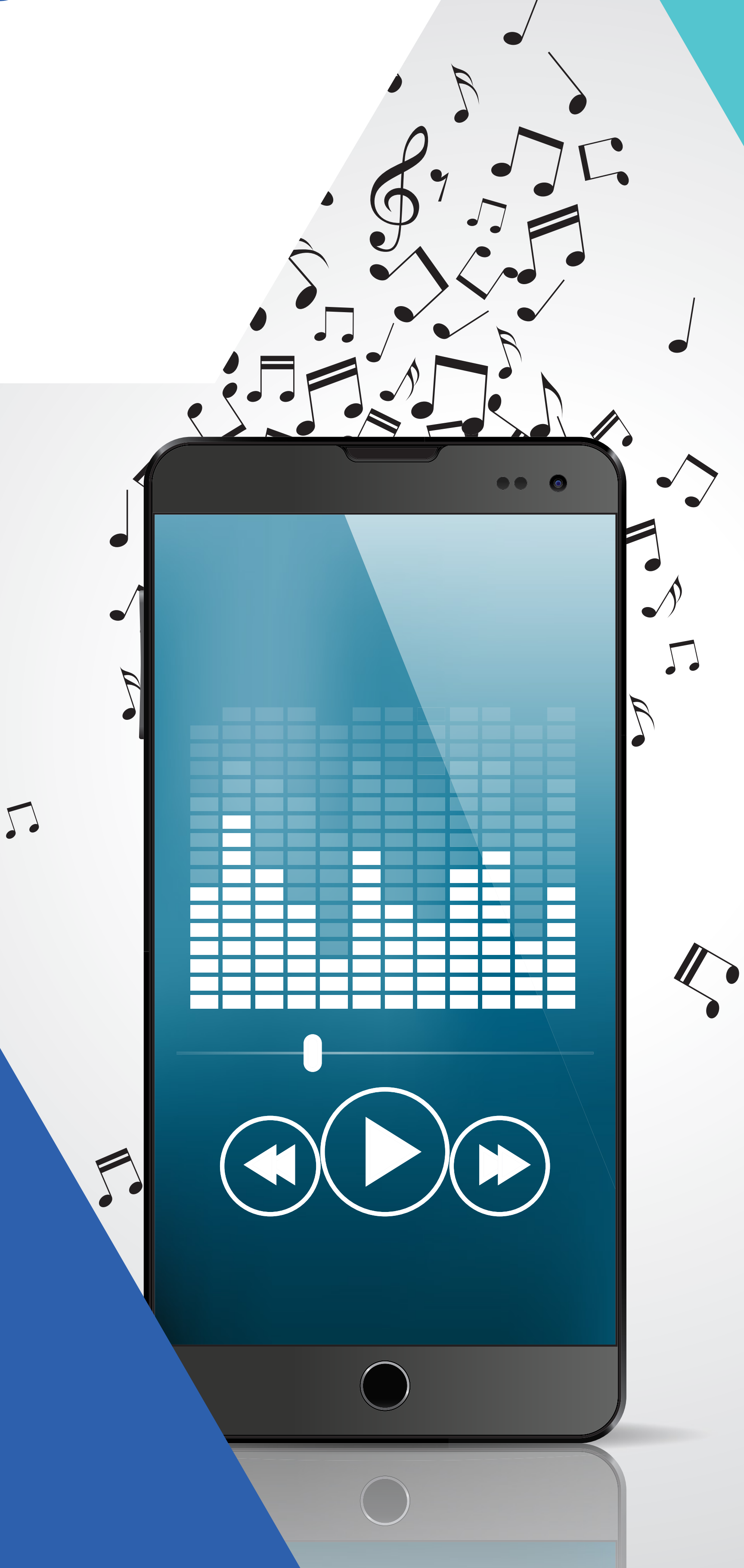
The beat of progress: The rise of music streaming in Asia

November 2016



Digital/McKinsey

Content

A. Executive summary

In line with global trends, the Asian music industry draws most of its revenue from the digital world. But as is the case with other digital services, the speed of change here has outpaced the rest of the world. Globally, it took two years for digital revenue to overtake that of physical content. It also took two years for revenue from music streaming to exceed downloads. In Asia, both shifts occurred in a single year. Today, 56 percent of digital music revenue in the region comes from music streaming. This growth has been powered by the emergence of a generation of digital natives, improving connectivity, and more localised and personalised curation.

While global heavyweights like Spotify launched in Asia earlier, it is now regional services like JOOX that occupy the top of the download charts, spurred in part by better localisation of editorial teams, user interfaces, and music content. The emergence of regional streaming service providers propelled the entire industry to greater reach and scale, which in turn attracted interest from brand advertisers to use this as a platform to market to younger people, and mobile operators to include streaming music as a must-have in their service line-up.

Despite the growing popularity of music streaming among consumers, the path to profitability for these services is less straightforward. Challenges include limited end-user ability and willingness to pay for subscriptions, low advertising prices, and high content costs. To illustrate, to be profitable a hypothetical "freemium" player with a 15 to 20 percent market share would require either 60 percent of its users to pay for premium subscriptions, or attract 30 percent more advertising revenue than the total music streaming industry in the region did in 2015. Clearly, a more sustainable path forward will require changes to the prevailing business model.

Innovations by music streaming providers are shedding light on what this path forward could look like. Firstly, advertisers and music streaming services are using Big Data to deliver more targeted advertising and marketing messages, raising their effectiveness as new marketing platforms that brands can no longer ignore. Secondly, music rights holders and music streaming services are increasing revenue together by producing original content and events, and experimenting with charging for live concert broadcasts. Finally, channel partners like telecommunication companies are working more closely with streaming music services to develop unique offers and customised content, and allowing more consumers to get music streaming services at affordable rates.

As with development of other digital services, players in the Asian market could be trailblazers of innovative music-streaming business models. Success could redefine how music is consumed and monetized the world over.

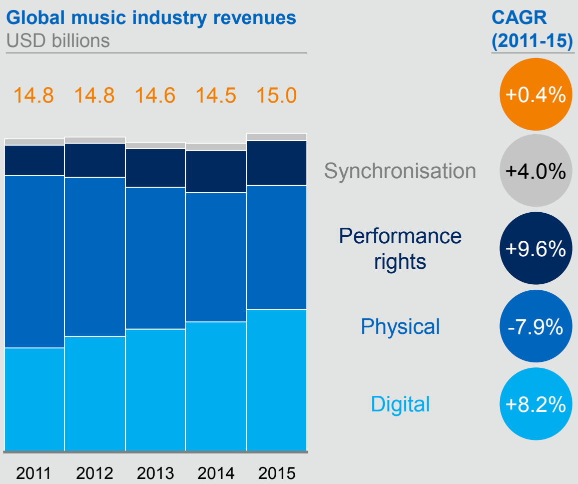
B. The shifting Asian digital music landscape

A tale of two trends – physical to digital and downloads to streaming

In 2014, a significant shift occurred in the global music industry. A decade or so since the launch of iTunes, the first digital music platform at scale, revenue from digital channels overtook that from physical channels (see Exhibit 1). In 2015, digital channels accounted for 45 percent of the global music industry compared with 39 percent for physical channels.

Exhibit 1

The global music industry is growing increasingly digital



SOURCE: IFPI

In 2016, a second significant shift is widely expected within the digital music industry, with streaming to overtake download revenue. As early as 2011, 13 percent of global digital music revenue came from streaming versus 72 percent from downloads. By 2015, this ratio had shifted to 43 percent compared with 45 percent. The movement has been spurred by the spread of smartphones, which allow for listening on the go, and the widespread availability of quality freemium services, which allow access to a deep library of content, not just music paid for and downloaded onto a device. Some 68 million consumers globally paid for a music subscription service last year, up from just 8 million in 2010.

However, in a handful of smaller, high potential Asian markets, both of these shifts took place in a single year (2014), indicating that the forces shaping the global music industry appear to be more pronounced in the region. In this report, we will focus on the digital music streaming segment, the most important driver of growth in the music industry.

The high potential focus markets

Within the global digital music market, Asia is relatively small, with regional revenue amounting to less than a third than that of the United States ($900 million versus $3.3 billion in 2015). Japan has dominated the market, with about a 76 percent share in 2015, but consumption there stagnated in the period we studied.

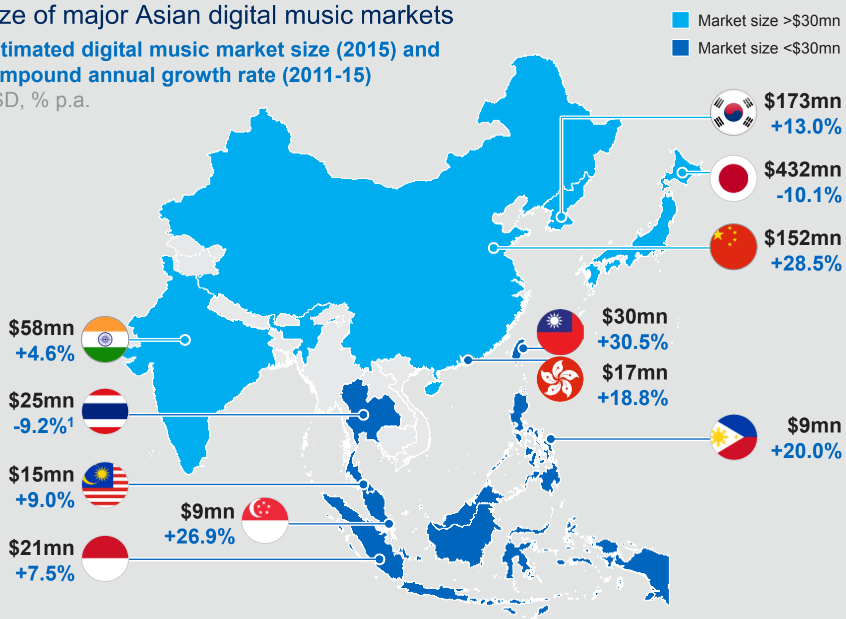
However, the opportunity is significant: although Asia accounts for only 14 percent of global digital music revenue, the region had 44 percent of all internet users in 2015, and 25 percent of global GDP in 2013. The opportunity is most apparent in Asian markets of less than $30 million. These have grown rapidly in recent years and have the potential to expand even further (see Exhibit 2). We pay particular attention to these markets in our report.

Exhibit 2

Size of major Asian digital music markets

Estimated digital music market size (2015) and compound annual growth rate (2011-15)

USD, % p.a.



1 The shrinkage of Thailand's digital music revenues from 2011 to 2015 is primarily due to a drastic decline in mobile personalization and single-track music downloads, while both premium and ad-supported music streaming revenues have increased during this time

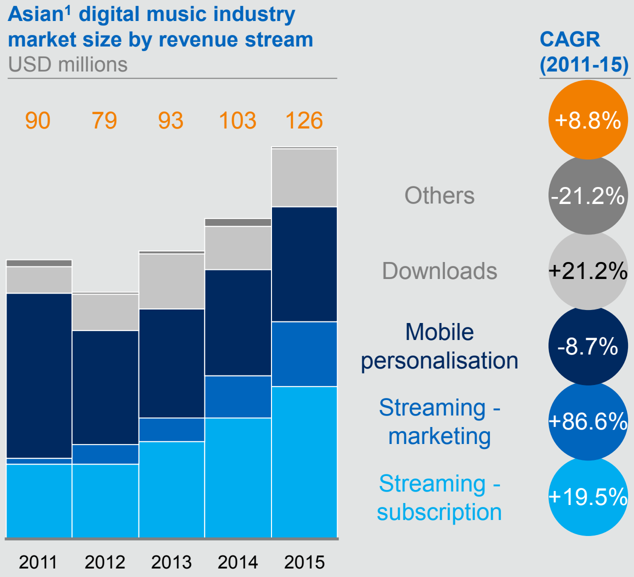
SOURCE: IFPI

These focus markets have collectively been growing significantly faster than the global digital music industry (8.8 percent a year compared with 0.4 percent a year between 2011 and 2015). Several shifts in digital music revenue streams have influenced this trend (see Exhibit 3):

- Sharp increase in subscription and advertising-supported revenue
- Continuing growth in download revenue
- Gradual decline in mobile personalisation revenue

Exhibit 3

Digital music industry market size – selected Asian markets



1 Based on sizing of digital music industry for the following markets - Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Taiwan, Thailand

SOURCE: IFPI (2016)

Explaining the rise of music streaming in Asia

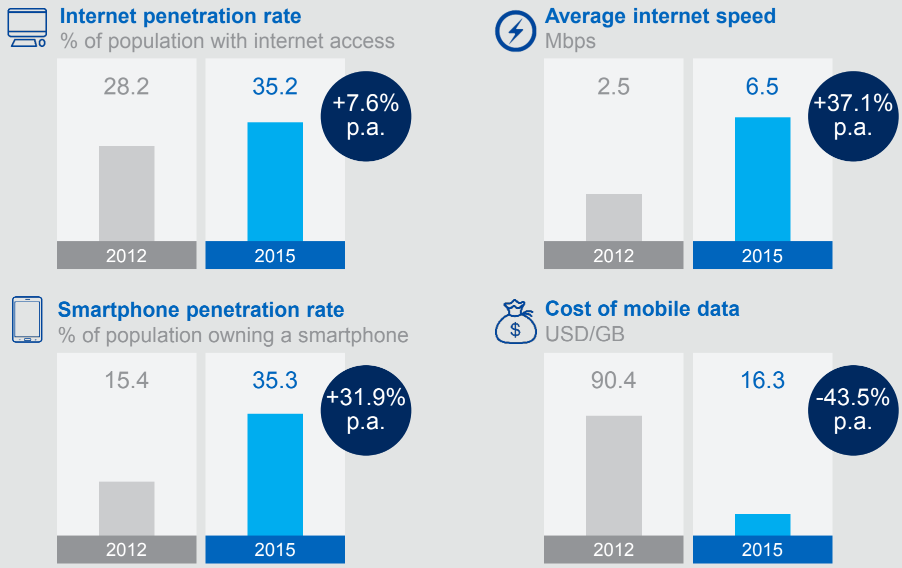
This upward trend in the Asian music streaming industry is expected to continue, with the number of digital music users expected to grow about 15 percent a year from 2014 to 2020. Several factors underlie this growth:

A young, growing generation of digital natives – About 50 percent of the revenue from music streaming in 2015 came from those under 35 years old. These millennials are more likely to be digital natives; nearly half their media consumption is digital, according to research conducted in the United States. In some developed markets, about 70 percent of this demographic cohort already pays for a video streaming subscription, and the number is rising. This makes digital channels such as music streaming critical to engaging with this population segment. Furthermore, the popularity of music streaming will only increase. In 2015, Spotify reports that its users spent about 150 minutes a day listening to music streaming, more than double what they used five years ago.

Improved connectivity – Across the markets studied, connectivity, a prerequisite for digital music consumption in general and on-demand music streaming in particular, has improved significantly (see Exhibit 4). This is a result of mobile network operators' big investment in infrastructure (about $600 billion), facilitating the provision of about 90 percent 3G coverage and about 70 percent 4G network coverage for Asian consumers by 2020.

Exhibit 4

Improving connectivity – wider, faster, smarter, cheaper



Note: Figures reflect weighted averages for Hong Kong, Taiwan, Singapore, Malaysia, Philippines, Indonesia, and Thailand. Averages weighted by total population for penetration rates and by number of internet users for other metrics.
SOURCE: EIU, Strategy Analytics, Analysys Mason, World Bank

Innovations in the music streaming user experience – Innovations in the digital ecosystem and corresponding changes in consumers' online behaviours have allowed digital music providers to considerably improve users' experience. These include:

- **Localisation** – Music streaming services in the region have grown increasingly tailored to local user tastes. For instance, most services have built up their local language libraries, making digital music more relevant to consumers. Local language content is particularly important in some Asian markets – in Thailand and Taiwan, 40 to 50 percent of the most popular singles are in the local language. Providers have also become more adept at curating content suited to local tastes. In Malaysia, where music tastes vary based on users' primary language, JOOX offers separate and unique user interfaces for Chinese, English, and Malay speakers.

- **Personalisation** – The proliferation of social media and personal data shared on it, the consumption of digital music through smartphones, and the advent of more advanced data analytics have allowed providers to tailor content, based on a granular understanding of individual users' tastes. For example, JOOX provides personalized playlists called "Your Daily Music" to its Hong Kong users (to be made available to additional markets soon) by allowing them to select up to 10 artists or music genres that appeal to them, after which JOOX automatically compiles a playlist of songs each day and pushes it to users. Spotify's "Discover Weekly" playlists - unique playlists curated through machine learning algorithms for each user - consist of music that the user has not yet listened to; 71 percent of listeners like at least one song in each "Discover Weekly" playlist.

- **Social nature of music streaming –** Most digital music providers allow users to create new accounts by signing into existing social media profiles, thereby making it easier for them to share digital music with others. In addition, nearly all providers allow for and encourage users, some of whom may not even know each other, to build playlists together. This is particularly important in Asia given the greater social nature of the internet in the region – of the 10 countries globally that spend the most time using social media daily, 4 are high growth markets in the region. Services such as JOOX, for instance, take advantage of this phenomenon by offering incentives to users to share songs they enjoy on social media platforms such as Facebook or WeChat Moments. Users who do so are offered free access to premium features for a limited period.

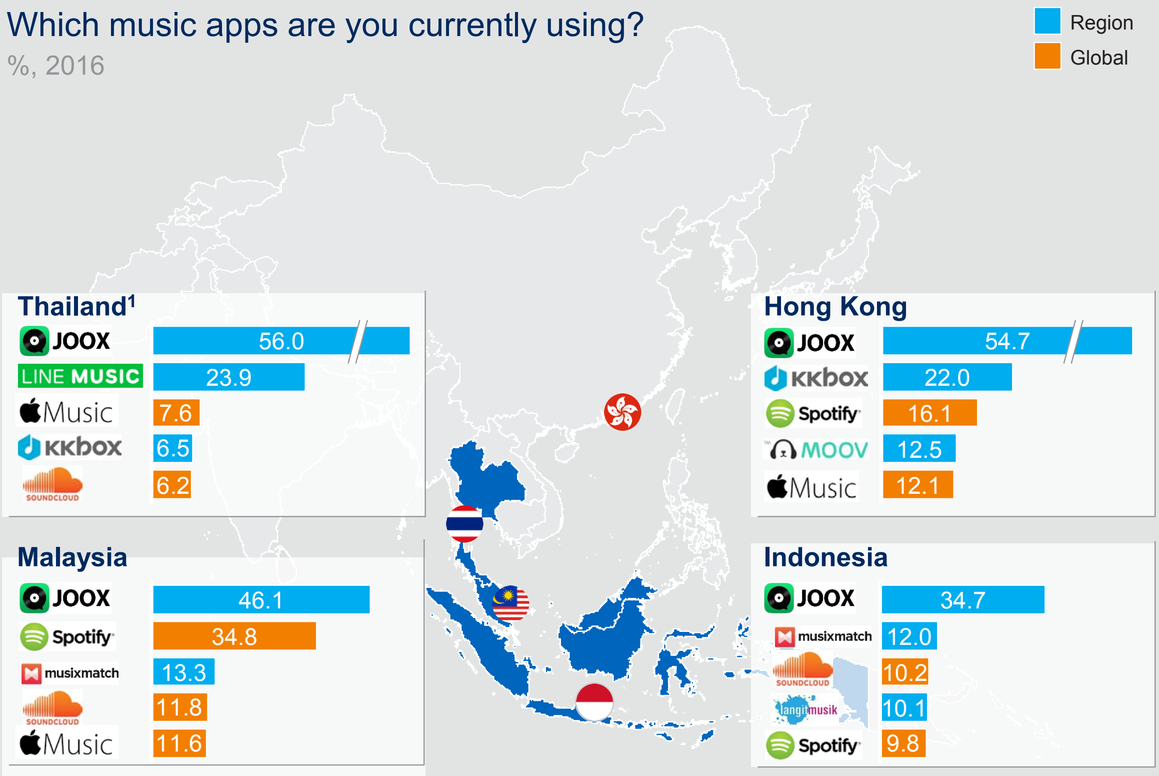
The rise of regional Asian music streaming services – JOOX

Following the success of its QQ Music service in mainland China, Tencent launched JOOX, a freemium music streaming service aimed at other Asian markets. In the past year, JOOX app has been downloaded more than 50 million times, collectively accounting for more than 50 percent of all music streaming app downloads in its four markets.

Exhibit 5

Which music apps are you currently using?

%, 2016



1 In Thailand, Line Music has ceased its operations as of September 30th, 2016, while KKBox plans to cease its Thailand operations by October 31st with a full shutdown planned for December 31st

The rise of regional Asian music streaming services – JOOX (cont'd)

Defining features of the JOOX business model include:

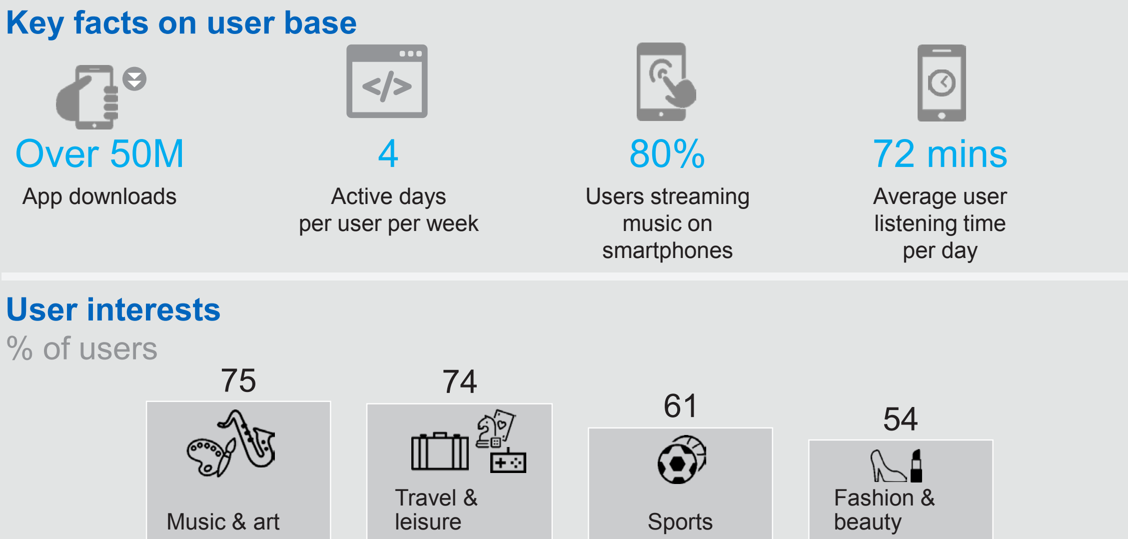
- **Localised approach** – As a focused regional player, JOOX has been able to procure a larger library of local and regional content (such as K-pop) than global competitors. JOOX also tailors curation for each market; for example, users are asked to share their preferred language on first login and local editorial teams compile playlists that cater to their tastes and trends. The organisation of events in collaboration with local artists also contributes to a more localised customer experience, such as collaboration with Red Box Karaoke in Malaysia to host live performances with local musicians. JOOX also recognizes the popularity of karaoke in Asia, and it offers the option for users to stream song lyrics while music plays, and to save lyrics on customizable "lyrics cards" with images of the user's choices to be shared on social media.

- **Emphasis on engaging users** – JOOX allows users to share their favorite songs on Facebook, and with other customers of partners, such as advertisers. This has led to more user activity, encouraged stickiness, and built understanding of its subscription product.

- **Enabling potential for advertisers** – The majority of music consumers in the region have grown accustomed to not paying for music. To compensate for this attitude, JOOX has concentrated on growing the scale and activity of its user base as an attractive platform for advertisers (see Exhibit 6). Monetisation focuses on enticing advertisers to use JOOX as a digital music marketing platform. One way that JOOX does this is by selling premium subscriptions to advertisers, who can then redistribute them to consumers as a promotional tool. One example is its partnership with FWD Insurance in Indonesia, where FWD engaged in a VIP bulk sale with JOOX to provide ~4,000 3-month VIP JOOX subscriptions to new users.

Exhibit 6

JOOX user characteristics



SOURCE: JOOX

C. Trends in the music streaming ecosystem

Music streaming providers are not the only players in the digital music space – a number of non-conventional (or non-music focused) platforms coexist within the ecosystem (see Exhibit 7). Market research indicates that more consumers watch music videos online than stream audio (about 45 percent versus about 35 percent) in France, the United Kingdom, and the United States. The main example of this is YouTube. With more than 1 billion regular users globally, YouTube delivers more music streams a year than Spotify, Apple Music, and Tidal combined, and runs at a low content cost base. The launch of the YouTube Red video and music subscription service could offer an additional choice and increase the competition for paid digital music services.

Exhibit 7

Music streaming ecosystem in focus Asian markets

Players within ecosystem		Description
Music streaming providers	Subscription services	Services offering a full range of features, content, and value-added services to sponsored or self-funded subscribers
	Freemium services	Providers offering a choice of two services: (1) Free – limited features and content, supported by advertising, or (2) Paid – premium service with full features, supported by subscriptions
Advertising partners		Brands or agencies that collaborate with digital music services for marketing activities
Music industry partners		Artistes, record labels, and others in the music industry involved in the development and distribution of music content
Channel partners	Mobile network operators	Partner operators that typically sharing their customer base, data infrastructure, marketing, and payments platform with providers
	Payment solution providers	Partners that provide platforms for alternatives payments by consumers to digital music providers
	Other partners	Other partners that enable access to consumers, e.g., social media platforms
Music streaming sub-stitutes	Legal download platforms	Allows users to purchase and own digital music content for personal consumption offline
	Related digital format providers	Other music-related digital media, e.g., music video streaming, concert video streaming
	Unlicensed digital music providers	Unlicensed downloading or streaming of digital music content. May generate advertising revenue.

Within the core music streaming ecosystem, regional players are winning market share at the expense of international ones. Regarding the high growth Asian markets, single market players such as AMPed were among the first movers but they struggled to scale up. Soon, international players such as Spotify and Deezer entered the high growth Asian markets. Drawing from a deep library of music from agreements with record labels, these multinational players largely catered to higher income, urban segments who consumed more international content.

However, a growing number of regional players (for example, KKBox, JOOX, and Yonder) have emerged and seized a large market share, especially since 2015 (see Exhibits 8 and 9). A key factor explaining the rise of regional players has been a localised approach. Examples include:

- **Localised curation of content and playlists through local editorial teams.** In each market, these teams are responsible for scanning the local music scene, identifying trends, and presenting content in a way that appeals to local consumers, usually in the form of playlists.

- **Localized user interface and experience.** Recognising differences in how Asians consume music, regional players have taken steps to tailor their apps. For instance, given the popularity of karaoke in the region, JOOX streams song lyrics while music plays as a way of differentiating itself from competitors. Users can even save lyrics on customizable "lyric cards" with images of the user's choice to be shared on social media.

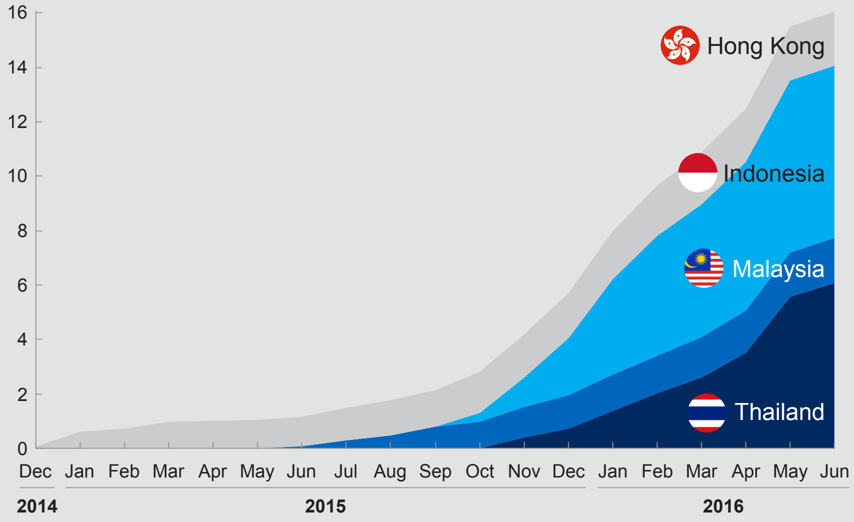
- **Localized content.** Nearly all music streaming services now offer local content but regional players have taken additional steps to support and procure music from independent, local labels or artists that cater to niche markets (for example, indie rock in Hong Kong). In addition to local music content, regional players are increasingly offering non-music content; for instance, players like JOOX also provide users access to exclusive music videos, concert recordings, and artist interviews directly through its smartphone app.

Exhibit 8

JOOX app downloads

Cumulative number of new monthly downloads

Millions of downloads



Represents cumulative number of iOS and Android downloads from September 2014 to June 2016
SOURCE: Priori

This growing user base has encouraged brand advertisers to step up their marketing collaboration with music streaming services (see Exhibit 9). Increasingly, brands are working with music streaming platforms to market to their users through in-app advertising, branding of playlists, the sale of premium subscriptions to partners, and co-branding of offline events.

Exhibit 9

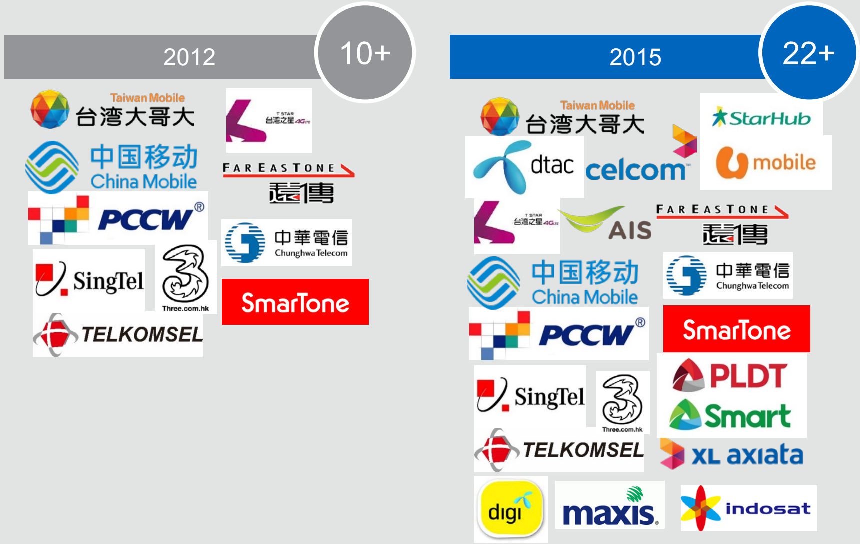
Various brands have launched innovative advertising partnerships with music streaming players in the region

1 Matching user profiles to Nike products with playlist analyzer	2 World Music Day partner sponsorship & B2B2C	3 Song submission competition to empower women	4 Expand appreciation of Chinese pop music	5 Curation of runway music for Asia's Next Top Model
▪ Spotify's playlist analyzer allowed users to find out which limited edition Chinese New Year sportswear items they were most suited to, driving engagement in Chinese	▪ Partnered with Coca Cola and secondary partners in Thailand to promote World Music Day ▪ Gave away 20K free VIP memberships, physical, and digital gifts to users	▪ Levi's In-App page was exclusively created via the Deezer platform ▪ Nationwide contest in Malaysia inviting submissions of songs that empower women	▪ Ad platform partnership between Twitter and KKBox to promote appreciation of Chinese pop music ▪ Hosting exclusive content such as celebrity interviews and live concert broadcasts on KKBox's official Twitter account	▪ Guvera showcased its expertise through curation of the runway music ▪ Launched a dedicated America's Next Top Model brand channel with videos and a collection of runway music

The growth in music streaming's popularity has also prompted more mobile network operators to form partnerships with music streaming services (see Exhibit 10). Mobile network operators are able to bundle premium music streaming services with data to generate revenue and potentially reduce churn, and take advantage of the brands of more well-known streaming providers. In return, music streaming services benefit from cheaper mobile data costs for users, access to mobile network providers' payments infrastructure, and increased brand awareness, especially among less digitally savvy consumers. Such partnerships can be instrumental to monetisation – in an example from outside the region, more than 50 percent of Deezer's 2014 revenue in France resulted from its partnership with Orange.

Exhibit 10

Major mobile network operators in partnerships with music streaming services in focus Asian markets



D. Challenges for music streaming in Asia

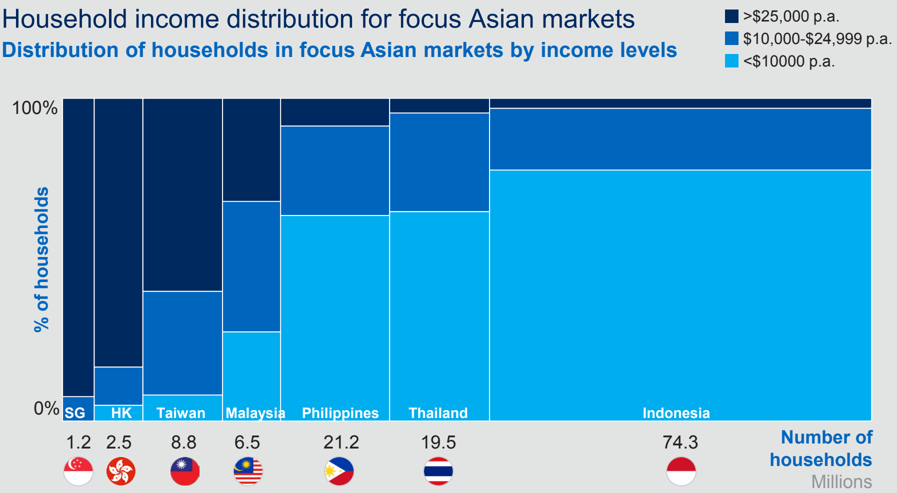
Despite the growing popularity of music streaming among consumers, the path to profitability has been less straightforward. Music streaming services have faced several challenges:

Limited consumer disposable income in focus markets has an impact on both the addressable market for music streaming subscriptions and the number of users that advertisers are able or want to target through advertising on digital music platforms (see Exhibit 11).

Exhibit 11

Household income distribution for focus Asian markets

Distribution of households in focus Asian markets by income levels



SOURCE: IFPI

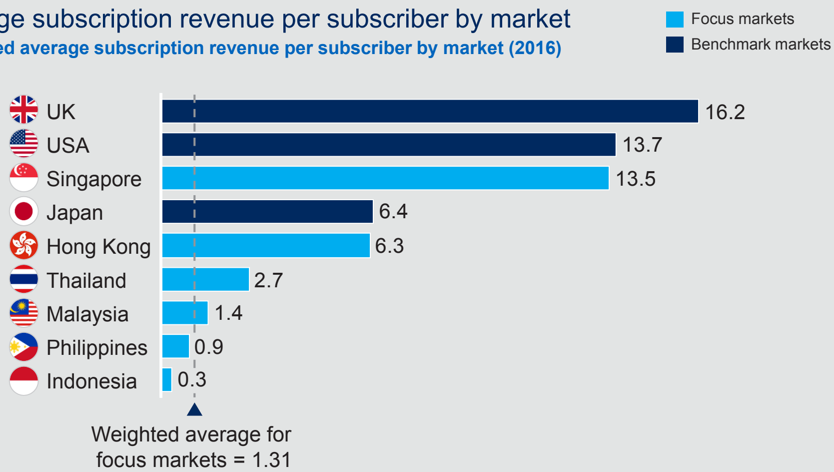
Limited consumer willingness to pay for music streaming subscriptions has resulted |in low average subscription revenue in the region (see Exhibit 12).

Exhibit 12

Average subscription revenue per subscriber by market

Estimated average subscription revenue per subscriber by market (2016)

USD



Note: Figures for average subscription revenue weighted by number of music streaming users in each country

SOURCE Statista; World Bank

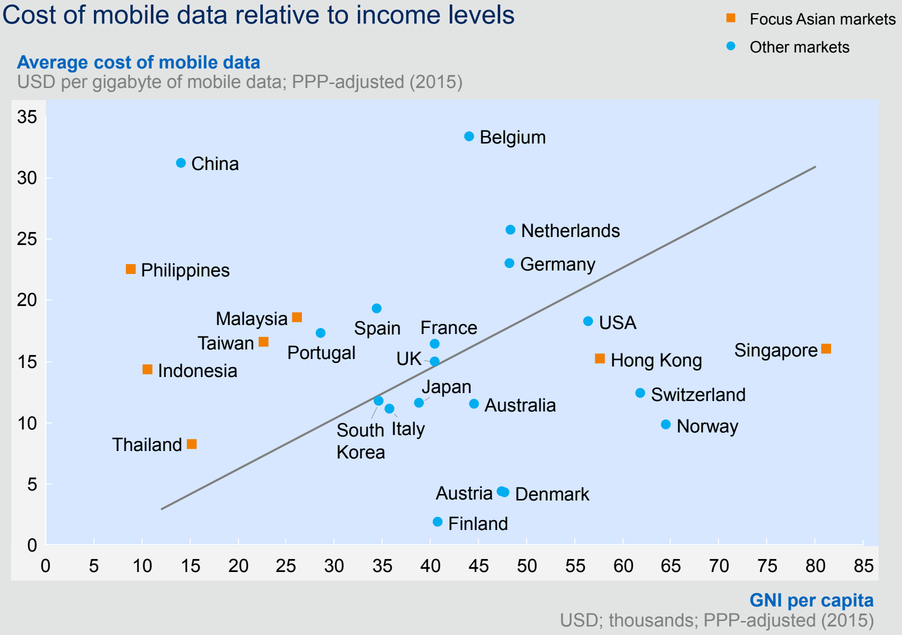
Potential explanations for this low willingness to pay include:

- **Prevalence of piracy.** Pirated music in some markets has entrenched the expectation that digital music should be free or priced low, putting pressure on pricing of subscriptions. Unlicensed digital music is available in a myriad of easily accessible forms, including through online downloads, purchased on USB devices, and converted into files from YouTube videos.

- **Relative lack of affordability of mobile data.** A key component of the customer value proposition for music streaming is access to a vast library of content on demand and on the go. However, the cost of mobile data in some of the focus markets appears to be high relative to income levels (see Exhibit 13). As a result, consumers are less likely to be willing to pay to stream music when they do not have access to a Wi-Fi connection, which can coincide with peak music listening periods, such as during commutes.

Exhibit 13

Cost of mobile data relative to income levels



SOURCE: World Bank; Analysys Mason

Prevalence of low-end smartphones amongst mass market consumers has hindered the take-up of music streaming apps. In markets such as Indonesia, low-end smartphones cost as little as $75 per device. These devices are slower and possess less memory capacity than other smartphones, posing a dilemma for music streaming services. They can optimise music streaming apps for these lower-end smartphones at the cost of functionality that is critical to the customer experience of more affluent consumers, or retain the full functionality of streaming apps to maximise the customer experience for affluent customers at the cost of limited access to mass market consumers. Regional and international players that make up the bulk of the regional market have opted for the second approach, at the expense of reaching mass market consumers.

Low rates for advertising on music streaming platforms is limiting marketing revenue for music streaming providers. Music streaming advertising rates, as measured by effective cost per 1,000 impressions (eCPM), remain low in Asian markets relative to other markets at a similar development level. For instance, average eCPM rates are $5.77 in Singapore and $4.53 in Japan compared with $9.68 in the United States and $10.65 in the United Kingdom. One important reason why this is happening may be that many advertisers in Asian markets have yet to realise or take advantage of the opportunities offered by digital music marketing, especially given the nascent nature of the music streaming industry.

Significant minimum guarantee for content costs is having an impact on the economics of music streaming. Music content is the most significant cost component for music streaming services – in 2015, Spotify paid more than 80 percent of its over $2 billion in revenue for music rights. At present, music rights holders typically license music at a relatively modest charge per stream, relative to prices for physical music sales. However, licensing contracts often require music streaming providers to pay a substantial and ever increasing minimum guarantee upon commencement of each licensing period, regardless of the actual number of music streams users consume. These contractual terms require a significant upfront investment by music streaming services and impose a higher per-unit cost on services that cannot quickly achieve scale within or between markets.

Let's look at a hypothetical, freemium service operating in the region to illustrate the combined effect of these challenges. A theoretical service provider with a 15 to 20 percent market share of music streaming users would require either about 60 percent of its users to pay for premium subscriptions – double Spotify's current global subscription rate – or attract 30 percent more advertising revenue than the total music streaming industry in the region did in 2015. It is clear that a sustainable path forward will require changes in the prevailing music streaming business model.

E. Steps to unlock the industry's potential

Innovations by leading music streaming providers are shedding light on what a more sustainable path might look like. This will require players throughout the music streaming ecosystem to create mutually beneficial partnerships.

Realizing the potential of music streaming as an advertising platform

Digital music marketing brings numerous benefits to advertisers. These include access to a youthful demographic segment that is difficult to address through conventional media; the ability to target specific users with messages through consumer data; the potential to track the effectiveness of specific forms of advertising; and association with the positive brand attributes of music streaming services, for example the perception that they are fun, digital, and youthful. Furthermore, the number of addressable consumers using music streaming services is substantial and expected to grow significantly in the coming years (see Exhibit 14). Many of these consumers will be young digital natives who consume disproportionately more digital media compared with conventional media. Already, JOOX reports that more than 80 percent of music streaming users in its Southeast Asian markets are under 35 years old.

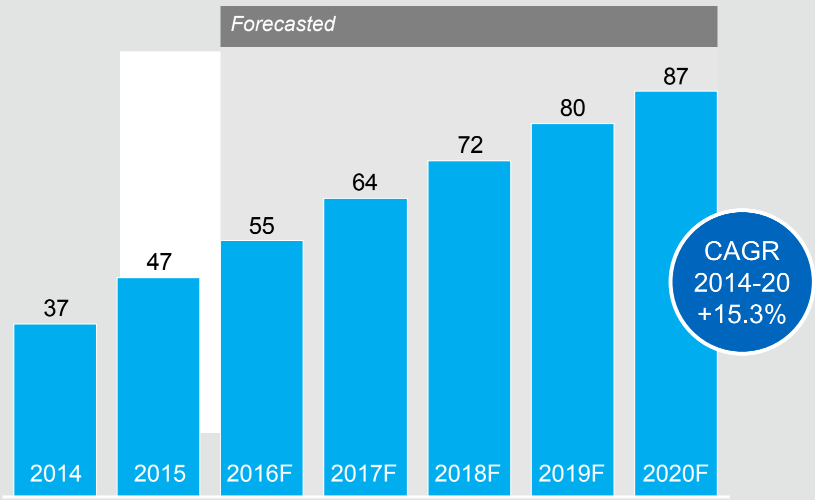
In response to this, marketers already began to move their ad budget to vertical platforms like music streaming to reach attractive demographic segments such as youth. We see this as a new and exciting trend that will continue. Realising further benefits will require advertisers and music streaming services to collaborate in two areas in particular.

Exhibit 14

Number of music streaming users in focus Asian markets

Estimated and forecasted number of music streaming users[1]

Millions



1 Estimated figures for Asian markets – Hong Kong, Singapore, Malaysia, Thailand, Philippines and Indonesia. Taiwan figures unavailable.

SOURCE: Statista

Data-driven targeting and tailoring of advertising – Digital music streaming services are able to accumulate and analyse a vast trove of data on listeners. In addition to user-provided data (for example, Pandora has collected data on 50 billion likes by users as of January 2016), linkages with social media platforms also provide a rich source of data. Analysis of this data yields granular user insights that provide a dual opportunity to advertisers who partner with music streaming services:

- **Improved user targeting and messaging** – Increasingly, music streaming platforms are now allowing advertisers to target users based on not just demographics (age, geography, language) but also based on their moods (romantic, stressed) and activities (exercising in the gym, hosting dinner parties), gleaning information from playlist choices. This allows advertisers to select a specific audience to address as well as understanding other defining features to allow more tailored messaging.

- **Targeted, contextual delivery of advertising** – Music streaming provides a platform for advertising at specific times of day (advertising for car insurance during commuting periods) and during specific activities (advertising for running shoes while listeners are tuning into running playlists). Additionally, users can be retargeted across multiple platforms and delivered sequential messages.

Co-branding to leverage positive brand attributes – Digital music providers are increasingly using the strength of their brands, especially associations with being “fun” or “youthful” to support marketing for other brands. Examples include Spotify’s partnership with Uber to optimize the ride-sharing experience of Spotify premium customers. By matching Spotify premium customers with “music-enabled” Uber cars, Spotify is able to enhance its branding and incentivise customer conversion to premium accounts. In Hong Kong, JOOX worked with a range of brands, from Converse, Coach, Fox Movies to Hong Kong Disneyland, to run co-branded campaigns which helped reach and engage new, young customers.

Creating a sustainable economic model with content owners

The symbiotic relationship between music streaming services and music rights holders will continue to evolve. Building new revenue streams and exploring alternative, sustainable licensing arrangements will be critical.

Original and exclusive content – Video streaming services are increasingly developing original content that is proving popular with audiences – Netflix original programs have been nominated in 13 of the 21 Primetime Emmy Award categories. Music streaming services have begun following suit. For instance, Yonder Music has commissioned leading local artists to develop original songs only available on its service. In addition, music streaming providers can also collaborate with music rights holders to secure exclusive content. For instance, the Singaporean singer JJ Lin’s release of an exclusive single on QQ Music in December 2015 resulted in 610,000 paid downloads within a week. Original and exclusive content can help music streaming providers distinguish themselves within the market while providing music rights holders a platform for promotion (especially for less well-known artists) and to secure more favorable contractual terms.

Co-branded promotion of music and music events – Performance rights have been the fastest growing segment of the global music industry for the past five years (9.6 percent a year). This has given rise to a number of mutually beneficial partnerships between music streaming providers, performers, and music rights holders. For example, in Thailand, JOOX worked with Coca Cola in its World Music Day campaign which strongly appealed to youth. In China, where concert streaming is becoming more popular, a performance by the pop singer Jolin Tsai that was streamed by Tencent was viewed 48 million times in just 48 hours.

Alternative, sustainable licensing arrangements – Crafting contracts that optimize pricing of music streaming services and that fairly compensate rights holders will be essential to the continued growth of the industry. This may require music streaming services and content rights holders to explore alternatives to the prevailing model that calls for a big upfront guarantee and minor revenue sharing. Several examples from outside Asia offer some instructive, lower-risk ideas. CÜR Music, which launched in the United States in early 2016, managed to secure more favourable licensing terms from the three major record labels (Universal Music Group, Sony Music Entertainment, and Warner Music Group) by offering equity in the new business. YouTube and Vevo license content on a per-stream, revenue-sharing model.

Broadening the attractiveness and accessibility of music streaming

Continued growth of the market will depend on the ability of music streaming providers to expand their reach, especially in collaboration with channel partners. Examples include:

Personalisation of content and curation – Most music streaming providers offer song and playlist recommendations based on past content that users have listened to. Increasing the degree of personalisation beyond this presents an opportunity to raise engagement and activity levels among users. This will call for improved analytics on the part of providers and partnerships with other players within the digital ecosystem, such as device manufacturers and other app developers.

Solutions to low-end smartphones and expensive mobile data – Overcoming these challenges will be key to ensuring continued growth in adoption and maximising customer experience in the focus markets. In addition to partnerships with mobile network operators, music streaming services could develop software solutions that mitigate these hurdles. Examples include:

- **Offline listening options** that allow users to select music while connected to Wi-Fi and listen to it without a data connection. This is a common feature in premium subscription products but a more limited version could be beneficial to ad-supported listening as well. An analogy would be YouTube's Smart Offline feature in the Indian market, which allows users to cache videos (including advertising) on their mobile devices for several days and watch later without a data connection.

- **"Thinner" or more flexible apps** offered to consumers that are faster on low-end phones or that require less mobile data usage. For instance, Yonder Music, focused on emerging markets, allows all users to choose the amount of smartphone memory to dedicate to the app and to offline listening.

The right music for the right moment

The current challenge for music is getting the right song at the right moment by adding the additional element of context. Users want to listen to different types of music in different contexts (such as time, place, and activity) so a non-context specific recommendation engine will not fully engage the user. Music streaming services are now using context-based recommendations to match the right music to the consumer at the right time.

Several players have been pushing this approach:

- **JOOX "Hot Topics" Curation** – JOOX has dedicated teams of content curators in each country to personalize playlist recommendations based on current socio-political events and pop-culture phenomenon. These curators constantly refresh content being pushed to users based on trending topics, such as curated playlists for Pokemon Go, the Olympics, and Kobe Bryant's retirement. Furthermore, JOOX also recommends music content based on time of year, such as for horoscopes, holidays, and seasonal trends like "back-to-school." By doing so, JOOX is able to sustain its trendiness based on what is happening in society.

- **Spotify's Mood Playlists** – In addition to personalisation based on listeners' preferred music genres, Spotify invests heavily in providing a user experience tailored to context-specific music-listening situations – 41 of Spotify's top 100 playlists are context-specific. The aim is to connect more closely with users to increase their activity. An example is their Mood playlists; Spotify recommends algorithm-based playlists tailored to individual users. It roots these choices in a user's characteristics, listening tastes, and habits, such as choice of music genre by time of day and age. For example, playlists recommended on a Friday night would include electronic dance music for some users but instrumental jazz for others. The playlists suggested are often dynamic, meaning that they include a "mood tuner" slider so users can keep the music selection in tune with energy levels at a party.

- **Google Play Music "Moments"** – Google has been leveraging its significant customer data advantage and its acquisition of Songza in 2014 to develop the concept of "moments." These are context driven recommendation of music playlists. Examples include Focusing, Getting Lost in a Story, Watching the Sunset and Unwinding. These attempt to use Google's vast data based understanding of consumers to identify the type of music they want to list to at any given time. Google is focused on making the users' music experience less about the music catalogue and more about the users' life.

Lower barriers to consumer adoption – Many potential music streaming customers already have downloaded music and playlists on their devices. The prospect of having to search for this music and recompile playlists can be a significant barrier to adoption. Music streaming services have begun to address this issue. Apple Music, for instance, allows users to import existing playlists. In selected markets, JOOX allows new premium subscribers to scan their mobile device for existing music files and download higher quality versions of the same music for offline listening.

Bundling and promotional partnerships – Broadening such partnerships beyond mobile network operators can bring benefits to both parties. In typical partnerships, premium subscriptions are offered bundled or free of charge with another product or service. Music streaming providers gain access to the partner's customer base and partners are able to offer a perk with a defined retail value to customers. For instance, over the course of a year, Deezer formed such partnerships with multiple online service providers (for example, Lazada, Grab, and JetStar) across Southeast Asia, concentrating on the Malaysian and Singaporean markets.

Alternative payment models – In some focus markets, partnerships with payment solution providers can be critical given the low rate of credit or debit card usage. In the Philippines and Indonesia, Spotify accepts payments via bank transfers, ATM transactions, and Doku Wallet, as well as cash payments at convenience stores and retail chains. In Hong Kong, JOOX users can purchase credit for subscriptions in convenience stores. As music streaming spreads beyond middle- and higher-income urban Asian populations, the need for additional payment models beyond credit and debit cards will grow.

Players in the Asian market could be trailblazers in the development of innovative music streaming business models, such as those discussed above. Their success could redefine how music is consumed and monetized the world over.

Authors

For more information, please contact one of the authors of this report:

Tycen Bundgaard
Partner
Singapore
Tycen_Bundgaard@mckinsey.com

Axel Karlsson
Senior Partner
Hong Kong
Axel_Karlsson@mckinsey.com

Alan Lau
Senior Partner
Hong Kong
Alan_Lau@mckinsey.com

Andrew Pereira
Engagement Manager
Kuala Lumpur
Andrew_Pereira@mckinsey.com

The authors wish to thank Roy Liu and Angela Lim for their contributions to this report.

About Digital McKinsey

Digital McKinsey is a global organization that brings together the best of McKinsey's digital capabilities. Digital McKinsey not only advises but also builds, operates, and transfers capabilities to help our clients create value by reinventing the core of their businesses. Digital McKinsey brings together nearly 2,000 experts from across our global firm – including more than 800 developers, designers, IT architects, data engineers, agile coaches, and advanced analytics experts.

For more information, visit www.mckinsey.com/business-functions/digital-mckinsey/our-insights

Digital/McKinsey

November 2016

www.mckinseychina.com

@mckinseychina
McKinseyChina