

APPENDIX: METHODOLOGY

This document contains the methodology used in the research presented in AlphaBeta’s report “Asia-on-Demand: The Growth of VOD Investment in Local Entertainment Industries”, published in October 2018.

The report describes the economic impact of VOD investment in local content in Asia. As part of this analysis the current and future size of content spending by VOD services in Asia were estimated. Further, the total gross economic impact to Asian economies from this direct spending in local entertainment industries through indirect and induced spending is reported. The impact on employment and as well as Foreign Direct Investment (FDI) were also sized. These are gross benefits, some of which can be quantified and others which can be described in qualitative terms. This gross economic activity does not account for activity that may have been displaced by VOD services. Hence, the methodology does not attempt to estimate the incremental impact of VOD services in Asian economies beyond what would be the case if VOD services did not exist but other technologies like it did. The hypothetical scenarios required to calculate the truly incremental benefits of VOD services are highly speculative and beyond the scope of this report.

The quantitative analysis was complemented with a range of case studies developed through desk research, interviews VOD services and local entertainment industry executives.

Sizing content spending by VOD services

There are three types of VOD revenue models – advertising-based VOD (AVOD), transactional VOD (TVOD) and subscription-based VOD (SVOD).¹ Only curated AVOD content was included in the scope of this report, meaning services that rely predominantly on user-generated content (UGC) such as YouTube and Facebook are excluded. AlphaBeta’s analysis revealed that SVOD had approximately 69 percent of global market share in 2017, followed by TVOD (25 percent) and curated AVOD (6 percent).² Therefore, content spending by SVOD services has been prioritized in this report and formed the basis for our estimates of content spending by AVOD players. TVOD services were assumed to have no content investment in 2017, due to the nature of the service being an “exchange” for content producers and consumers, a to date limited venture into original content by TVOD services as well as the general lack of information on expenditure by large pure TVOD players such as Apple iTunes and Google Play Movies & TV.³

Global content spending

To obtain global content spending, a six-step approach was used:

- 1. Sizing VOD market revenues.** Market revenues of global VOD industry, broken down by revenue model (i.e. AVOD, TVOD and SVOD) were obtained. Further, revenues by a range of major global and local VOD services (including Netflix, Amazon Prime Video, HBO, Hulu, Tencent Video, Youku Tudou and HOOQ) were gathered. As sources, various analyst reports and media releases (Table 1) were used. For instance, Netflix is reported to spend up to

¹ See Glossary for definitions.

² These estimates rely on publicly available analyst reports as well as AT Kearney (2018), *OTT Streaming in the Limelight: Four Trends and Predictions for the Media Industry*. Available at: <https://www.atkearney.com/documents/20152/1151498/OTT+Streaming+in+the+Limelight-+Four+Trends+and+Predictions+for+the+Media+Industry.pdf/0cc812ae-09f9-0185-ef15-92feebcdf705>

³ Apple’s original series such as “Carpool Karaoke” and “Planet of the Apps” are available on Apple’s subscription service - Apple Music. More information at Wired (2017), “Apple’s original TV shows suggest it doesn’t need to lure new subscribers” Available at: <https://www.wired.com/2017/02/apple-music-carpool-karaoke-planet-of-the-apps/>

US\$8 billion on content in 2018 alone, of which around US\$7 billion was earmarked for original content.⁴ Amazon is expected to invest around US\$4.5 billion for its Prime Video service, with a third of this funding allocated to original content spending.⁵ Where data was not available, market revenues were estimated based on the number of SVOD subscribers and Average Revenue per User (ARPU) estimates.

TABLE 1: INPUTS AND SOURCES FOR ESTIMATING VOD MARKET REVENUES

Input	Source
Revenue of global VOD industry	•AT Kearney (2018) ⁶
Netflix revenue	•Statista (2018) ⁷
Amazon Prime Video revenue	•Motley Fool (2017) ⁸
HBO online video revenue	•Statista (2018) ⁹
Hulu revenue	•Statista (2018) ¹⁰
Tencent Video revenue	•South China Morning Post (2017) ¹¹
Youku Tudou revenue	•Youku Tudou Form 20-F (2015) ¹²
HOOQ revenue	•Techwire Asia (2017) ¹³

2. Gathering public data on content spending. Content spending in 2017 and 2022 by VOD services was obtained from publicly available analyst reports and media releases. Estimates were made based on historical data where actual data was unavailable (Table 2).

⁴ TechCrunch (2018), "Netflix exec says 85 percent of new spending will go towards original content" Available at: <https://techcrunch.com/2018/05/14/netflix-original-content-spending/%20and%20https://www.statista.com/chart/13076/video-content-spending-in-2017/>

⁵ Loop Ventures (2017), "Apple readies to fight for your monthly video wallet share" Available at: <https://loopventures.com/apple-readies-to-fight-for-your-monthly-video-wallet-share/>

⁶ AT Kearney (2018), *OTT Streaming in the Limelight: Four Trends and Predictions for the Media Industry*. Available at: <https://www.atkearney.com/documents/20152/1151498/OTT+Streaming+in+the+Limelight+-+Four+Trends+and+Predictions+for+the+Media+Industry.pdf/0cc812ae-09f9-0185-ef15-92feebcdf705>

⁷ See data on Netflix's annual revenue from 2002 to 2017 (in million U.S. dollars). Retrieved in October 2018 from: <https://www.statista.com/statistics/272545/annual-revenue-of-netflix/>

⁸ Motley Fool (2017), "Amazon Prime Instant Video Is a Huge Loss Leader" Available at: <https://www.fool.com/investing/2017/02/22/amazon-prime-instant-video-is-a-huge-loss-leader.aspx>

⁹ See data on Number of HBO Now subscribers from December 2015 to February 2018 (in millions). Retrieve in October 2018 from: <https://www.statista.com/statistics/539290/hbo-now-subscribers/>

¹⁰ See data on Revenue generated by Hulu from 2008 to 2017 (in million U.S. dollars). Retrieve in October 2018 from: <https://www.statista.com/statistics/258004/hulus-annual-revenue/>

¹¹ South China Morning Post (2017), "Tencent Video, iQiyi in race to lead China's online video market" Available at: <https://www.scmp.com/tech/china-tech/article/2113720/tencent-video-iqiyi-race-lead-chinas-online-video-market>

¹² Youku Tudou (2015). Available at: http://media.corporate-ir.net/media_files/IROL/24/241246/YoukuTudouInc.pdf

¹³ Techwire Asia (2017), "Southeast Asia's SVOD scene hotbed for competition and growth" Available at: <https://techwireasia.com/2017/03/southeast-asias-svod-scene-hotbed-competition-growth/>

TABLE 2: INPUTS AND SOURCES FOR ESTIMATING CONTENT SPENDING

Input	Source
Netflix content spending	<ul style="list-style-type: none"> •Fortune (2018)¹⁴ •Loup Ventures (2017)¹⁵
Amazon Prime Video content spending	<ul style="list-style-type: none"> •Business Insider (2017)¹⁶ •Loup Ventures (2017)¹⁷
HBO content spending	<ul style="list-style-type: none"> •Statista (2018)¹⁸
Hulu content spending	<ul style="list-style-type: none"> •CNBC (2018)¹⁹ •Loup Ventures (2017)²⁰
Tencent Video content spending	<ul style="list-style-type: none"> •Variety (2018)²¹ •China Daily (2017)²²
Youku Tudou content spending	<ul style="list-style-type: none"> •Variety (2018)²³
HOOQ content spending	<ul style="list-style-type: none"> •Indian Television (2016)²⁴

- 3. Disaggregating spending on original versus licensed content.** Spending was disaggregated by expenditure on original and licensed content, based on AlphaBeta’s analysis of publicly available data, and interviews with VOD services. This is an important step, as the economic impact of original content spending is different from that of licensed content spending.
- 4. Calculating content spending relative to revenue.** Content spending (both original and licensed) per dollar of revenue was calculated by VOD service provider. For VOD players where there was no publicly available data, ratios for similar players or weighted averages thereof served as proxies. To err on the side of conservatism, ratios of content spending

¹⁴ Fortune (2018), “Netflix Original Content Has Grown By 88 percent This Year, But Old TV Still Rules the Remote” Available at: <http://fortune.com/2018/08/12/netflix-original-content-has-grown-by-88-this-year-but-old-tv-still-rules-the-remote/>

¹⁵ Loup Ventures (2017), “Apple Readies to Fight for Your Monthly Video Wallet Share” Available at: <https://loupventures.com/apple-readies-to-fight-for-your-monthly-video-wallet-share/>

¹⁶ Business Insider (2017), “Netflix and Amazon are estimated to spend a combined \$10.5 billion on video this year” Available at: <https://www.businessinsider.com/netflix-vs-amazon-prime-video-content-spend-estimate-chart-2017-4/?IR=T>

¹⁷ Loup Ventures (2017), “Apple Readies to Fight for Your Monthly Video Wallet Share” Available at: <https://loupventures.com/apple-readies-to-fight-for-your-monthly-video-wallet-share/>

¹⁸ See data on HBO’s programming costs from 2011 to 2017, by type (in million U.S. dollars). Retrieved in October 2018 from: <https://www.statista.com/statistics/329302/hbo-programming-costs/>

¹⁹ CNBC (2018), “Hulu CEO heckles Netflix on content spending: ‘It’s how you spend that is really important’” Available at: <https://www.cnn.com/2018/06/19/hulu-ceo-heckles-netflix-on-content-spending.html>

²⁰ Loup Ventures (2017), “Apple Readies to Fight for Your Monthly Video Wallet Share” Available at: <https://loupventures.com/apple-readies-to-fight-for-your-monthly-video-wallet-share/>

²¹ Variety (2018), “Inside Alibaba and Tencent’s Plans for World Media Domination” Available at: <https://variety.com/2018/biz/asia/alibaba-tencent-china-1202795583/>

²² China Daily (2017), “Tencent injects 2 billion RMB towards original content” Available at: http://www.chinadaily.com.cn/business/2017-06/19/content_29801525.htm

²³ Variety (2018), “Inside Alibaba and Tencent’s Plans for World Media Domination” Available at: <https://variety.com/2018/biz/asia/alibaba-tencent-china-1202795583/>

²⁴ Indian Television (2016), “Hooq plans to invest \$ 2 million in Indian original content in India” Available at: <http://www.indiantelevision.com/iworld/over-the-top-services/hooq-plans-to-invest-2-million-on-original-indian-content-160830>

relative to revenue by big spenders such as Netflix, Amazon and HBO were not included in averages. The derived ratios were then multiplied with the corresponding market revenues of the remaining SVOD and AVOD players to obtain estimates of their original and licensed content spending. Apple was not included in this step due to the difficulty of disaggregating its online video revenue from Apple Music revenue. Instead, Apple's content spending was subsequently added as a separate item.²⁵ Lastly, content spending figures were summed up for all global SVOD players (including Netflix, Amazon, HBO and Apple) and local SVOD players (including Hulu, Tencent Video, Youku Tudou, HOOQ) and the remaining non-listed players. The split between spending by global and local players was assumed to be the same for content spending by AVOD players.

- 5. Forecasting future content spending.** For original content spending, the average compounded annual growth rate (CAGR) of Netflix, Amazon Prime, and Apple's content spending between 2017-22 was applied. For licensed content spending, the CAGR of the overall video content production market between 2011-16 was applied.²⁶ These CAGRs were selected based on market consensus that in order to remain competitive VOD players will need to expand their content offering and are increasing their original content spending at a higher rate than they are acquiring licensed content.

Local content spending in Asia

Local content spending was calculated by determining how much of global spending on content by VOD services is allocated to producing Asian content. There are three drivers for spending on Asian content – subscription revenue, preference for local content and opportunity to export Asian content to international markets. These three drivers were factored into the disaggregation of global spending into local content spending in Asia in 2017 as follows:

- 1. Asia share of global VOD revenue.** The relative size of revenue source by market is a key determinant of content spending allocation between regions – following the economic principle that investments are commensurate to where revenue (i.e. demand) is generated. First, Asia's SVOD revenue and global SVOD revenue were calculated using estimated subscriber base and average revenue per user (ARPU) in Asia and globally.²⁷ Next, market revenues of listed Asian players – Tencent Video, Youku Tudou and HOOQ were removed from both Asia's SVOD revenue and global SVOD revenue – as all their content spending was assumed to be on Asian market only and hence, was added separately. In addition, Hulu's revenue was removed from global SVOD revenue – as all their content spending was assumed to be outside Asia. Asia's share of global SVOD revenue was calculated using the

²⁵ Loup Ventures (2017), "Apple Readies to Fight for Your Monthly Video Wallet Share" Available at: <https://loupventures.com/apple-readies-to-fight-for-your-monthly-video-wallet-share/>

²⁶ Boston Consulting Group (2016), *The Future of Television: The Impact of OTT on Video Production Around the World*. Available at: <https://www.bcg.com/publications/2016/media-entertainment-technology-digital-future-television-impact-ott-video-production.aspx>

²⁷ Global subscriber base was obtained from: Statista (2018), *Number of subscription video on demand (SVoD) subscribers worldwide in 2017 and 2022, by country (in millions)*. Available at: <https://www.statista.com/statistics/760219/svod-subscribers-by-country/>; and Asian subscriber base was obtained from: Media Partners Asia (2016), *Asia Pacific online video distribution*. Available at: www.media-partners-asia.com/pdf/research/Asia_Pacific_Online_Video_Distribution.pdf

ARPU varies significantly across regions. See Statista (2018), *Global average revenue per user (ARPU)*. Available at: <https://www.statista.com/outlook/206/100/video-streaming--svod-/worldwide>; and Statista (2018), *Asia average revenue per user (ARPU)*. Available at: <https://www.statista.com/outlook/206/101/video-streaming--svod-/asia>

revised Asia's SVOD revenue and revised global SVOD revenue.²⁸ This percentage share was used to determine the "base" level of global content spending allocated to Asia.

2. **Preference for local content.** The degree to which Asian subscribers exhibit a preference for local versus foreign content will determine how much of the "base" spending allocated to Asia is spent on local content. Preference for local content in this study was calculated based on results of an extensive consumer survey of paid online users commissioned by AlphaBeta, covering over 2,000 consumers in five countries – India, Indonesia, Malaysia, Taiwan and Thailand.²⁹ The average of local content preferences in these five countries was used, and applied to the "base" level of original and licensed content spending allocated to Asia to obtain a "revised" level of content spending in Asia.³⁰ At the end of this step, original content spending of Asian players Tencent Video, Youku Tudou and HOOQ was added to the "revised" content spending in Asia. Licensed content spending of Asian players was also added after factoring in the preference for local content. This reflects the fact that Asian VOD services invest in both Asian and foreign licensed content.
3. **Export opportunity.** Asian content is consumed by both Asian and non-Asian VOD subscribers alike. This in turn drives investments in Asian content. The "export" opportunity was determined based on assumptions of viewership of Asian content overseas. However, for 2017, it was assumed that total content spending already factored in overseas demand for Asian content.

Variations in the underlying assumptions behind the three drivers above were used to forecast two scenarios of spending on local Asian content by VOD services in 2022, utilizing the forecasted global content spending in the same year:

- **Business-as-usual (BAU) scenario.** Assumptions in this scenario were based on historical trends and expected growth:
 - i. Share of global VOD revenue: This was assumed to remain the same through 2022, i.e. that Asia's growth in SVOD revenue matches that of global SVOD revenue.
 - ii. Preference for local content: This was assumed to remain the same in 2022 i.e. that viewers did not demand higher local levels of local content.
 - iii. Export opportunity: Calculated total local content spending in Asia before exports was assumed to not account for export demand in this scenario and was short by 12.5 percent further demand – which is one-quarter of the foreign viewership of popular Brazilian Netflix TV series, "3%" (for which 50 percent of views came from outside Brazil).
- **Accelerated growth scenario.** Assumptions in this scenario were based on expectations of accelerated growth:

²⁸ The underlying assumption behind using SVOD revenues as a proxy for overall VOD revenues being that SVOD has the largest revenue share across VOD models, as discussed earlier.

²⁹ AlphaBeta consumer survey of internet users watching paid online VOD once a month or more – in India (460), Indonesia (438), Malaysia (597), Taiwan (418) and Thailand (435). Viewers were asked the following question: "When you watched paid online VOD over the last week, how much time did you spend watching local and foreign content (in terms of hours watched)?"

³⁰ Please refer to Exhibit 3 for more detailed information on local content preference in the five surveyed countries.

- i. Share of global VOD revenue: Asia's percentage share of global VOD market would reach the forecasted 25 percent in 2022.³¹
- ii. Preference for local content: This was assumed to match the market with the highest surveyed preference for local content in 2017, i.e. Thailand (55 percent of viewing hours).
- iii. Export opportunity: Calculated total local content spending in Asia before exports was assumed to not account for export demand in this scenario and was short by 25 percent further demand – which is half of the foreign viewership of popular Brazilian Netflix TV series, “3%” (for which 50 percent of views came from outside Brazil).

Foreign direct investment in local content in Asia

Foreign direct investment (FDI) in local content in Asia was calculated as the amount of content spending allocated to Asia by global VOD players. Similar to the methodology used to estimate local content spending in Asia discussed above, this is driven by three factors – growth in Asia's subscriber base, preference for local content and opportunity to export Asian content to international markets. However, only content spending by global VOD services was considered in this case.

Estimating the economic impact of local content spending

Economic impact of content spending in Asia by VOD services was calculated at three levels:

1. *Direct spending* by VOD services during core operations (e.g. equipment, transport, marketing, catering, etc.);
2. *Indirect spending* by suppliers to the VOD industry (e.g. lenses for cameras, food demand for catering, fuel for transport, etc.); and
3. *Induced spending* by workers employed as a result of direct and indirect spending across all sectors in the economy.

Economic impact in terms of gross output as well as employment was quantified for direct, indirect and induced spending. The approach taken follows the academic literature on the economic impact of the TV, film and entertainment industry, with this report being the first piece of research looking exclusively at the impact of VOD content spending.³²

For each level, the economic impact of original content spending and that of licensed content spending were estimated separately. This is because original content spending leads to new content production, which in turn requires inputs from all supplying industries; licensed content spending does not result in new content production; therefore, it only impacts a limited number of supplying industries.

To calculate the impact of content spending in the overall Asian economy, gross output multipliers and employment multipliers were derived from Input-Output (IO) tables of different countries in

³¹ Global subscriber base was obtained from: Statista (2018), *Number of subscription video on demand (SVoD) subscribers worldwide in 2017 and 2022, by country (in millions)*. Available at: <https://www.statista.com/statistics/760219/svod-subscribers-by-country/>; and Asian subscriber base was obtained from: Media Partners Asia (2016), *Asia Pacific online video distribution*. Available at: www.media-partners-asia.com/pdf/research/Asia_Pacific_Online_Video_Distribution.pdf

ARPU varies significantly across regions. See Statista (2018), *Global average revenue per user (ARPU)*. Available at: <https://www.statista.com/outlook/206/100/video-streaming--svod-/worldwide>; and Statista (2018), *Asia average revenue per user (ARPU)*. Available at: <https://www.statista.com/outlook/206/101/video-streaming--svod-/asia>

³² See for example, Deloitte (2018), *Economic Contribution of the Film and Television Industry in India, 2017*. Available at: https://www.mpa-i.org/wp-content/uploads/2018/05/India-ECR-2017_Final-Report.pdf

Asia.³³ An IO table shows the relationship between an initial shock (such as content spending) and final output across the whole economy. Both Type I and Type II multipliers were calculated in this study. The Type I multiplier shows the direct as well as indirect impact along the supply chain while Type II multiplier factors in the induced impact which arises from workers spending their wages on goods and services.

To construct average multipliers for Asia, IO tables of four countries with major entertainment industries were used as proxies – China, India, South Korea and Malaysia. The reason for using an Asia average rather than individual countries' IO tables is the lack of data on the breakdown of VOD content spending amongst individual countries, meaning we are not able to assign bulks of spending to individual countries. The impact in individual countries is highly encouraged as a topic of future research. China and India were selected due to the relative size of their industries, while South Korea and Malaysia were selected to proxy for countries falling under a “developed” and “emerging” Asia archetype respectively. IO tables were obtained from the respective country's statistical website (Tables 3 & 4) and in alignment with existing literature, an adjustment for double-counting was made to multipliers by setting the own-sector purchases to zero.³⁴ Weighted multipliers were calculated for Asia by using the relative market size of in terms of revenue as weights.³⁵

TABLE 3: INPUT AND SOURCES FOR ESTIMATING TYPE I AND TYPE II MULTIPLIERS OF SELECTED COUNTRIES

Country	Sector used	Source	Year published
China	Culture, Sports and Entertainment	42-sector Input-Output table from National Bureau of Statistics of China ³⁶	2015
India	Other services ³⁷	130-sector Input-Output table from National Council of Applied Economic Research ³⁸	2013
South Korea	Video and audio production and distribution	161-sector Input-Output table from Bank of Korea ³⁹	2014
Malaysia	Cinema, Video and Television Activity	124-sector Input-Output table from Department of Statistics Malaysia ⁴⁰	2010

³³ Input-output (IO) tables provide detailed information about the supply and disposition of commodities in an economy and about the structure of inter-relationships between industries within the respective economy. The following publication provides an introduction to the construction, interpretation and usage of IO multipliers: Australian Bureau of Statistics (n.d.), *Information Paper Australian National Accounts: Introduction of Input-Output Multipliers*. Catalogue No. 5246.0. Available at: [http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/FFD0BAE851EDCB8BCA2570C9007ECE04/\\$File/52460+-+Information+Paper+-+Introduction+to+Input+Output+Multipliers.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/FFD0BAE851EDCB8BCA2570C9007ECE04/$File/52460+-+Information+Paper+-+Introduction+to+Input+Output+Multipliers.pdf)

³⁴ Oxford Economics (2017), *The economic contribution of film and television in China in 2016*. Available at: https://www.mpa.org/wp-content/uploads/2018/03/MCAA_China_2016_WEB-2.pdf

³⁵ See for example, data on China Video Streaming Revenue. Retrieved in October 2018 from: <https://www.statista.com/outlook/206/117/video-streaming--svod-/china>

³⁶ National Bureau of Statistics, China (2018), *Input-output table*. Available at: <http://data.stats.gov.cn/english/adv.htm?f=aq&cn=C01&nodeid=A020G01&wdcode=zb>

³⁷ This includes recreation & entertainment, and radio & TV broadcasting services. See Deloitte (2018), *Economic Contribution of the Film and Television Industry in India, 2017*. Available at: https://www.mpa-i.org/wp-content/uploads/2018/05/India-ECR-2017_Final-Report.pdf

³⁸ National Council of Applied Economic Research (2016), *Input Output Table for India: 2013-14*. Available at: http://www.ncaer.org/publication_details.php?plD=274

³⁹ Bank of Korea (2018), *Input-output table*. Available at: <http://ecos.bok.or.kr/>

⁴⁰ Department of Statistics, Malaysia (2018), *Input-output table*. Available at: <https://www.dosm.gov.my/v1/>

TABLE 4: TYPE I AND TYPE II MULTIPLIERS FOR ORIGINAL CONTENT SPENDING IN SELECTED COUNTRIES

Country	Sector used	Type I multiplier (adjusted for double-counting)	Type II multiplier (adjusted for double-counting)
China	Culture, Sports and Entertainment	2.31	5.30
India	Other services ⁴¹	2.25	5.14
South Korea	Video and audio production and distribution	2.05	3.26
Malaysia	Cinema, Video and Television Activity	1.78	2.22

To calculate the total employment impact, the sum of direct, indirect and induced impact in terms of gross output obtained using the Type II multiplier was converted to GDP for each sector in the IO table of each country using sector-specific ratios for GDP to gross output. The total impact in terms of GDP in each sector was then divided by the economy-wide labor productivity to obtain the Type II employment multiplier, which shows the number of jobs created per dollar increase in content spending. This multiplier was subsequently multiplied with spending on local original content in Asia in 2017 and 2022 as above to obtain the total number of jobs created by this spending across Asia in each respective year.

Economic impact of licensed content spending

The impact for licensed spending followed a similar approach. However, unlike original content spending, which leads to new content production, licensed content spending only requires inputs from a limited number of industries such as ICT, banking, legal, business services, marketing and communication. Therefore, all sectors of the economy that would be involved in the production of new content such as transportation, hotel and accommodation services, food and beverage, etc. were “switched off” by setting their own-sector purchases to zero. Adjustment for double-counting was similarly made by setting the own-sector coefficient to zero.

Total employment impact of licensed content spending was calculated using a similar approach. First, the sum of direct and indirect impact in terms of gross output obtained using the licensed content Type I multiplier was converted to GDP for each sector in the IO table using sector-specific ratios for GDP to gross output. The direct and indirect impact in terms of GDP in each sector was then divided by the economy-wide labor productivity to obtain Type I employment multiplier. Next, the ratio of Type I employment multiplier (showing employment impact of direct and indirect spending) to Type II employment multiplier (showing employment impact of direct, indirect and induced spending) for original content was used to arrive at the Type II employment multiplier for licensed content. This multiplier was subsequently multiplied with spending on local licensed

⁴¹ This includes recreation & entertainment, and radio & TV broadcasting services. See Deloitte (2018), *Economic Contribution of the Film and Television Industry in India*, 2017. Available at: https://www.mpa-i.org/wp-content/uploads/2018/05/India-ECR-2017_Final-Report.pdf

content in Asia in 2017 and 2022 to obtain the total number of jobs created by this spending across Asia in each respective year.

Understanding perspectives of local industry players and VOD executives

AlphaBeta conducted an exclusive survey for this study, incorporating responses from 15 executives from 9 VOD services. While the names of interviewees will remain confidential, AlphaBeta expresses its gratitude not only for their provision of valuable insights and opinions, but also for their support in facilitating connections with members of their extensive networks.

There were two themes to this survey. The first theme explored perceptions on the impact of VOD on local entertainment industries. Respondents were asked to rank positive and negative impact in order of importance. In the survey for entertainment industry representatives, respondents were also asked if their perceptions on a range of potential benefits of directly working with VOD services.

The second theme explored perceptions on relative performance (top performers and fastest improving) of 13 key markets across different aspects of the video content production value chain in Asia and policy levers to drive VOD content investment in Asia. These countries were – Bangladesh, Hong Kong, India, Japan, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. Respondents were also provided an opportunity to recommend potential policy options to strengthen the contribution of VOD operators to local entertainment industries across Asia.