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Digital Platforms and Services: Operating in the OTT Environment

Operators should partner with OTTs to differentiate and reduce churn, whereas equity investments could be undertaken for financial and strategic diversification

Over-the-top (OTT) services are considered to be online mobile applications that are typically provided by third parties through app stores and often consume significant mobile network bandwidth. With billions of users, OTT services already have huge scale and still have further growth potential. In this article, we discuss four kinds of OTT services – consumer messaging & voice, mobile gaming, video and music streaming, focusing on the impact to telecom operators and the options to address and benefit from collaborating with OTT players.

A major disruption of voice and messaging revenue is imminent for GCC telecom operators; they cannot successfully fight OTTs, but can participate in their monetization efforts. The local mobile gaming industry is nascent, but the region has potential. Telecoms can partner with gaming companies or even invest in them. In video and music streaming, global OTT players have scale and top Western content so are poised to play a significant role in the markets. At the same time local providers have a chance by capitalizing on local tastes and market knowledge. Telecoms should partner with video and music OTTs to reduce churn, whereas equity investments could be undertaken for financial and strategic reasons.

Three main OTT business models have emerged:

- Subscription-based the user pays a regular subscription fee (typically monthly) to gain access to the full service, usually ad-free;
- 2. Transaction-based the user pays for a specific transaction only, such as viewing a movie or listening to a song;
- Advertising-based the user receives the service for free or at limited charges, however advertising is inserted along with the main content and/ or the user's is used for marketing/advertising purposes; in addition, an ad-based model is used to attract users, some of whom might later convert to subscription-based service.

Out of these four verticals, consumer messaging & voice OTT apps attract the highest number of users – the combined users of nine of the most popular services at the end of 2016 exceeded a stunning 4.2 billion people. However, these applications have barely been monetized yet, with Tencent as the main player to meaningfully profit from its WeChat app (revenues of ~USD 1.8 billion as of early 2016). By now the messaging and voice apps are seen as an indispensable, free part of the mobile experience. As a result, revenue potential in OTT messaging and voice is mostly in advertising and, to a certain extent, transactions.



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18

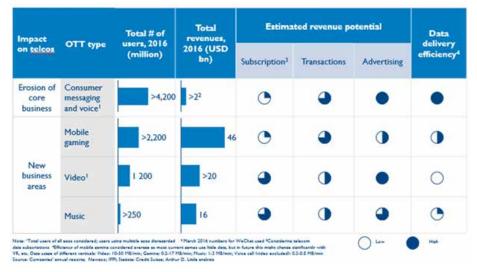


Figure 1: Estimated global size of key OTT verticals

Mobile gaming is practiced by around 2.2 billion people, and generated USD 46 billion in revenues in 2016. Historically the most popular games have utilized the freemium model, whereby gamers get free access to a game, but can buy addons with in-app purchases. Therefore, the revenue potential of mobile gaming is in transactions and to a certain extent in advertising.

OTT video has more than 1.2 billion users globally, and utilizes two distinct business models. On the one hand, more than 1 billion users of YouTube consume free, amateur or semi-professional content supported by advertising. On the other hand, players such as Netflix and Hulu offer premium content on a monthly subscription basis. Therefore, the revenue potential in OTT video is in both, advertising and subscription, with a more limited opportunity in transactions. Digital music streaming had 97 million paid subscribers at the end of 2016. We estimate that this corresponds to more than 250 million subscribers in total, including ad-supported usage. Therefore, we see the revenue potential for online music mainly in subscriptions and advertising, with a more limited opportunity in transactions.

Each OTT player originally began operations in a specific vertical, however there is a trend towards convergence of the verticals. For instance, music streaming players like Spotify also selectively offer videos whereas messaging players become platforms for gaming (WeChat) or video viewing (Snapchat). In subsequent sections, we discuss the impact of OTT services on telecom operators as well as possible strategies for telecoms.

Current situation of OTT services in the GCC

The regional OTT environment is characterized by a strong representation and often dominance of global players and few local service providers with high ambitions. The GCC players are active in the verticals where the local audience's language and tastes are of high importance – in particular video, music and gaming.

Several factors influence the ability of the user to take advantage of OTT services:

 Technology availability – in the GCC mobile broadband is widely available and smartphone penetration is among the highest in the world (UAE and Bahrain – 92%, Kuwait – 90%, Qatar – 86%, Saudi Arabia – 71%), therefore technological concerns play a limited role in the provision of OTT services;

- Content availability in the GCC top premium content is typically available, even if sometimes delayed; at the same time some of the large OTT players such as Spotify are not available in the region, likely due to licensing issues;
- Regulatory considerations in the GCC these affect mostly OTT messaging and voice, whereby the voice call functionality of applications is typically blocked on all networks, and some applications are restricted (e.g. Apple's FaceTime). However, maintaining a block on OTT services is not a sustainable model

Relatively muted impact of OTT on GCC telco revenues for now – the quiet before the storm?

- We believe that telecom revenues in the GCC are in for further disruption due to a full-blown revenue and EBITDA impact of OTT messaging & voice
- In this situation, telcos need to rebalance towards better data monetization and efficient operations; in addition, they can partner further with OTT providers as part of the monetization efforts

All leading global chat apps are available in the region, including WhatsApp, Facebook Messenger, Viber, Snapchat, WeChat. The high smartphone penetration in the region translates to high messaging app usage, reaching 97% WhatsApp penetration in the UAE according to some surveys. Local

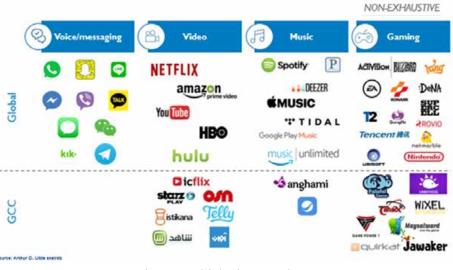
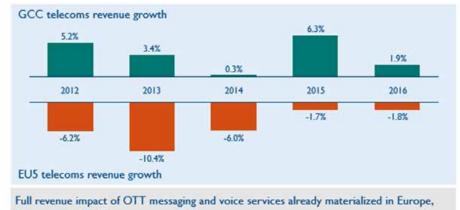


Figure 2: Key global and GCC OTT players

¹WhatsApp, Facebook Messenger, WeChat, Snapchat, Kik, Viber, Line, Telegram, KakaoTalk

² The Mobile Economy – Middle East and North Africa 2016



but not yet in GCC

Note: "Largest 5 BJ markets considered: Germany, UK, France, Italy, Scelin Source: Operatory' annual records: Arthur D., Uitle analysis

Figure 4: Revenue growth for EU and GCC telecom operators, 2012-2016

messaging applications are not a viable proposition due to the strong network effects of global incumbents.

As we stated in our February 2016 report "The OTT conundrum for MENA telecoms: Achieving sustainable growth in a digital world", the benign regulatory environment supports the existing business model of GCC operators. Unlike other regions, notably Europe, OTT messaging and voice in the GCC has not disrupted telecom operator revenues as strongly as in other regions. Total GCC telecom revenues posted a cumulative increase of 18% between 2011 and 2016. At the same time total telecom revenues in the five biggest European markets declined by 24%. While there are more reasons behind this drastic drop, it is clear that substitution of paid-for calls and text messaging with free OTT services has been a driver.

At the same time, GCC telecom revenue growth slowed down significantly to 1.9% in 2016 from 6.3% in 2015. This happened across all markets, and some players plunged from growth to decline in 2016. There is no more growth potential in further market penetration. The SMS is largely irrelevant and the focus of value preservation is on voice. Average data usage is increasing but operators have been unable to increase prices accordingly; as a result, the price per GB of data is falling. In the enterprise market, unified communications apps are gaining traction. Therefore, in order to preempt a major revenue and EBITDA disruption, operators should focus on recovering

revenue by effectively bundling and monetizing data and on introduction of efficiency measures.

Messaging apps are becoming the platform for disruption, as shown by WeChat in China. In the GCC offering digital and e-commerce transactions through the apps to an underbanked population is an imminent monetization opportunity. In such a scenario, telecom operators can provide carrier billing and take a slice of the revenue pie.

Gaming - an untapped differentiator?

- Local gaming companies are facing a relatively untapped market
- Telcos can partner with game producers in order to enhance their own value proposition vis-à-vis youth segments; in addition, they can make equity investments in an immature market with good potential

Established global players dominate the gaming market. These include traditional video game publishers that have entered the mobile space such as Electronic Arts, Take-Two Interactive and Activision Blizzard, as well as 'native' mobile game developers such as Netmarble and Supercell. Some initial attempts are made to establish a local video game industry. Companies such as Falafel Games, Wixel Studios, Game Power 7 and Quirkat develop and publish games; however, for the time being there are no significant local content players.

The overall MENA gaming market is quite small, estimated at less than 2%

of the global market. At the same time, significant segments of the GCC's young, tech-savvy population have a passion for gaming. In Saudi Arabia, surveys show that 25% of gamers play for three or more hours per day, and 13% of gamers spend SAR 500 or more on gaming the so-called 'whales' that spend a disproportionately high amount of time and money on gaming. Furthermore, gaming is a creative area that allows for content localization according to local tastes, which is currently lacking. The local players are used to playing the leading global games and there is no significant local gaming production with content relevant for the region beyond language localization.

Some initial efforts have started, with regional-focused gaming developers and publishers appearing in Lebanon, Jordan and UAE. Regional venture capital firms such as Middle East Venture Partners and twofour54 have invested in several gaming startups across the region – Falafel Games, Jawaker, Unnyhog.

Partnerships between the gaming startups and telecom operators have win-win potential. The operators' distribution network and customer base can be give a powerful boost to the region's nascent gaming industry. For telecoms, carrier billing partnerships or gaming-themed bundles can be an opportunity to differentiate.Zero-rating of e-sports viewing, for instance a Twitch package, can also separate an operator by the pack. Finally, equity investments in gaming can provide both financial and strategic return.

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In video, content is king; is Arabic content worthy of the throne?

- We expect that Netflix will become a strong – if not dominant - player in the region on the back of its improved content
- Telcos can partner with Netflix or the local players to enhance their value proposition and reduce churn

The GCC region historically has been a huge consumer of free OTT video, in particular YouTube. This involves typically amateur or semi-professional content. The global leader in premium, professional content – Netflix, launched in the region in 2016, along with Amazon Prime Video. In addition, several local players compete in the space, counting on Arabic content as a key differentiator – icflix, Starz Play, Istikana, Telly. In addition, in May 2017 the South East Asian provider Iflix entered the region with a launch in Kuwait and Bahrain.

In the OTT universe, video represents the most complex value chain, with multiple players both cooperating and competing at different parts of the value chain as shown in Figure 3.

Telecom operators participate in the value chain by aggregating and distributing content, and more recently also by engaging in content creation. Locally, players only aggregate and distribute content, typically as a complement to their IPTV platform.

We believe that having the most relevant content is key to winning in OTT video and Netflix has a strong chance of ultimately

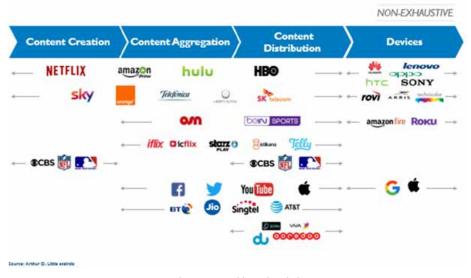


Figure 3: OTT video value chain

leading in the GCC markets. The company started 18 months ago with a relatively small catalogue with no Arabic subtitles and without its top shows, but has made significant strides over the past 18 months. It launched its own blockbuster shows ('House of Cards.' 'Orange Is the New Black'), added Arabic subtitles to all content and Arabic dubbing to some of the children's content. Netflix boasts the largest non-Arabic library in the region, with 2.5 - 7 times the content of regional players, and is particularly strong in TV shows - a prime area of the company's own content investment. The app offers excellent user experience and functionalities including ability to download and watch offline. Therefore, Netflix is currently poised to win the content game, especially if it manages to increase its Arabic offering - potentially by creating its own Arabic content as it has done in other non-English markets, or alternatively by partnering.

	Netflix	Amazon Prime Video	Starz Play	ieflix	Istikana	Telly
Arabic shows (#)	2		17	165	99	~70
Arabic movies (#)	3	4		~1,200	132	46
Non-Arabic ¹ shows (#)	~290	~106	102	22		14
Non-Arabic movies (#)	~2,500	~2,350	506	900	<u>8</u>	~370
Children's content ² (#)	144	100	100	58	14	13
Monthly subscription fee (USD)	7.99-11.99	5.993	7.99	7.99	0.27/day	4.99
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However, for the time being the local players are significantly stronger in their Arabic content offering, which will be important for some segments of the population. icflix is by far the strongest with around 1,200 Arabic movies. Once the market matures, we expect a clear winner to emerge from the Arabic content plays, which might be a runner-up in the region.

For telecom operators, the OTT video services represent a partnership opportunity through which to increase the attractiveness of their data bundles, and thereby potentially decrease churn.

Starz Play is an interesting case focusing more on quality than on quantity, with top blockbuster movies and exclusive content. At the same time we consider its content proposition somewhat inferior to Netflix's in Western content but not comparable to the local players in terms of Arabic content.

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Non-Arabit content includes Hollowood as well as non-Hollowood content - French, Indian, etc. + Movies and shows combined: 2 USD 2.99 for the first 6 months

Figure 6: Available content on key OTT video services available in the GCC markets, May 2017

To scale wins – is there room for a GCC OTT video giant?

- We believe that OTT video will consolidate in the region and there is room for a strong local player
- Telcos can play a role in the process, by making selective equity investments in video OTT players

Given the fixed investment in content rights (and in some cases - content creation), strong economies of scale exist in video streaming. Therefore, we expect that over time the number of players on the GCC market will decrease and consolidation will happen. This will be aided by the data-driven nature of the industry - the more data on the viewing habits a player has, the better known the viewers' habits are and the easier it is to recommend - or create - the right content. Netflix has utilized this virtuous cycle with great success, which results in increased subscriber stickiness and. in the case of hit shows, new subscriber acquisition.

To make things even more complicated for the regional players, the available research has shown that local audiences have relatively higher willingness to pay for high-quality Western content. At the same time, the willingness to pay for Arabic content is relatively lower, as this content is often available on free-toair television. This makes partnerships especially important as a distribution channel. Therefore, all of the regional OTT video players have engaged in some form of partnership activity – with both telecom operators and other vendors, as shown in Figure 6.

In order to succeed in attracting paying customers beyond the free trials, OTT players might need to introduce lowerpriced packages, potentially with a more limited offering. Telecoms can play a role in the future direction of the vertical by making equity investments in OTT video players, thereby potentially combining strategic with financial objectives. This is a path that has been taken for instance by Singtel in South-East Asia through its investment in Hooq.

Music is still up for grabs – is there money to be made?

- One local player has emerged as a frontrunner and stands a chance in the absence of some of the global giants
- Telcos can partner with music streaming players to enhance their value proposition and reduce churn, or even make investments in them

In music, several of the major global players have not yet entered the region –notably Spotify, but also Google Play Music, Amazon Music Unlimited and Tidal. The main reason is content rights acquisition, even though limited financial resources, piracy and low credit card

GCC telcos are faced with significant core revenue disruption by OTT voice players. To counter this, operators need to strengthen their data monetization capabilities, make their operations more efficient and develop partnering skills. At the same time OTT services themselves have a long way to go until market maturity and full monetization.

penetration also play a role in the relative attractiveness of a market. Out of the global players, Deezer and Apple Music are present, and they are competing with the local service Anghami.

Similar to the dynamics in video streaming, Anghami uses Arabic content as its key differentiator, with extensive Arabic music selection, Arabic search functionality and multiple filters for various Arabic content. Anghami receives strong media exposure through some of the region's most successful TV shows such as Arab Idol, Coke Studio and The Voice. Furthermore, the company has a partnership with du in the UAE as well as with Huawei for easy activation of ring-back tones on Huawei devices. As a result, Anghami claims 33 million listeners across the MENA region.

However, even globally the music streaming industry has still not reached maturity – and its business model has not been proven. For streaming players, partnerships and a variety of pricing models will be equally critical to increase reach and foster conversion of free to paid users. For telecoms, partnering is an opportunity to enhance their value proposition, while investment can bring financial return, especially as the industry consolidates.

Conclusion

GCC telcos are faced with significant core revenue disruption by OTT voice players. To counter this, operators need to strengthen their data monetization capabilities, make their operations more efficient and develop partnering skills. At the same time OTT services themselves have a long way to go until market maturity and full monetization. The verticals are not mature even globally, and in the GCC they face an additional set of challenges, including free content availability, piracy issues, and limited willingness to pay. Telecom operators in the region can play an indispensable role in scaling the OTT services by:

- Selectively embracing OTT messaging and voice providers in their monetization efforts – and taking a cut in the process
- Partnering with local mobile game producers, global or local video players, or music streaming players, thereby enhancing their own value proposition and reducing churn
- Making selective equity investments in OTT players for financial and strategic reasons, playing a role in the consolidation of these industries.