. Additionally, stc play entered into a sponsorship deal with Geekay e-sports (to use, publicly display, transmit, and stream the stc play marks and to run tournaments and create content on stc play) and an agreement with LG (exchanging and sharing relevant and necessary data and information). Similarly, Zain has partnered with NVIDIA to offer NVIDIA's 5G cloud gaming platform GeForce NOW in KSA.

Talent development through programs and training improves and develops local gaming skillsets and capabilities in order to build national strength in the sector. In KSA, several governmental entities (e.g., Ministry of Communications and Information Technology (MCIT) and SEF) have launched educational programs and training schemes. MCIT, in partnership with DigiPen (dedicated to building national strength in the sector) and Advanced Initiative (an educational technology company), has launched the Game Changers Program which aims to help locals launch indie game companies that produce engaging and interactive experiences for the MENA region. The Game Changers Program features an initial intensive training phase that will lead to an incubation phase or employment, in addition to various packages to support start-ups. Furthermore, SEF has set up an e-learning platform, Saudi Esports Academy, which provides gaming enthusiasts with the opportunity of both improving their skills and bringing them closer to some of the main professional and global gaming (especially e-sports) experiences.

Funding/M&A and investments support and drive growth, development, and expansion within the sector – including raising capital, full/partial acquisition of gaming companies or IP and crowdfunding.

Buyer/ Investor	Target	Deal description	Value (USD bn)	Date
Savvy Games Group (PIF)	Scopely	Wholly owned – mobile games developer and publisher	~4.9	Apr 2023
PIF	Activision Blizzard	4.8% stake in Activision Blizzard – game developer, publisher and distributor	~3.6	Aug 2021
Savvy Games Group (PIF)	Nintendo	5% stake in Nintendo – a fully integrated gaming company	~3	May 2022
Savvy Games Group (PIF)	Embracer Group	8.1% of shares in Embracer Group – a PC, mobile, console game developer and publisher	~1	June 2022
Savvy Games Group (PIF)	ESL Gaming	91% stake in ESL Gaming – esports events and tournaments organizer	~1	Apr 2022
Savvy Games Group (PIF)	VSP0	Minority stake in VSP0 – an esports-focused agency that houses multiple esports teams	~0.3	Feb 2023

FIGURE 6: SAMPLE RECENT LARGE M&A TRANSACTIONS DRIVEN BY KSA [SOURCE: ANALYSYS MASON, 2023]

KSA is one of the leading countries globally in terms of gaming acquisitions and investments. PIF (KSA's sovereign wealth fund) launched Savvy Gaming Group in 2022 aiming to channel its investments in the gaming sector (especially e-sports), announcing an investment of USD37.8 billion later that year intended to be used for investments into several key gaming companies and publishers. So far, as seen in Figure 6, Savvy Gaming Group has acquired minority stakes in Nintendo (a wholly integrated gaming company across all the components of the value chain from manufacturer to distributor) and Embracer Group (a partially integrated PC, mobile and console developer and publisher gaming company), as well as a full acquisition of ESL Gaming (an e-sports organizer and production company that establishes video game competitions worldwide). In addition, MiSK (a government sponsored not-for-profit organization) has acquired an initial 33.3% stake in Japanese video game publisher SNK for a valuation of USD217 million, with plans to grow this up to 51%.

Overall, KSA is committed to growing its gaming industry, showing huge potential to become a regional and global gaming hub with a strong focus on four key factors:

- **economic development** – grow economy with interest and investment from relevant players in the gaming ecosystem
- **employment opportunities** – create jobs across the gaming industry value chain
- **demographics** – engage the youth, two thirds of the population is under the age of 35 (which contains most of the gaming demographic)
- **quality of life** – offer new entertainment options via gaming and e-sports which suit the young population.

In summary, over the past few years the digital gaming market in the MENA region has experienced a significant surge in popularity and growth. Fueled by a young and tech-savvy population, and coupled with the government's efforts to boost the gaming industry through initiatives such as establishment of the the SEF which has organized gaming events with prize worth over USD10 million, developed multiple national strategies and made several investments in the sectors, along with major telecoms operators (i.e., stc, e&, Zain, Mobily) who have also acted as one of the key facilitators in this booming market, through their efforts establishing their own gaming arms / platforms or investing into the sector, the gaming industry in the region is poised for huge growth in the future.

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We have successfully completed around 775 strategy and operations advisory engagements for TMT clients in over 60 countries in the last three years alone.



Offices located in Europe, the Middle East, Asia and the Americas

For more than 30 years, our intellectual rigor, operational experience and insight have helped our clients in the telecoms space such as operators, government organizations and investors. We have also performed an equivalent amount of work with technology and internet-first businesses across a wide array of strategic matters and have assisted investors in this domain on numerous transactions.

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- 1 • 150+ due diligence assessments of technology and internet assets in the MENA, South and South East Asia, and Europe regions over the last couple of years
- 2 • 150+ commercial due diligence and market assessments in the MENA, South and South East Asia region alone
- 3 • First port of call for due diligence assessments of internet assets for marquee investors globally
- 4 • Provided advice on investments worth over USD15 billion over last five years

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- Multiple diligence assessments of cloud computing, SaaS, and AI firms in various geographies (including India and MEA)
- Assisted multiple governments and corporates globally through their journey to implement deeptech solutions

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- We have conducted 15+ full commercial due diligence assessments of horizontal e-commerce majors in the MENA, South and South East Asia region
- We have been advisors to marquee private equity funds and financial institutions on over five commercial diligence assessments of leading hyper-local delivery players in the grocery and food delivery market

Payments and mobile wallets

- We have supported 10+ commercial diligence assessments of leading digital wallet providers in India, South-East Asia and the Middle East including of a leading wallet provider in India
- We have also assisted telecoms operators in developing their commercial and technical digital wallet strategy

Cab aggregation

- We have conducted commercial due diligence assessments of the leading cab aggregator in India four times for different marquee hedge funds and financial institutions in the last seven years
- We have also provided diligence support for the self-drive commercial car market and its leading player across Asia

Content including OTT

- We have conducted full commercial and technical diligence assessments of multiple players across the video and music content value chain – from producers to distributors and streaming assets
- We have also supported leading mobile operators in the region in developing their content and OTT strategy

Others

- Over 15 diligence projects in the classifieds and online travel space
- Full commercial diligence assessments of multiple ed-tech firms across MENA, South and South East Asia region
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