

# THE SCREEN EVOLUTION: HOW VIDEO-ON-DEMAND BOOSTS ASIA'S ECONOMIES AND GENERATES VALUE FOR VIEWERS, BUSINESS AND SOCIETY

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# GLOSSARY

The following terms have been used at various stages in this report.

**AVOD** – “Ad-based video-on-demand”, where users have access to a video-on-demand service for free in exchange for watching advertisements before, during or after videos

**BEPS** – “Base erosion and profit shifting”, the process via which an individual or a company operating in multiple countries artificially shifts tax liability from one tax jurisdiction to another with typically lower taxes

**Broadcast TV** – A system by which TV programming is transmitted to TV sets of users by the broadcast of radio waves from a terrestrial transmitter of a TV station; can be free or via paid-for service

**Cable TV** – A system by which TV programming is transmitted to TV sets of users by cable; can be free or via paid subscription

**Consumer surplus** – The difference between the total amount a consumer is willing to pay for a product or service and the total amount the consumer pays in the market for the same product or service

**GST** – “Goods and Services Tax”, an indirect tax on consumption, levied on products or services sold; typically, a flat rate added to the price of a product or service, collected by the business selling the product or service, and subsequently remitted to the relevant tax authority. It can be destination-based (levied in the country of consumption) or origin-based (levied in the country of production).

**Internet piracy** – The use of the internet to illegally copy and/or distribute content or software which is copyrighted by a content or software producer

**ISP** – “Internet Service Provider”, a company that provides subscribers with access to the internet

**MNEs** – “Multinational enterprises”, businesses with operations in several countries and regions

**OECD** – “Organization for Economic Co-operation and Development”, an inter-governmental multilateral body founded in 1960 to stimulate economic progress and world trade

**Online VOD** – Video-on-demand accessed via the internet; can be free or via paid subscription

**OTT** – “Over-the-top”, refers to the internet-based implementation of traditional media and telecom services, such as phone calls, instant messaging and broadcast or cable TV

**Pay-TV** – TV programming which viewers pay for via subscription to watch a pre-determined set of TV channels

**Regulators** – Broadly classified as national agencies involved in the regulation of telecommunication services and media broadcasting

**Streaming service** – A service whereby media such as music or video is sent to a user in a continuous stream of data, without requiring the download of the same media; can be free or via paid subscription

**SVOD** – “Subscription video-on-demand”, where users subscribe to a video-on-demand service for a flat fee to access a pre-determined library of videos (including but not limited to TV series, movies and documentaries)

**TVOD** – “Transaction-based video-on-demand”, where users pay to permanently or temporarily access video content from a pre-determined library of videos

**UGC** – “User-generated content”; content including video, blogs, discussion forum posts, or other form of media that is created by end-users or consumers of an OTT application or platform, and is publicly available to other end-users of the platform

**VOD** – “Video-on-demand”, a system in which viewers access the filmed entertainment of their choice, using a variety of devices (mobile phones, computers, tablets, smart TVs and so on) from an available selection of videos; can be free or via paid subscription

**VOD platform/service** – A platform or service accessible via the internet from which users can access video-on-demand

**VoIP** – “Voice over Internet Protocol”, a set of rules that enable the use of the internet for telephone or video communication

# THE SCREEN EVOLUTION: ONLINE VOD IN ASIA



## KEY FACTS

VOD models go well beyond advertising and user-generated content, with diverse user experiences. Subscription VOD could have approximately

**68 MILLION**

APAC users by 2020.



### DID YOU KNOW?

VOD does not require spectrum to operate and licenses to be allocated, and uses the



**INTERNET TO  
PUBLISH CONTENT.**



Online video-on-demand (VOD) is a distinct OTT segment, driving most of its value. It is forecast to grow at

**22% CAGR OVER THE NEXT  
FIVE YEARS IN APAC.**

# CONSUMER, BUSINESS AND SOCIETAL BENEFITS



## 82% OF USERS

in India trust safety features of online VOD platforms, such as safety PINs and “kids” profiles, to protect their families from inappropriate content.



## 2 OUT OF 3

users in Taiwan agree that content availability on legal sources make them less likely to use illegal websites.



VOD platforms are investing in high quality content and technology. Amazon’s “Manchester by the Sea” received

## 6 NOMINATIONS

at 2016 Academy Awards. Netflix was the first to introduce 4K ultra-HD and uses surround-sound capabilities.



Portugese-language Netflix original series “3%” clocked

## OVER 50%

of viewing hours outside of Brazil.



Amazon and Netflix alone plan on spending over

## US\$ 10 BILLION

on content in 2017.

The average Thai VOD user in values these services at

## US\$211 PER YEAR

on top of the price he/she currently pays for them.



## OVER 60%

of all users in India, Taiwan and Thailand believe VOD services are good value-for-money.



## DIRECTIONS FOR POLICY REFORMS

1

### MULTI-STAKEHOLDER

governance approach to online safety that empowers users to make appropriate choices.

2

Clear, predictable, easily enforceable and equitable

### FISCAL REGIMES.

3

### LIGHT-TOUCH REGULATION

that supports and stimulates innovation in Asia’s digital economies.



# EXECUTIVE SUMMARY

New technology is changing the way people consume media. Household names such as Facebook, Line and Google provide new internet-based services that allow users to talk to friends and family on the other side of the globe via free video calls, listen to an unlimited amount of music on their smartphones, or enjoy a variety of live and recorded video content. Such applications are collectively referred to as “over-the-top” (OTT) services.

OTT services cater to a range of consumer needs. Some focus on connecting people, while others entertain and inform. Each of these novel services have unique features and business models, but they have one thing in common: they are bringing innovation to the traditional industries. It is in the public interest to encourage the innovation catalyzed by OTT services, but also to limit any conflicts that may arise from integrating these new technologies into the existing regulatory landscape. Understanding how OTT service providers differ from traditional telecommunication, television and broadcasting networks is an essential condition for doing so.



Video-on-demand (VOD), particularly video streaming, has grown to become the biggest and most valuable segment of the OTT market in recent years – powered by companies such as Amazon, Netflix, HOOQ and Viu. Its growth outlook remains solid. By 2021, video traffic is forecast to account for 80 percent of all internet traffic globally.<sup>1</sup> In the US, nearly two out of three households have already subscribed to a VOD platform, allowing them to watch movies, TV series, documentaries, news and sports at any time and on any device of their choice.<sup>2</sup>

The VOD market is less developed in Asia, but poised for strong growth.<sup>3</sup> Analysts are forecasting online video revenues in Asia Pacific to reach US\$35 billion over the next five years – an increase of 22 percent annually, or about three times the average global rate.<sup>4</sup> A host of Asian video streaming platforms have sprung up in recent years, including Thailand-based DooNee, India-based Hotstar Premium, Malaysia-based iflix and Singapore-based HOOQ. They tap into the growing consumer desire for on-demand content at a time of increasing household incomes and internet access. VOD services are expected to count 360 million paying subscribers across the Asia Pacific by 2021, twice as many as today.<sup>5</sup>

The rapid evolution of OTT services and the VOD industry has begun to catch the eye of regulators across Asia, a few of whom are advocating for greater legal control over OTT services. Some have proposed light-touch regulations or guidelines that take into account the unique characteristics of these services within the larger context of the internet. Others

have decided to treat VOD platforms similar to other traditional communication and media distribution companies, and oblige them to adhere to similar regulatory frameworks.

Much of the new regulatory initiatives come at a time when OTT services are not yet widely understood in Asia. This creates the risk that new regulations could inadvertently jeopardize the innovation potential of a nascent growth industry with significant benefits for consumers and the media industry as well as several positive spillover effects for society at large.

This report contains a critical message: **without a robust, fact-based understanding of the OTT landscape, good policy intentions can lead to unintended negative outcomes.** To capture the burgeoning benefits of the VOD industry in Asia, this report offers a range of data points to broaden the public understanding of the unique features of VOD platforms. These data points highlight the importance of continued consumer access to these services, and the need to explore their innovation potential. The goal of this report is to ensure that any country-specific regulations that may be implemented remain in sync with global precedents, as well as the industry's economic strength and the benefits it delivers to societies in Asia. Drawing on a survey of over 1,300 VOD users in Thailand, Taiwan and India, as well as case studies and interviews with industry experts, this report uses a comprehensive framework to describe these benefits. It also offers guidance on policy reforms for the VOD market, based on a global overview of regulatory best practices.

1. Cisco (2017), "The Zettabyte Era: Trends and Analysis" Available at: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html>

2. In the US, VOD services generated a total revenue of US\$18 billion in 2014, which amounts to 40 percent of the global market value of US\$45 billion. See Future Market Insights (2016), "Video-on-demand market forecast infograph". Available at: <http://www.futuremarketinsights.com/infographics/video-on-demand-market-forecast-infograph.pdf>. Data on user subscription sourced from Leichtman Research Group (2017), "82% of households have a DVR, Netflix or use VOD" Available at: <http://www.leichtmanresearch.com/press/030617release.html>

3. Current penetration rates vary: in Hong Kong, 72 percent of internet users are watching VOD, compared with only 31 percent in Thailand. Data on VOD growth sourced from Media Partners Asia (2016), "Asia Pacific online video distribution" Available at: [http://www.media-partners-asia.com/pdf/research/Asia\\_Pacific\\_Online\\_Video\\_Distribution.pdf](http://www.media-partners-asia.com/pdf/research/Asia_Pacific_Online_Video_Distribution.pdf)

4. The global VOD market is forecast to grow on average 7.5 percent annually between 2017 and 2021. See data tables on video-on-demand worldwide growth at: <https://www.statista.com/outlook/201/100/video-on-demand/worldwide>

5. Media Partners Asia (2016), "Asia Pacific online video distribution" Available at: [www.media-partners-asia.com/pdf/research/Asia\\_Pacific\\_Online\\_Video\\_Distribution.pdf](http://www.media-partners-asia.com/pdf/research/Asia_Pacific_Online_Video_Distribution.pdf)

In detail, this report...

### 1. EXPLAINS HOW GOOD POLICY INTENTIONS CAN LEAD TO UNINTENDED OUTCOMES.

Some policymakers want to ensure that minors only have access to age-appropriate content, incentivize contributions from international companies to local economies, and promote fair competition between traditional media companies and newcomers. However, recently proposed regulations risk missing their intended impact and could even be counterproductive. For example, lengthy approval processes for new film releases run the risk of driving people to illegally download movies and other content. This draws on results from the survey of paid online VOD users

conducted by AlphaBeta, which reveal a clear link between legal content availability and the decreased demand for pirated content. Complicated content licensing regimes also hurt legitimate content providers and reward online piracy sites. Burdensome requirements on foreign companies to establish local business partnerships or a large physical presence may ultimately deter foreign investors, reduce the value OTT services provide to consumers and businesses, and narrow opportunities for growth and innovation in the local business community.

### 2. CLARIFIES KEY FACTS ABOUT THE INDUSTRY STRUCTURE AND CHARACTERISTICS.

It shows that:

#### **FACT 1:**

**Video is a distinct OTT segment, with the strongest growth opportunities**

OTT has powered the explosive growth of the internet industry and spurred the development of digital startups worldwide. The VOD segment is both OTT's largest and fastest expanding segment, poised to grow in Asia over the next decade at rates far higher than the global average.

#### **FACT 2:**

**VOD business models go well beyond advertising and user-generated content**

VOD business models vary and so do the viewing experiences they offer. Some platforms allow many different video content producers to post free-to-watch and/or user-generated content (UGC), funded by advertising revenues. Others invest heavily in original and licensed content, and offer consumers paid access to premium content and longer, high-quality viewing experiences through "pay-per-view" services or flat-rate subscription deals for "all-you-can-watch" offerings.

#### **FACT 3:**

**VOD does not require spectrum to operate and licenses to allocate it**

Traditional cable, terrestrial and satellite TV providers operate on a limited-capacity spectrum, for which they need to acquire a license. VOD services operate differently. They use the open internet—with virtually unlimited capacity—to publish their content, hence there is no need for licenses to assign this resource and operate.<sup>6</sup>

6. The "open internet" is a fundamental network (net) neutrality concept in which information across the world wide web (WWW) is equally free and available without variables that depend on the financial motives of internet service providers (ISPs).

### **3. ESTIMATES THE BENEFITS OF VOD SERVICES FOR CONSUMERS, BUSINESSES AND SOCIETIES IN ASIA, based on a case study analysis on India, Taiwan and Thailand.**

- Consumer benefits:** VOD services provide significant value for consumers. The average Asian user of VOD services values them up to US\$223 per year on top of the price paid for the subscription. This is the result of an extensive consumer survey in India, Taiwan and Thailand, prepared exclusively for this report.<sup>7</sup> The survey shows that the novel viewing experience—being able to watch an infinite variety of ad-free, curated content whenever and wherever they want—drives most (61 percent) of the value Asian consumers attach to VOD services. Having full control and being able to use safety features such as PINs to prevent children from watching inappropriate content drives another 29 percent of the service value for surveyed users. Most are aware of such safety features and find them helpful in choosing appropriate content for their families.
- Business benefits:** Video-on-demand benefits businesses in the TV and film industry in at least three different ways. First, it can be a cost-effective way for small independent producers to attract large audiences, allowing them to promote their films at little marketing costs. Second, working with OTT providers can give small production companies scale and access to larger production budgets. The added competition in the marketplace for high quality TV and film content provides a further boost to investment in production and jobs for producers, directors and creative specialists. Third, it can boost the broader TV and film industry ecosystem, including firms and freelancers working in post-production, dubbing and subbing services.<sup>8</sup>
- Societal benefits:** VOD services can help lower internet piracy rates, promote cultural diversity and drive digital adoption. There is evidence that people download less pirated content when they have access to legal VOD streaming services.<sup>9</sup> The exclusive survey undertaken for this report confirms that over half of the VOD users surveyed in India, Taiwan and Thailand agreed that being able to download videos legally (for example, through services such as Netflix or Amazon Prime) makes them less likely to use illegal websites. Streaming services also contribute to the cultural diversity of available video content by playing an active role in promoting and investing in foreign-language films, TV series and documentaries. Research has shown that internet penetration rates tend to increase with online content availability and diversification. Digital adoption brings with it a host of knock-on benefits, such as improving education, enabling access to a host of public and health services and availing of digital financial services.<sup>10</sup>

7. A representative online consumer survey was conducted amongst over 1,300 users of VOD services in India (460), Taiwan (418) and Thailand (435). The survey population mirrored the demographics (gender, age, income, geography etc.) of each country's online population. See Appendix for further details.

8. Netflix (2017), "Why are Netflix's standards for Subtitles and Closed Captions so high?" Available at: <https://backlothelp.netflix.com/hc/en-us/articles/214969868-Why-are-Netflix-s-standards-for-Subtitles-and-Closed-Captions-so-high>

9 Sandvine's Global Internet Phenomena Report revealed that over 70 percent of all North American traffic now is video and audio streaming (with Netflix, YouTube and Amazon Video the top three sources of traffic), with file sharing sites such as BitTorrent's share declining to 5 percent. See Sandvine (2015), "Over 70% of North American traffic is now streaming and audio" Available at: <https://www.sandvine.com/pr/2015/12/7/sandvine-over-70-of-north-american-traffic-is-now-streaming-video-and-audio.html>

10. World Economic Forum (2015), "Understanding digital content and services ecosystems: the role of content and services in boosting internet adoption", Global Information Technology Report 2015. Available at: <http://reports.weforum.org/global-information-technology-report-2015/1-3-understanding-digital-content-and-services-ecosystems-the-role-of-content-and-services-in-boosting-internet-adoption/>



#### **4. PROVIDES A SET OF INNOVATIVE DIRECTIONS FOR POLICY REFORMS IN ASIA**

**to ensure the VOD industry remains a driver of economic growth and consumer satisfaction in the region. International best practice reveals that successful regulation typically rests on three pillars:**

- **A multi-stakeholder governance approach to online safety** to ensure safe and appropriate content is freely and promptly available on legal sources. In this model, industry and regulators work together to provide viewing guidelines and safety technology, to empower consumers to make appropriate viewing choices for their families.
- **Clear, predictable, easily-enforceable and equitable fiscal regimes** that promote fair competition between incumbents and new players, provide sustainable fiscal revenues for governments, and are conducive for foreign investments. Transparent public consultation processes are key to regulatory reforms: they help develop trust between regulators and the industry, and create a public source of information on regulatory updates which can reliably inform business decisions.
- **Light-touch regulation that supports and stimulates innovation** in Asia's digital economies, i.e., simple and efficient rules that are conducive to innovation by removing high compliance costs and lengthy regulatory processes. This facilitates partnerships and collaboration between international and local players, generally leading to greater choice for consumers, new business opportunities and local services growth.



## FOCUS AND STRUCTURE OF THIS PAPER

This report focuses on subscription- and transaction-based online streaming services like Netflix, HOOQ and iTunes. It does not cover the benefits of advertisement-based VOD services, such as YouTube, which publish content free of charge for users.<sup>11</sup> The distinction between ad-based online VOD services and paid online VOD services is made clearly in Chapter 2. The report concentrates on Asia, which is expected to see some of the strongest growth in VOD services globally in coming years.<sup>12</sup>

The paper is structured as follows: **Chapter 1** describes how the push to regulate the VOD industry across Asia can lead to unintended negative outcomes. **Chapter 2** presents three facts about the nascent VOD industry, which aim to inform further regulatory debate. **Chapter 3** draws on results from a quantitative and qualitative analysis to outline the main benefits of VOD services for Asian consumers, businesses in the Asian TV and film industry and Asian societies at large. **Chapter 4** analyzes regional best practices to make recommendations for a sound regulatory framework that would preserve the innovative strength and growth potential of VOD services in Asia.

11. YouTube Red, a subscription-based service offered by YouTube, falls under the scope of this analysis.

12. The analysis includes some figures reported for the Asia-Pacific region, which have been clearly referenced. These figures are used because they are often more robust and form the only available research covering the region.



**GOOD  
INTENTIONS,  
UNINTENDED  
OUTCOMES**

Paid online on-demand video services are increasingly popular worldwide, and Asia is emerging as a growth region. Driven by companies like Google, HOOQ and Netflix, this new model of watching TV and other video content via the internet wherever and whenever users want is capturing growing audiences from Thailand to Taiwan.<sup>13</sup> Over the next five years alone, the number of video-on-demand (VOD) subscribers in Asia is set to double to 360 million.

The growth of this nascent industry has set off a flurry of activity among regulators. However, there is a risk of poor regulatory design unless these decisions are grounded in a strong understanding of the VOD industry.

*13. The ability to watch TV over the internet – online video-on-demand – is powered by “over-the-top” (OTT) technology, which allows access to content directly over the internet. This type of content not only powers VOD platforms, but also several other companies which leverage on the technology to deliver a variety of communications, e-commerce and entertainment content to consumers.*



# ASIA IS POISED FOR STRONG GROWTH IN THE VOD INDUSTRY

Video-on-demand (VOD) is booming in Asia. Large global technology companies and small local services firms alike are now marketing video streaming subscriptions across the region. Together, they form the VOD industry.

North America is currently the biggest market for VOD services. However, rising household incomes and increasing internet and smartphone penetration have significantly boosted demand in Asia.<sup>14</sup> The number of VOD subscribers in Asia Pacific is expected to double from 177 million in 2016 to 360 million in 2021.<sup>15</sup> Much of the growth will be driven by China, but video-on-demand will become an ever-present complement to traditional TV across the entire region. Penetration rates—the share of internet users subscribing to VOD services—are forecast to rise from just 3.1 percent in 2017 to 7.7 percent in 2021.<sup>16</sup> Analysts forecast the VOD industry in Asia to grow at rates significantly above the global average, underpinning its potential as the backbone of modern digital economies.<sup>17</sup>

Global platforms are by no means driving this growth on their own. Several “home-grown” VOD platforms are now vying for subscribers across Asia, including Thailand-based DooNee, India-based Hotstar Premium, Malaysia-based iflix, China-based iQiyi and Singapore-based HOOQ—a joint venture between Singtel, Sony Pictures and Warner Brothers (See Exhibit 1).<sup>18</sup> These platforms, both global and home-grown, have varied content offerings. While some focus on bringing an existing catalogue of traditional TV shows, movies and documentaries to their platform, others are heavily involved in producing their own exclusive content for their subscribers. Users may thus be enticed to have multiple VOD subscriptions in the future, with a noticeable trend emerging: already, 30 percent of all VOD users in the UK and in the US subscribe to more than one video streaming service.<sup>19</sup>

14. An open internet is crucial for enabling consumers to access more content of their choice. See Technology Consulting, Research and Training [TRPC] (2017), “Fostering an Open Internet in Asia”, Connectivity, Innovation and Growth. Available at: [http://trpc.biz/wp-content/uploads/FosteringanOpenInternetinAsia\\_v1.pdf](http://trpc.biz/wp-content/uploads/FosteringanOpenInternetinAsia_v1.pdf)

15. Current penetration rates vary: in Hong Kong, 72 percent of internet users are watching VOD, compared with only 31 percent in Thailand. Media Partners Asia (2016), “Asia Pacific online video distribution” Available at: [www.media-partners-asia.com/pdf/research/Asia\\_Pacific\\_Online\\_Video\\_Distribution.pdf](http://www.media-partners-asia.com/pdf/research/Asia_Pacific_Online_Video_Distribution.pdf)

16. In Asia, the penetration of online VOD is expected to rise from 3.1% in 2017 to 7.7 percent in 2021, according to Statista. See data tables on “video-on-demand” penetration on: <https://www.statista.com/outlook/201/101/video-on-demand/asia#takeaway>

17. See for example: Future Market Insights (2016), “Video-on-demand market forecast infographic” Available at: <http://www.futuremarketinsights.com/infographics/video-on-demand-market-forecast-infograph.pdf>

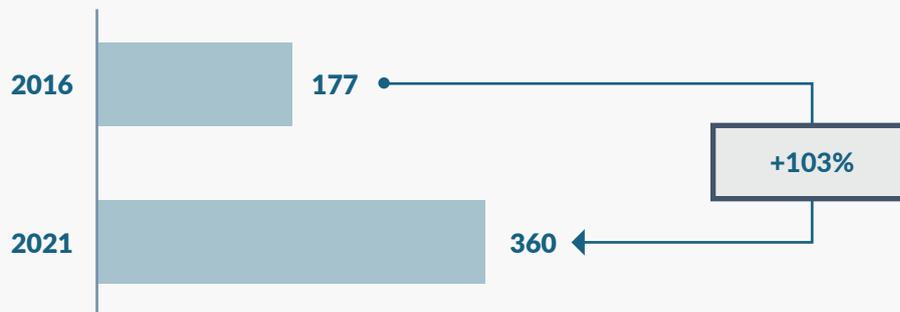
18. Analysts are expecting the combined market share of established VOD providers Netflix and Amazon to reach a growth limit at 16 percent by 2021, as competition heats up. See: Boston Consulting Group Perspectives (2016), “The Future of Television: The Impact of OTT on Video Production Around the World”. Available at: <https://www.bcgperspectives.com/content/articles/media-entertainment-technology-digital-future-television/?chapter=4#chapter4>

19. Digital TV Europe, “Research finds ‘high overlap’ between Netflix and Amazon subscribers” Available at: <http://www.digitaltveurope.net/588432/research-finds-high-overlap-between-netflix-and-amazon-subscribers/>

## EXHIBIT 1:

## ASIA-PACIFIC IS POISED FOR STRONG GROWTH IN THE VIDEO-ON-DEMAND (VOD) INDUSTRY, WITH AN INCREASING NUMBER OF USERS AND HOMEGROWN STARTUPS

## ACTUAL AND FORECASTED NUMBER OF VOD USERS IN ASIA PACIFIC



## EXAMPLES OF HOMEGROWN VOD STARTUPS



CATCHPLAY

SOURCE: AlphaBeta analysis, Media Partners Asia

# SOME GOVERNMENTS ARE KEEN TO REGULATE VIDEO-ON-DEMAND MORE HEAVILY

Entry barriers for companies that distribute content online—or “over the top” (OTT)—are lower than in traditional media and communications markets, which has resulted in strong competition and innovation across markets. However, their rapid emergence and growing popularity has led to increased scrutiny from regulators across Asia.<sup>20</sup>

Regulators generally have three broad concerns regarding companies that use so-called over-the-top (OTT) technology to distribute audio and video content: they want to ensure that minors only have access to age-appropriate content, incentivize contributions from international companies to local economies and promote fair competition between traditional media companies and newcomers.

Calls for more regulatory oversight and stricter standards have reverberated across the region, with a raft of recently proposed changes to existing regulation. Various draft legislations aim at bringing OTT services under similar regulatory constraints as the traditional broadcasting industry. These include blanket requirements for all foreign OTT services to set up as local entities, maintain proprietary data centers on national soil, apply for broadcast licenses or be subject to strict content restrictions.<sup>21</sup>

Regulators believe that such regulations are important for two reasons. First, a permanent establishment in host countries could improve lines of communication

between OTT services and the regulatory authority for all operational matters and issues related to inappropriate content. Second, licensing and corporate taxation could bring foreign players’ contribution to the local industry and economy through an expanded tax base.

However, this rush to regulate comes at significant risk. New regulations may indeed jeopardize the young and rapidly growing OTT industry and limit its ability to provide choice for consumers and generate economic benefits. Past actions to control what content can be aired via the internet and non-transparent fiscal schemes show that good policy intentions can lead to undesired, even counterproductive, regulatory outcomes.

For example:

- **Lengthy approval processes** that prohibit or delay the release of video content can lead to an increase in internet piracy, as viewers may feel like they are missing out and search for illegal ways to download a movie or TV series. This draws on results from the survey of paid online VOD users conducted by AlphaBeta, which reveal a clear negative link between legal content availability and the demand for pirated content. In the recent controversy over a proposed ban of Disney’s animated movie “Beauty and the Beast”, due to allegedly inappropriate content, the Malaysian Tourism and Culture Minister warned that delaying the screening may encourage illegal downloads.<sup>22</sup>

20. Asia Internet Coalition (2015), “Smart Regulation for OTT Growth”. Available at: <http://www.asiainternetcollaboration.org/wp-content/uploads/2015/10/AIC-White-Paper-on-OTT.pdf>

21. For more information, please see: S&P Global Market Intelligence (2017), “Analysts: Asian OTT players need less regulation, stricter piracy rules” Available at: <http://marketintelligence.spglobal.com/our-thinking/news/analysts-asian-ott-players-need-less-regulation-stricter-piracy-rules>

The Bangkok Post (2017), “Facebook, Netflix get OTT ultimatum” Available at: <http://www.bangkokpost.com/news/general/1273743/facebook-netflix-get-ott-ultimatum>

The Bangkok Post (2017), “NBTC makes volte-face on OTT plan” Available at: <http://www.bangkokpost.com/archive/nbtc-makes-volte-face-on-ott-plan/1281779>

Connected Asia (2017), “New OTT regulations in Indonesia and Thailand: inching towards a level playing field?” Available at: <http://www.connectedasia.com/new-ott-regulations-in-indonesia-and-thailand-inching-towards-a-level-playing-field/>

22. TODAY Singapore (2017), “Movie ban will only lead to illegal downloads: Malaysian Minister” Available at: <http://www.todayonline.com/world/asia/movie-ban-will-only-lead-illegal-downloads>

- **Unpredictable, discriminatory and complicated tax regimes** that only target certain companies or sectors, while exempting others, can create uncertainty and deter foreign investors. Whilst determining the optimal amount of tax contributions is beyond the scope of this report, it is worthwhile to highlight past research showing that “how to tax” seems to matter more than the “how much to tax”.<sup>23</sup> Simplicity, predictability and fairness of fiscal regimes have been found to be considered more important than the tax rate itself by digital entrepreneurs, investors and multinational executives.<sup>24</sup> Research similarly shows that the way foreigners perceive a country’s regulatory environment can make or break a company’s investment plans. The perception of being treated unfairly in a country (“sector discrimination”) may be enough for foreign investors to defer their investment plans.<sup>25</sup>

- **Burdensome operational requirements** that oblige foreign OTT companies to partner with local businesses, master a lengthy licensing process, or establish a physical presence could deter international investors and stifle innovation. There are three potential concerns with these requirements if implemented poorly:

1. *They may not increase multinationals’ contributions to the host country.* Recent research shows that multinational companies are important drivers of growth in the digital economies of the Asia Pacific. Yet they were found to contribute to a digital economy regardless of whether they had a physical presence in that country or not. Most only employed a limited number of people on the ground, but made substantial investments in national education systems, start-up communities and digital infrastructure.<sup>26</sup>

Remote communication between companies and customers or regulators is also much easier than in previous years due to technological advancements (e.g., videoconferences), and offers significant time and cost savings.<sup>27</sup>

2. *They may hinder innovative business models.* In an interview for this report, a senior company executive at a VOD firm said: “VOD providers can quickly scale up new consumer markets, commission local content and distribute domestic productions without a presence on the ground...once you impose that requirement, you artificially raise the costs for these players and may jeopardize this investment cycle”.
3. *They may disadvantage legal players and local SMEs.* Lengthy licensing procedures and other requirements can burden all legal content providers, both local and foreign, with costly red tape – therefore hampering their ability to innovate and grow. Illegal piracy sites, which would not be covered by potential regulations, would consequently gain a competitive advantage. There is a risk that licensing schemes may overregulate an emerging industry. Research confirms that red tape particularly harms the competitiveness of small companies, which—due to their lack of scale—have to commit more resources to comply with administrative burdens than larger rivals.<sup>28</sup>

It is essential that any framework to regulate the VOD industry is thoroughly designed and minimizes the risk of unintentionally creating sub-optimal outcomes. The following chapters will establish a solid fact base to contribute to an informed regulatory debate.

23, 24, 25, 26. AlphaBeta (2017), “Digital Nation: Policy levers for investment and growth” Available at: [http://www.alphabeta.com/wp-content/uploads/2017/05/DigiNations\\_FA.pdf](http://www.alphabeta.com/wp-content/uploads/2017/05/DigiNations_FA.pdf)

27. Frost and Sullivan (2015), “2015 Global Video-as-a-Service (VaaS) Product Leadership Award” Available at: [https://ww2.frost.com/files/5314/3716/1192/Lifesize\\_Award\\_Write\\_Up.pdf](https://ww2.frost.com/files/5314/3716/1192/Lifesize_Award_Write_Up.pdf)

28. See, for example, the following OECD paper that affirms that “regulatory burdens remain a major obstacle for SMEs as these firms tend to be poorly equipped to deal with the problems arising from regulations”: OECD (1998), “Small business, job creation and growth: facts obstacles and best practices” Available at: <https://www.oecd.org/cfe/smes/2090740.pdf>



# THREE FACTS ABOUT THE NASCENT VOD INDUSTRY

Streaming services are disrupting the traditional media landscape. VOD services like Netflix have become household names in a short space of time. OTT services such as Amazon Prime, iTunes and Skype are now mentioned in the same breath as traditional TV broadcasters, music retailers and telecommunication providers. Is there a reason for regulators to be concerned about these new services upending the competitive balance in national media distribution markets? This chapter intends to inform this debate, by presenting three basic facts about video-on-demand that highlight the unique features of this industry, show what sets it apart from traditional TV and other OTT services, and dispel some common misconceptions.



# FACT ONE: VIDEO IS A DISTINCT OTT SEGMENT, WITH THE STRONGEST GROWTH OPPORTUNITIES

Over-the-top content has become a key driver of the digital economy, powering the explosive growth of products and services from companies such as Facebook, Line and Google. The OTT market comprises four segments:<sup>29</sup>

- **Voice-over-Internet-Protocol (VoIP)** communications technology adopted by FaceTime, Skype, Viber, WhatsApp and others.
- **Text and images** on social media platforms (such as Facebook, Instagram and LinkedIn), search engines such as Google, and online news sites such as NDTV and The Bangkok Post.
- **Music-streaming** services such as Apple Music, Spotify, Gaana.com and Joox.
- **Video-on-demand (VOD)** platforms such as, Netflix, DooNee, Amazon Prime and Hotstar Premium

The market outlook for OTT services remains solid, with predicted average growth rates of 14.5 percent per year globally over the decade through 2026. The Asia Pacific is expected to be the main driver: revenues from the region's OTT services are forecast to increase by almost 25 percent per year, significantly faster than the global average.<sup>30</sup>

Some erroneously believe that video streaming is still a niche area of the digital economy.<sup>31</sup> Video-on-demand has long outgrown its niche. Today, it represents the biggest and most valuable segment of the OTT market, estimated to generate more than half of all revenues in the US\$53 billion market (see Exhibit 2). The significance of VOD services is set to grow even further, as OTT is rapidly becoming a new standard for media consumption. Video IP traffic (which is a good proxy for video-on-demand) is expected to constitute 82% of all IP traffic by 2021, up from 73% in 2016.<sup>32</sup>

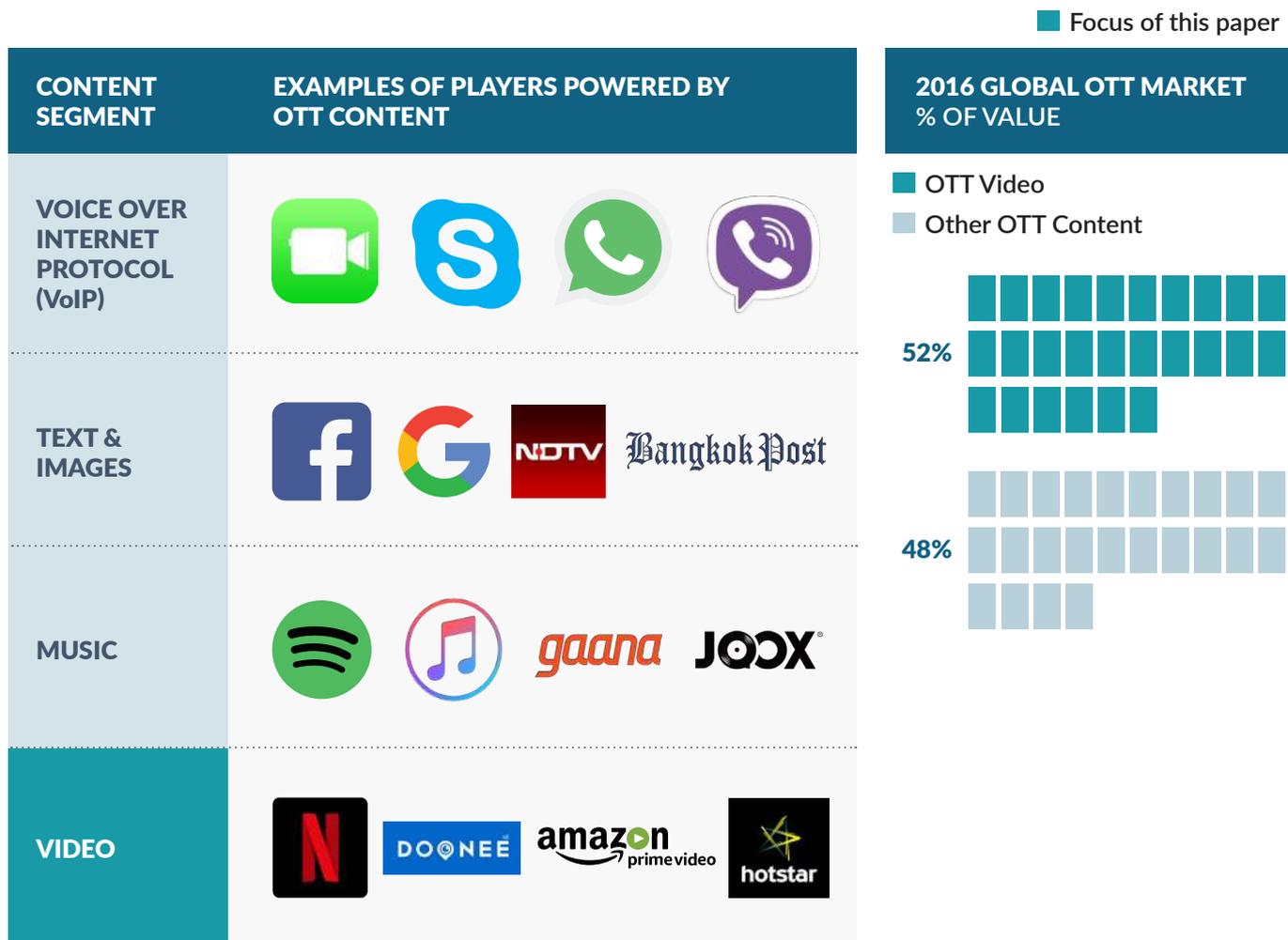
29, 30. Future Market Insights (2016), "Over-the-top OTT content market". Available at: <http://www.futuremarketinsights.com/reports/over-the-top-ott-content-market>

31. Midia Research (2017), "The rapidly growing niche online video market opportunity" Available at: <https://www.midiaresearch.com/blog/the-rapidly-growing-niche-online-video-market-opportunity/>

32. Cisco (2017), "The Zettabyte Era: Trends and Analysis" Available at: <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/vni-hyperconnectivity-wp.html>

EXHIBIT 2:

VIDEO IS A DISTINCT OTT SEGMENT, WITH THE STRONGEST GROWTH OPPORTUNITIES



SOURCE: Future Market Insights

## FACT TWO: VOD REVENUE MODELS GO WELL BEYOND ADVERTISING AND USER-GENERATED CONTENT

Early VOD services commonly monetized video content through ad-hoc advertisement arrangements.<sup>33</sup> Recently, however, new and sophisticated business models have emerged, which monetize VOD content in different ways.<sup>34</sup> While some platforms now use advanced advertising systems to generate revenues, others offer “pay-per-view” services or “all-you-can-watch” access in exchange for a flat subscription fee. These new models are gradually being recognized beyond industry circles and covered in new studies.

There has also been a significant change in the way they offer content. The early growth of platforms such as YouTube was fueled by user-generated content (UGC) and short, free-to-watch content from media production companies. However, with more viewers watching content online and on smaller devices, media houses

began adding longer and higher quality entertainment and programming to their VOD catalogues to complement their traditional offerings. Platforms devoted to longer, premium content offer more than just a catalogue of existing TV shows, movies and documentaries that appear on traditional TV channels and in cinemas, for which they legally obtain copyrights (content may be contractually restricted by geographical region). In fact, many platforms are increasingly investing in original content that they own the global rights for and is exclusively available to their subscribers.

As illustrated by Exhibit 3, VOD providers can be classified broadly into three groups, depending on the model they use to generate revenue: advertising-based video-on-demand, transactional video-on-demand, and subscription-based video-on-demand.<sup>35</sup>

33. For instance, YouTube formally arranged monetization arrangements through the YouTube Partner Program in December 2007. See Google (2010), “History of monetization at YouTube” Available at: <https://sites.google.com/a/presatgoogle.com/youtube5year/home/history-of-monetization-at-youtube>

34. Streaming Media (2016), “Survey: Do you AVOD, SVOD or TVOD?” Available at: <http://www.streamingmedia.com/Articles/Editorial/Featured-Articles/Survey-Do-You-AVOD-SVOD-or-TVOD-112879.aspx>

35. Imagen (2016), “What are SVOD, TVOD, AVOD?” Available at: <https://imagenvp.com/video-on-demand/>

## EXHIBIT 3:

## ONLINE VOD PROVIDERS CAN BE CLASSIFIED INTO THREE GROUPS ACCORDING TO DIFFERENCES IN REVENUE MODELS AND USER EXPERIENCES

 Focus of this paper

REVENUE MODEL	VALUE PROPOSITION	EXAMPLES OF KEY PLAYERS
<b>AVOD</b> <i>Ad-based</i> <b>Video-On-Demand</b>	Users can have access to <b>free content (often user-generated)</b> in exchange for watching <b>advertisements along with it</b>	 
<b>TVOD</b> <i>Transactional</i> <b>Video-On-Demand</b>	Users can <b>purchase and download single pieces of content</b> either for a short period of time or on permanent basis	 
<b>SVOD</b> <i>Subscription</i> <b>Video-On-Demand</b>	Users can have <b>unlimited access</b> to a large variety of content in exchange for a <b>monthly or annual subscription fee</b>	 

SOURCE: Imagen, AlphaBeta analysis

## FACT THREE: VOD DOES NOT REQUIRE SPECTRUM TO OPERATE AND LICENSES TO ALLOCATE THEM

Audio-visual technology used to deliver video content has evolved immensely over the last few decades – from humble beginnings on small black-and-white TV sets, to readily available satellite TV and video-on-demand today.

Traditional TV stations need to procure licenses to deliver their content into people’s living rooms via exclusive use of broadcasting spectrum or cable in the ground. The licensing system is needed because the availability of broadcast spectrum and cable infrastructure is limited and demand from TV channels may exceed supply. The scarcity of these resources effectively creates a high barrier to entry into the traditional television market. Traditional TV stations need a wealth of financial resources and political capital to procure such licenses.

VOD platforms, however, do not require access to broadcast spectrum and rely on the internet access that a customer has already purchased to deliver video content, which in principle has no capacity limitations

and is able to reach any endpoint on the internet.<sup>36</sup> The online VOD space thus has far lower barriers to entry, and in turn, potential for a higher degree of competition.

Exhibit 4 shows the different models of video content distribution, traditional and online, and their reliance (if any) on licensing systems.

Notably, these fundamental differences in video content distribution methodology carry over to user watching habits. Users do not necessarily view either service as a substitute for the other – in fact, most viewers with TV subscriptions consume both traditional TV content and online video-on-demand complementarily. A recent study of households owning at least one TV set in the US provides data to support this claim: 58 percent of all cable subscribers watch VOD simply in addition to watching traditional TV.<sup>37</sup> Another study in Singapore showed that majority of adult users paying for VOD services made no changes to their Pay-TV subscriptions.<sup>38</sup>

36. Increasing advances in internet transmissions technology, together with more physical hardware such as servers, enable theoretically unlimited internet capacity. Boy Genius Report [part of the Penske Media Corporation] (2015), “Future of the Internet is safe: engineers break the capacity limit for fiber optic transmissions” Available at: <http://bgr.com/2015/06/27/internet-fiber-optic-capacity-limit-ucsd/>

37. Leichtman Research Group (2017), “82% of households have a DVR, Netflix or use VOD” Available at: <http://www.leichtmanresearch.com/press/030617release.html>

38. 67 percent of respondents paying for VOD services in IMDA’s study of 2,585 Singaporean citizens and permanent residents indicated that they made no changes to their Pay-TV subscriptions. See IMDA (2016), “Fact Sheet - Key Takeaways from Three MDA Surveys on Media Consumption” Available at: <https://www.imda.gov.sg/about/newsroom/archived/mda/media-releases/2016/fact-sheet-key-takeaways-from-three-mda-surveys-on-media-consumption>

## EXHIBIT 4:

## VOD DOES NOT REQUIRE SPECTRUM TO OPERATE AND LICENSES TO ALLOCATE THEM

 Focus of this paper

TV MODEL	USE OF FREQUENCY	EXAMPLES OF KEY PLAYERS
<b>CABLE TV</b> Radio Frequency Transmission	<ul style="list-style-type: none"> <li>• Programming via radio frequencies</li> <li>• TV stations use analog or digital cables which connect to homes</li> <li>• Stations require licenses to operate a portion of the limited spectrum</li> </ul>	 
<b>BROADCAST TV</b> “Over-the-Air” Radio Wave Transmission	<ul style="list-style-type: none"> <li>• TV programming via radio waves</li> <li>• TV stations directly transmit to TV sets with antennas</li> <li>• Stations require licenses to operate a portion of the limited spectrum</li> </ul>	 
<b>ONLINE VOD</b> “Video-on-Demand” Powered by the Internet	<ul style="list-style-type: none"> <li>• Video content via the internet</li> <li>• OTT service providers post content on VOD platforms</li> <li>• No licensing required, internet capacity is virtually unlimited</li> </ul>	 

SOURCE: Literature review, AlphaBeta analysis



# VOD BENEFITS FOR VIEWERS, BUSINESSES & SOCIETY

VOD services are highly popular. But that does not mean they are well understood. The young industry has only recently moved into the spotlight of researchers, regulators and the wider public. Little is known, subscription fees aside, about the true value viewers attach to VOD services and the spillover benefits arising from these services.

Consumers derive measurable benefits from the unique, flexible and safe viewing experience video-streaming services offer. Businesses benefit—not just VOD platforms themselves, but also video content producers and a range of ancillary services. Importantly, research shows that the entire society can benefit as VOD services can help to reduce internet piracy.

Based on findings from a survey of VOD users in Thailand, Taiwan and India, as well as case studies and interviews with industry experts, this chapter outlines the main benefits of video-on-demand (see Exhibit 5).



## EXHIBIT 5: THE BENEFITS OF ONLINE VOD CAN BE CLASSIFIED IN THREE AREAS

CONSUMER BENEFITS	BUSINESS BENEFITS	SOCIAL BENEFITS
 <ul style="list-style-type: none"> <li>• Asian consumers value VOD because of the <b>choice, control and convenience</b> offered</li> <li>• VOD services bring <b>high-quality content</b> and state-of-the-art <b>technologies</b> to Asian users</li> <li>• VOD platforms autonomously put in place <b>safety features</b> that protect families</li> </ul>	 <ul style="list-style-type: none"> <li>• VOD platforms <b>widen reach and scale</b> of distribution for independent producers</li> <li>• VOD platforms are raising <b>budgets for original content</b>, at unprecedented levels for Asia</li> <li>• VOD bring higher demand for <b>ancillary services</b> (e.g., subtitles)</li> </ul>	 <ul style="list-style-type: none"> <li>• VOD services <b>reduce piracy</b> by providing a legal and more convenient alternative</li> <li>• VOD services promote <b>local languages</b> and cultures to international markets</li> <li>• VOD services drive <b>digital adoption</b> with increased content demand</li> </ul>

SOURCE: AlphaBeta analysis

## BOX 1. HOW MUCH DO VIEWERS REALLY LIKE VIDEO-ON-DEMAND?



It is easy to confuse the price paid for a service with its true value. A consumer's appreciation of a product or service can be much higher than the purchase price suggests. The gap between the price a consumer is willing to pay and the actual price paid is called "consumer surplus".

To find out how much viewers appreciate video-on-demand, AlphaBeta conducted a survey of more than 1,300 VOD users in India, Taiwan and Thailand. The goal was to quantify the consumer surplus for VOD services in these three countries (see Appendix for further details). Survey participants were confronted with the following scenario: they were offered a fixed monthly cash reward in exchange for giving up all paid VOD services. Their willingness to give up their VOD subscription at a certain monetary value flagged how much they really like the VOD service of their choice.

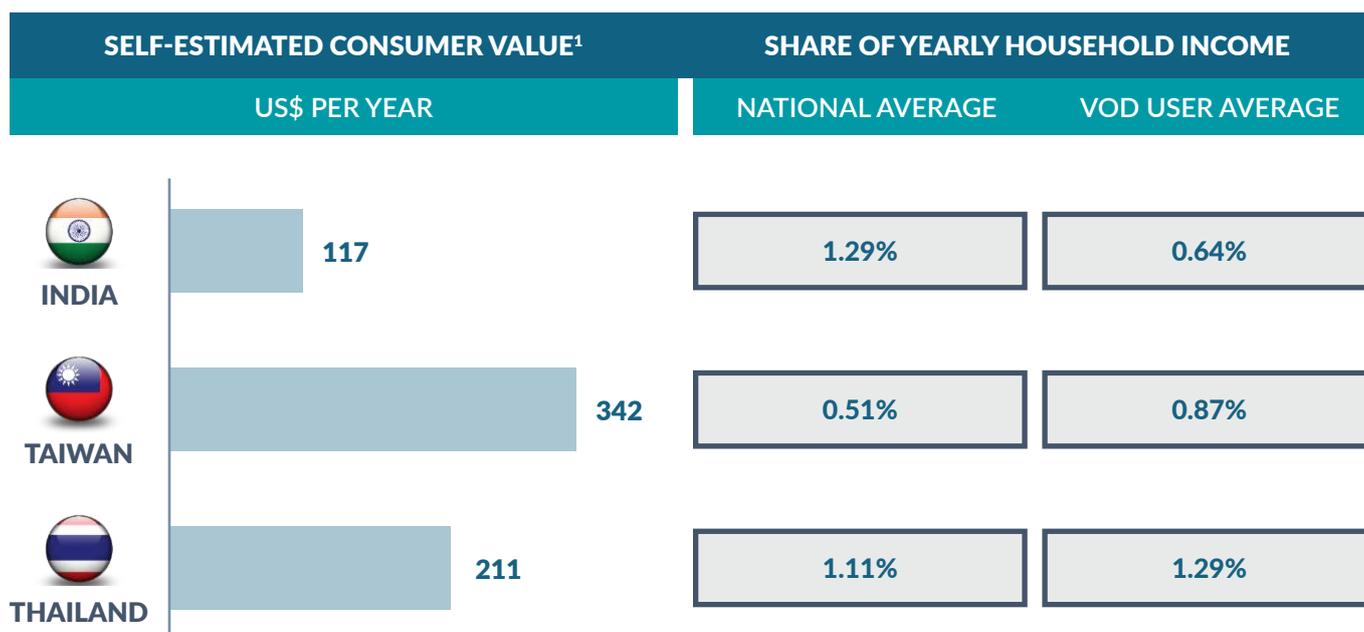
# CONSUMER BENEFITS:

A large-scale consumer survey, undertaken exclusively for this report, reveals that VOD creates a substantial amount of value for the customers, well beyond the price paid for these services. In particular, the average value viewers ascribe to these services (on top of subscription fees) is US\$117 per year in India, US\$342 in Taiwan, and US\$211 in Thailand (see Exhibit 6).<sup>39</sup>

To put things in perspective, the extra annual value ascribed to these services would be sufficient to purchase as many as 13 premium movie tickets in New Delhi, 33 in Taipei and 16 Bangkok for the average VOD user in each of these countries (see Appendix for more details).<sup>40</sup>

## EXHIBIT 6:

### EXISTING VOD CONSUMERS VALUE THESE SERVICES AT US\$117 PER YEAR IN INDIA, US\$342 IN TAIWAN, AND US\$211 IN THAILAND – ON TOP OF SUBSCRIPTION FEES



1. Survey respondents were asked the following question: "Imagine that you were offered a fixed cash payment each month as compensation for no longer being able to watch any paid online VOD service (e.g. Netflix or DooNee). You would not be charged for any subscription fee. What is the minimum amount of compensation you would accept to stop watching any online VOD service?" Respondents were then offered compensation choices in local currencies, along with the choice to enter a custom amount  
 SOURCE: AlphaBeta consumer survey of internet users watching paid online VOD once a month or more – in India (460), Taiwan (418) and Thailand (435)

39. Relative to their average household income, users in Thailand attach the highest value to video-on-demand: an estimated 1.29 percent of the average annual household income they listed in the survey. The ratio is lower for users in India, who are prepared to spend 0.64 percent of their average annual household income on video-on-demand. The average user in Taiwan ranks in the middle, being prepared to spend 0.87 percent of their annual household income on VOD services. Comparing averages of self-declared household income of VOD users in India with national statistics for the whole population also reveals that, unsurprisingly, the former is higher – since these people can afford internet broadband connections and hence do not include the poorer segments of the population. For a detailed breakdown of surveyed VOD users by income bracket, please refer to the Appendix.

40. The number of movie tickets purchasable are mentioned to provide a meaningful comparison to the average value derived from VOD services. The value derived from VOD services, however, should not be directly compared with the cost of other services – because consumers' willingness to pay for that service may be higher.

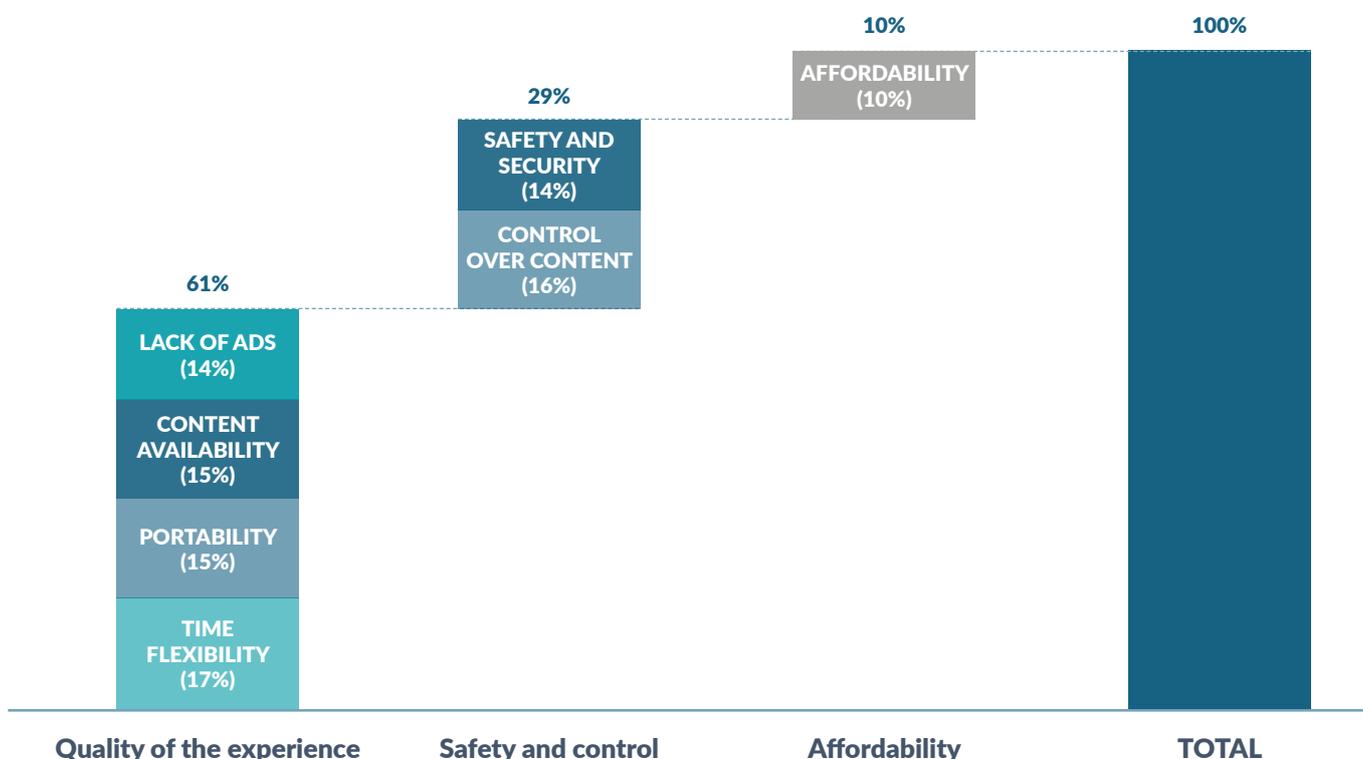
What makes video-on-demand a valuable offering to consumers in Asia? The consumer survey reveals three main drivers of viewer satisfaction (see Exhibit 7).

**EXHIBIT 7:**

**ASIAN USERS ATTRIBUTE 61% OF VALUE TO QUALITY OF THE EXPERIENCE, AND 29% TO SAFETY AND CONTROL OFFERED BY VOD PLATFORMS**

**3-COUNTRY AVERAGE<sup>1</sup> OF VOD VALUE DRIVERS (IN EXCESS OF PAYMENT FEES)**

SHARE OF THE TOTAL



1. Equal weights assigned to each country. Values may not sum up to 100% due to rounding approximations

SOURCE: AlphaBeta consumer survey of internet users watching paid online VOD once a month or more - in India (460), Taiwan (418) and Thailand (435)

## 1. QUALITY OF THE VIEWING EXPERIENCE.

Quality of the viewing experience constitutes 61 percent of the total user value, or US\$71 in India, US\$214 in Taiwan and US\$127 per year in Thailand. Its main components are:

- **Time flexibility** (the “when”) accounts for 17 percent of total user value. Rather than wait until a broadcaster airs their favorite TV show, viewers can start, pause, rewind or stop a large variety of drama, comedy, movie, sports, news and music at their own pace. Platforms such as Netflix allow viewers to access any video content at any time, multiple episodes back to back and without advertising breaks (which constitutes another 13.8 percent of total user value).<sup>41</sup>
- **Portability** (the “where”) drives 15.2 percent of total user value. Viewers can watch video-on-demand anywhere—on laptops, tablets, smartphones, in the comfort of their home or on the go—as long as they have an internet connection.<sup>42</sup>
- **Content availability** (the “what”) accounts for 15% of total user value. Content availability is perhaps the most unique factor of the viewing experience, due to the sheer variety of content available, the quality of the content library, and the technology used to deliver this content.

1. **Content Variety:** VOD services allow viewers to “pull” content from a vast, wide-ranging library, whereas traditional broadcasting models “push” out pre-determined content at set broadcasting times.<sup>43</sup> This gives users control of the viewing experience and allows

them to explore and discover content to their liking.<sup>44</sup> In turn, producers use consumption data and viewing patterns to curate content that most likely hits the taste of consumers. With more global and regional VOD services hitting the market, providers will likely attempt to differentiate their content offering, leading to greater variety and less overlap.

2. **Content Quality:** VOD platforms were initially a springboard for popular older TV shows, possibly to increase their viewership.<sup>45</sup> More recently, VOD platforms have featured and produced high-quality TV series.<sup>46</sup> Popularity of these shows has increased exponentially, along with production budgets, and has brought in a regular cast of award-winning actors and directors. Moreover, VOD platforms have established a reputation for also screening other types of original content, not just TV series, that rival the quality of traditional productions. (See Exhibit 8).
3. **Technology:** VOD providers attract viewers as they pioneer digital technology to screen their content.
  - User interface and content discovery tools: VOD platforms have an easy-to-browse interface, where content is curated by type (for instance, TV series, movies, documentaries, stand-up, and so on) and genre (comedy, romance, foreign language, international). Algorithms tailor the content browsing experience, accounting for each

41. Video-on-demand has even led to a new social phenomenon known as “binge-watching”, which involves watching multiple episodes of a television program in one sitting. The practice is controversial, but proponents argue that video-on-demand has sparked a “golden age of television”, with more sophisticated, smarter, and intellectually stimulating plots.

42. Future Market Insights (2016), “Video-on-Demand (VoD) Service Market - Impelled by Shift in Consumer’s Viewing Preferences and Increasing Penetration of High Speed Internet Infrastructure in Emerging Economies: Global Industry Analysis and Opportunity Assessment, 2016–2026” Available at: <http://www.futuremarketinsights.com/reports/video-on-demand-market>

43. All major VOD platforms have thousands of movies and TV series, among other forms of video content. See Variety (2016), “Amazon Prime Video has 4 times Netflix’s movie lineup, but size isn’t everything” Available at: <http://variety.com/2016/digital/news/netflix-amazon-prime-video-movies-tv-comparison-1201759030/>

44. Heidi Cohen (2015), “Content Marketing Distribution: Pull vs Push”. Available at: <http://heidicohen.com/content-marketing-distribution-pull-vs-push-chart/>

45. Some popular TV shows are available on platforms such as Netflix. See Hollywood.com (n.d.), “21 vintage shows that you must watch now on Netflix” Available at: <http://www.hollywood.com/tv/vintage-shows-that-you-must-watch-now-on-netflix-60479528/#/ms-22556/1>

46. Campaign Asia (2016), “How Netflix has changed content marketing” Available at: <http://www.campaignasia.com/article/how-netflix-has-changed-content-marketing/428163>

individual user's viewing habits when recommending content to watch.<sup>47</sup>

- High-definition (HD) streaming: VOD services, including Netflix, Amazon Prime and Google Play have switched to the new ultra-high-definition video technology, 4K, which offers several times the detail of standard HD images.<sup>48</sup> This combats a common problem faced by Pay-TV subscribers accessing high-definition (HD) content – distorted imagery due to increased signal compression.<sup>49</sup> To enjoy

this new quality of internet television, users need to have access to smart TVs and high-bandwidth internet.<sup>50</sup> The latter has been steadily growing in recent years around the world, and particularly in Asia.<sup>51</sup>

- Surround sound technology: VOD platforms are also increasingly working towards creating a “home theatre” experience for viewers. Many are now offering surround-sound features in partnership with companies such as Dolby.<sup>52</sup>

## 2. SAFETY AND CONTROL OVER CONTENT.

Safety and control over content constitutes 29 percent of total user value. VOD platforms have independently developed tools to account for the potential of younger viewers inadvertently watching inappropriate content.<sup>53</sup> This is reflected in how safety of the viewing experience and control over content watched drives almost a third of self-estimated consumer benefits, i.e., creating US\$35 of consumer surplus in India, US\$97 in Taiwan and US\$62 in Thailand. In particular, control over content is responsible for the majority of this value – 16 percent of the total.

Survey results summarized in Exhibit 9 show that most users are aware of safety features on VOD platforms and find them useful to protect their families from inappropriate content, while not being concerned about inappropriate content on VOD platforms.

Some safety features that platforms have implemented include:

- **Profile creation:** For example, Netflix allows the primary account holder to create a certain number of profiles with different “maturity levels”. Content labeled by the platform as sensitive is not available to access on every profile: for instance, under Netflix’s “Little Kids” profile, sensitive content is filtered out when browsing for TV shows and movies.<sup>54</sup>
- **Safety PINs:** For example, Amazon Prime makes certain categories of content only available via PIN code. Without entering the PIN, the content is not allowed to be played, preventing children from accidentally watching mature content.

47. Platforms like Netflix use an advanced algorithm that recommends content on the basis of friend's viewing habits, new genres that users have not explored yet, among other specific recommendations. See *The Business Insider Singapore* (2016), “Netflix lifted the lid on how the algorithm that recommends you titles to watch actually works” Available at: <http://www.businessinsider.sg/how-the-netflix-recommendation-algorithm-works-2016-2/?r=US&IR=T>

48. *Wired* (2015), “How Netflix is creating the Ultra-High-Def future of TV” Available at: <https://www.wired.com/2015/03/netflix-will-remake-image-tv/>

49. This is caused by cable operators adding more HD channels into limited bandwidths. As reported by the Associated Press in Minneapolis, US. *ABC News* (2017), “Cable's crunched signals irritate HD die-hards” Available at: <http://abcnews.go.com/Technology/story?id=4691553&page=1>

50. *Digital Trends* (2017), “Got a new 4k UHD TV? Here's where to go to start watching the best 4k Content right now” Available at: <https://www.digitaltrends.com/home-theater/where-and-how-to-watch-4k-uhd-content/>

51. *The Inquirer* (2016), “PH internet growth slowest in past 2 years – report” Available at: <http://technology.inquirer.net/49120/philippine-internet-speed-slowest-improvement-southeast-asia-akamai-report>

52. *TechGoindu* (2017), “Netflix starts streaming with Dolby Atmos – only on Xbox and LG TVs for now” Available at: <https://www.techgoindu.com/2017/06/30/netflix-starts-streaming-dolby-atmos-xbox-lg-tvs-now/>

53. *IMDA* (2016), “PACE urges broadcasters to protect the young from inappropriate content, and to develop more quality local content to attract and engage viewers” Available at: <https://www.imda.gov.sg/about/newsroom/archived/mda/media-releases/2011/pace-urges-broadcasters-to-protect-the-young-from-inappropriate-content-and-to-develop-more-quality-local-content-to-attract-and-engage-viewers>

54. *Netflix* (2017), “How do I set parental controls on my Netflix account?” Available at: <https://help.netflix.com/en/node/264>

- Touch ID:**  
 This safety technology uses fingerprint recognition to block access to certain content; for instance, the iTunes store requires fingerprint authorization

before the purchase of any video content. It has become a common feature on smartphones and tablets.

**3. AFFORDABILITY.**

Affordability is a minor driver of choice of VOD users, accounting for 10 percent of the value viewers attach the service. Still, the majority of survey respondents in all three countries said current services provide good value-for-money, especially when compared to cable

TV operators. 3 out of 4 respondents in India agree that VOD platforms provide higher value for money than cable TV subscriptions, with just over half of all respondents in Taiwan and Thailand agreeing with the same statement.

**EXHIBIT 8:  
VOD PLATFORMS BRING HIGH-QUALITY CONTENT TO ASIAN USERS**

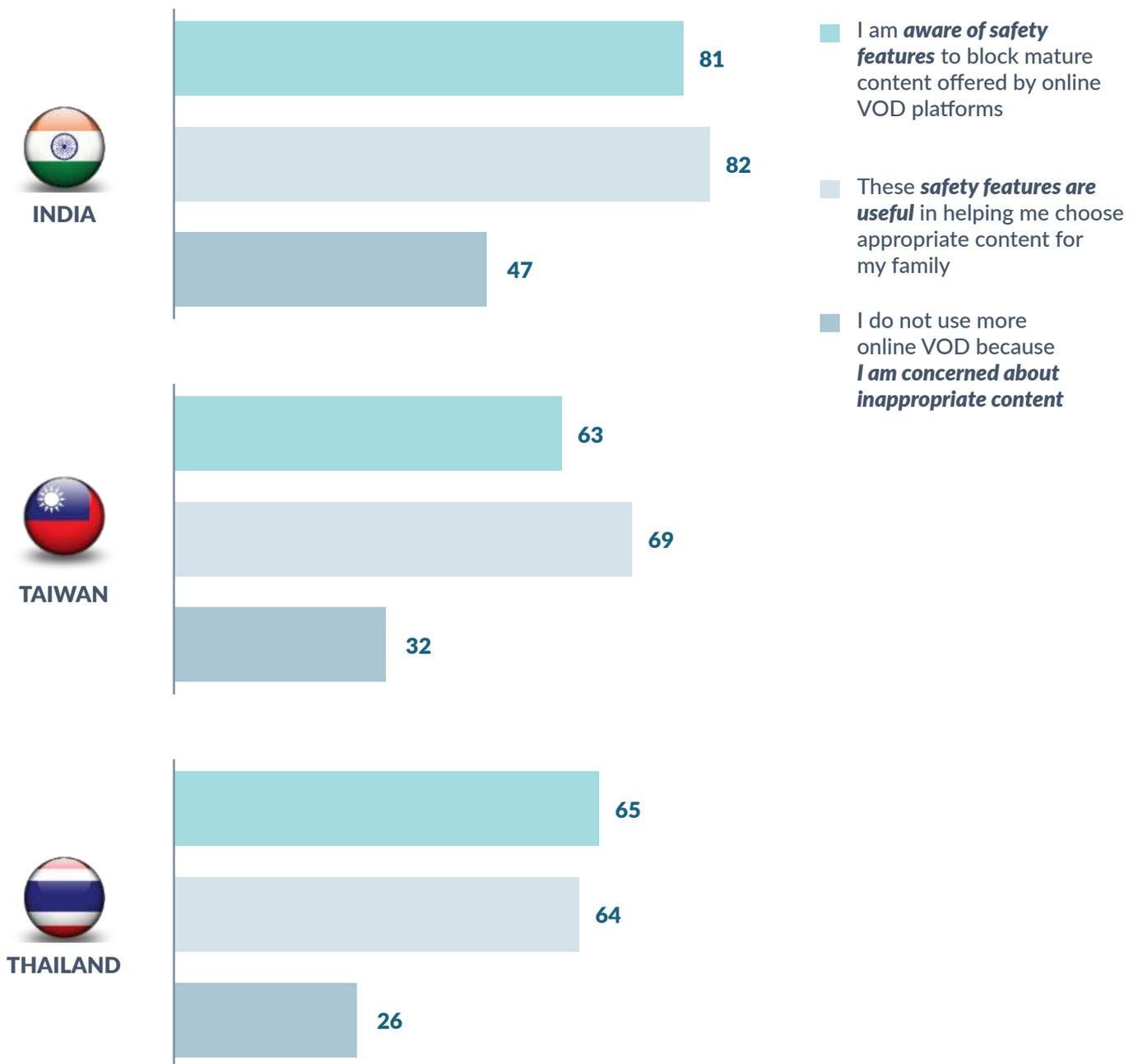
CONTENT CATEGORY	EXAMPLES OF AWARD-WINNING CONTENT PRODUCED BY VOD PLATFORMS	
TV SERIES	<ul style="list-style-type: none"> <li>House of Cards (2012-Present)                             <ul style="list-style-type: none"> <li>Nominated for and won several Emmy's and Golden Globes</li> <li>Features celebrated actor Kevin Spacey</li> </ul> </li> </ul>	
MOVIES	<ul style="list-style-type: none"> <li>Manchester by the Sea (2016)                             <ul style="list-style-type: none"> <li>Nominated for 6 Academy Awards</li> <li>Won Academy Award for Best Actor and Best Original Screenplay in 2017</li> </ul> </li> </ul>	
DOCUMENTARIES	<ul style="list-style-type: none"> <li>The White Helmets (2016)                             <ul style="list-style-type: none"> <li>Won Academy Award for Best Documentary (Short Subject) in 2017</li> </ul> </li> </ul>	

SOURCE: CNBC, Artsbeat, Variety, AlphaBeta analysis

EXHIBIT 9:

**MOST USERS FIND SAFETY FEATURES USEFUL TO PROTECT THEIR FAMILIES AND ARE NOT CONCERNED ABOUT INAPPROPRIATE CONTENT ON VOD PLATFORMS**

% OF ONLINE VOD USERS THAT AGREE OR SOMEWHAT AGREE WITH THE FOLLOWING STATEMENTS



SOURCE: AlphaBeta consumer survey of online VOD users in India (460), Taiwan (418) and Thailand (435)

# BUSINESS BENEFITS:

Local and international VOD platforms offer three key benefits for the local TV and film industry, namely:

## 1. WIDENING REACH AND SCALE OF DISTRIBUTION.

Small independent producers that typically lack big marketing budgets can attract nationwide and even global followership on VOD platforms. Numerous success stories show how VOD platforms can help boost the success of small independent film productions:

- “Tumbledown” is a romantic comedy realized by independent filmmakers in the US for \$4.2 million. Concerned that it would never make it as a box-office success, the producers decided to skip the cinemas and release it via video-on-demand.<sup>55</sup> “Tumbledown” quickly captured viewers, rising to the most downloaded independent movie on the iTunes US charts in 2016.<sup>56</sup>
- “For Lovers Only” is a low-budget romance film based in France that became a hit thanks to the social-media savviness of its producers (see Box 2).<sup>57</sup>
- “It Follows” is a horror film produced in the US for under US\$2 million, which proved the power of VOD platforms. Its producers released it only for two weeks at the box office, before launching it as a video-on-demand. The strategy paid off, allowing the filmmakers to pocket double the revenue they had anticipated.<sup>58</sup>

55. *The Wall Street Journal* (2017), “Video-on-Demand gives low-budget films wider audience” Available at: <https://www.wsj.com/articles/video-on-demand-gives-low-budget-films-wider-audience-1493605333>

56. *The Associated Press* reveals that, for the week ending June 12, 2016, “Tumbledown hit the top of the iTunes Independent Movies chart in the US. Via WTOP (2016), “The top 10 movies on the iTunes Store” Available at: <http://wtop.com/movies/2016/06/the-top-10-movies-on-the-itunes-store-57/>

57. *The Filmmaker* (2011), “Polish brothers release successful no-budget movie on iTunes” Available at: <http://filmmakermagazine.com/25728-polish-brothers-release-successful-no-budget-movie-on-itunes/#.WUtVMI6GNEY>

58. *IndieWire* (2015), “What the success of ‘It Follows’ means for Indie film distribution”. Available at: <http://www.indiewire.com/2015/04/what-the-success-of-it-follows-means-for-indie-film-distribution-63540/>

## BOX 2. CASE STUDY: “FOR LOVERS ONLY” — A LOW BUDGET FILM WITH ONLINE VOD SUCCESS



For Lovers Only (2011) is an American film based in Paris, produced by Mark and Michael Polish, also known as the Polish Brothers. The film has become a model for producing low-budget, independent movies.

Shot only with a small handheld Canon 5D camera over just 12 days in France, it rose to fame as a film that had literally no budget and such a tiny cast that the brothers doubled up on the filmmaking duties, acting as director and transportation service, writing but also starring in the film and liaising with local contacts. Actress Stana Katic, famous for her role as Kate Beckett on “Castle”, even brought her own wardrobe, while the crew paid for their own meals and hotels.<sup>59</sup>

The film was marketed aggressively on social media by Katic and director Mark Polish. After gaining traction on Twitter, they replaced critics’ quotes with tweets of euphoric fans. They also created a page for the movie on Tumblr, a picture-sharing social media site visited by their target audience.

After releasing it via video-on-demand to a global audience, making it available early due to the volume of pre-orders on iTunes, it soared in the download charts. In July 2011, the film was the second-most downloaded romance and the fourth-most downloaded indie film on iTunes.<sup>60</sup> It reached the top 100 in all movie rentals and downloads, topping US\$500,000 in earnings through digital sales.<sup>61</sup> “For Lovers Only” was subsequently recognized by the Screen Actors Guild as a notable Experimental Film.

59. O&O (2011), “For lovers only: how to make a movie with no budget”. Available at: <http://blog.oskoui-oskoui.com/?p=2299>

60. The Wrap (2011), “How the Polish Brothers are raking it in with a stealth, no budget movie” Available at: <http://www.thewrap.com/polish-brothers-new-movie-no-budget-huge-profit-exclusive-28989/>

61. See Wikipedia entry for “For Lovers Only”. Available at: [https://en.wikipedia.org/wiki/For\\_Lovers\\_Only\\_\(film\)](https://en.wikipedia.org/wiki/For_Lovers_Only_(film))

## 2. INCREASING PRODUCTION BUDGETS FOR ORIGINAL CONTENT.

VOD platforms are increasingly relying on original content to reach wider audiences. Many have put aside special budgets for original productions that are now strongly linked to their brand name and that can compete with the production budgets of traditional media production companies, such as HBO and NBC Universal. For example, Netflix plans to spend over US\$6 billion on original content in 2017.<sup>62</sup> Amazon, in particular, plans on tripling its investment in original content on Prime Video in the second half of 2017.<sup>63</sup> Others are following their lead: for example, Apple recently hired Jamie Erlich and Zack van Amburg, who helped produce popular shows such as AMC's "Breaking Bad" and Netflix's "The Crown", to lead their foray into original programming.<sup>64</sup> The competition in the VOD marketplace for high quality TV and film content provides a boost to investment in production and jobs for producers, directors and creative specialists.

Some examples of original content commissioned by VOD platforms in Asia include:

- "Okja" is a Netflix-commissioned film which has been produced for US\$50 million, and became the most expensive Korean-language movie of all time.<sup>65</sup>
- "Marlina – The Murderer in Four Acts" is an Indonesian film, directed by upcoming filmmaker Mouly Surya and funded by HOOQ, an Asian VOD platform that regularly invites movie pitches for local content in the five markets it operates in.<sup>66</sup>
- "Baahubali: The Lost Legends" is an animated TV series produced exclusively by Amazon in conjunction with Indian filmmakers.<sup>68</sup> Media reports say that Amazon is will invest close to US\$300 million on original content in India.<sup>69</sup>
- "Magic Hour" is an eight-part TV series – a sequel to a popular Indonesian film of the same name—that was recently announced by iflix. The South-East Asian platform commissioned "Magic Hour" and other original content earlier this year, after it raised US\$90 million from investors in March 2017.<sup>69</sup>

62. Netflix (2017), "Q3 2016 Letter to Shareholders". Available at: <http://files.shareholder.com/downloads/NFLX/4752302168x0x924415/A5ACACF9-9C17-44E6-B74A-628CE049C1B0/Q416ShareholderLetter.pdf>

63. CNBC (2016), "Amazon just quietly showed how ambitious it is with media" Available at: <http://www.cnbc.com/2016/07/29/amazon-just-quietly-showed-how-ambitious-is-it-with-media.html>

64. Apple Music's new reality TV show, "Planet of the Apps", features aspiring app developers pitching their ideas to seasoned investors, in order to win US\$10 million worth of funding for their ideas. Apple Music also acquired exclusive rights to "Carpool Karaoke", a video segment from a CBS late-night talk show where celebrities sing songs while driving in a car with host James Corden. For more, see *The Business Insider Singapore* (2017), "Apple hires Sony execs Jamie Erlich and Zack van Amburg to lead video programming" Available at: <http://www.businessinsider.sg/apple-hires-sony-exec-jamie-erlich-and-zack-van-amburg-to-lead-video-2017-6?r=US&IR=T>

65. Associated Press (2017), "Netflix theatre debate hits S.Korea as 'Okja' boycott looms" Available at: <http://www.cnbc.com/2017/06/14/the-associated-press-netflix-theater-debate-hits-s-korea-as-okja-boycott-looms.html>

66. HOOQ will invest US\$30,000 in pilot episodes for five Asian mini-series, with the one voted as the best to be developed into a full series. See *Variety* (2017), "Asian VOD platform HOOQ expands local film, series production" Available at: <http://variety.com/2017/digital/asia/asia-vod-hooq-expands-local-production-1202401063/>  
67. *The Indian Express* (2017), "Baahubali The Lost Legends animation series launched, to have new stories about characters and reveal hidden secrets" Available at: <http://indianexpress.com/article/entertainment/regional/baahubali-the-lost-legends-animation-series-launched-new-stories-about-characters-reveal-hidden-secrets-ss-rajamouli-4619760/>

68. *Tech Crunch* (2017), "Netflix rival iflix reveals its first original content series for emerging markets" Available at: <https://techcrunch.com/2017/04/20/iflix-original-content/>

69. *The Economic Times* (2016), "Amazon stitching content deals for possible Diwali launch of Prime Video" Available at: <http://economictimes.indiatimes.com/industry/media/entertainment/amazon-stitching-content-deals-for-possible-diwali-launch-of-prime-video/articleshow/54554614.cms>

### 3. COMMISSIONING ANCILLIARY SERVICES.

VOD platforms invest heavily in special effects such as computer-generated imagery (CGI), and subtitles or dubbing; the latter two are considered an essential part of the viewing experience for foreign-language TV shows and films.<sup>70</sup> Together with the rapid growth of online VOD services, there have been two key developments in producing localized video content:

- Increasing post-production budgets: in the US, the outsourced post-production services market for video content is steadily growing. It was estimated to be worth US\$6 billion in 2016.<sup>71</sup> Key factors powering this growth include the increasing use of special effects and the growing variety of foreign-language content on VOD platforms, which fuel demand for the creation of movie subtitles. India provides a good Asian example – Indian studios have capitalized on the country’s talent and cost advantages, and are now capable of doing end-to-end post-production. The Indian animation and
- Expanding market for talent: traditionally, countries like the US have served as global hubs for so-called ancillary services, which include special effects, subtitles and dubbing. More recently, Asia has been emerging as a new market. A growing number of firms, particularly in China, are now offering inexpensive, high-quality translation and dubbing services. This means the post-production process is becoming more decentralized.<sup>73</sup> Singapore is already capitalizing on this trend and trying to establish itself as a new hub for ancillary production services. For example, local visual-effect artists have been involved in the latest King Kong movie.<sup>74</sup>

visual effects (VFX) industry grew by 16.4 percent in 2016 to just shy of US\$1 billion, dominated by outsourced projects from TV and film industries, with several OTT platforms signing content licensing deals with Indian studios.<sup>72</sup>

70. Netflix Partner Center (2017), “Why are Netflix’s standards for Subtitles and Closed Captions so high?” Available at: <https://backlothelp.netflix.com/hc/en-us/articles/214969868-Why-are-Netflix-s-standards-for-Subtitles-and-Closed-Captions-so-high>

71. IBISWorld (2017), “Video postproduction services in the US: market research report” Available at: <https://www.ibisworld.com/industry-trends/market-research-reports/information/motion-picture-sound-recording-industries/video-postproduction-services.html>

72. KPMG India – Federation of Indian Chambers of Commerce and Industry (2017), “Media for the masses: The Promise unfolds” Available at: <https://assets.kpmg.com/content/dam/kpmg/in/pdf/2017/04/FICCI-Frames-2017.pdf>

73. JBI Studios (2016), “Asian online revenue growth is huge opportunity for video translation” Available at: <https://www.jbistudios.com/blog/asia-online-revenue-growth-video-translation>

74. The Straits Times (2017), “Singapore connection: team behind visual effects for ‘Kong: Skull Island’” Available at: <http://www.straitstimes.com/lifestyle/singapore-connection-team-behind-visual-effects-for-kong-skull-island>

# SOCIETAL BENEFITS:

Apart from benefitting local consumers and businesses, VOD services also have at least three positive spillover effects for the wider society:

## 1. FIGHTING PIRACY.

There is a consensus in academia and the business world that illegal downloads (more commonly known as “internet piracy”) increase when legitimate content is not readily available or expensive, and that VOD services could help tackle this problem, for example:

- In 2013, Netflix’s CEO cited an internal study indicating piracy had dropped by 50 percent in Canada since Netflix’s launch. He added that the ease and convenience of the platform might have discouraged people from using BitTorrent and other sites for illegal video consumption.<sup>75</sup>
- In 2015, CHOICE, a consumer advocacy group in Australia, published research showing that TV and film piracy reduced significantly, citing the “Netflix effect” as a reason behind the reduction. The number of consumers opting for legal streaming and subscription services jumped from 46 percent to 59 percent over a six-month window, with those viewing pirated content at least once a month reducing from 23 percent to 17 percent during the course of the year.<sup>76</sup>

A key area for further research is to improve the amount of critical quantitative evidence to corroborate this theory and demonstrate clear causality between the availability of VOD services and piracy rates.<sup>77</sup>

At present, few studies prove that availability of legal streaming services reduces need to pirate content.<sup>78</sup> Our survey confirms this hypothesis, providing new evidence from three Asian markets (see Exhibit 10). The majority of VOD users surveyed say the availability of legitimate content makes them less likely users of illegal/piracy websites. In particular, 77 percent of surveyed VOD users in India agreed with this statement, 68 percent in Taiwan and 57 percent in Thailand. This effect would not only protect vulnerable audiences from unclassified content, but also the value of intellectual property in the balance sheets of the legal owners.

75. Tweakers (2013), “Netflix CEO Reed Hastings: I wish we could offer all” Available at: <https://tweakers.net/video/8246/netflix-ceo-reed-hastings-ik-wou-dat-we-alles-konden-aanbieden.html>

76. CHOICE (2015), “Piracy drops with ‘Netflix effect’” Available at: <https://www.choice.com.au/about-us/media-releases/2015/september/piracy-dropping-with-netflix-and-other-streaming-services>

77. A study conducted in 2012 at the University of Georgia attempted to establish this causality. The study described “The Netflix effect”, or the reduction in illegal consumption of a successful box-office movie after its release on VOD platforms. See Brennan S. Welter (2012), “The Netflix effect: product availability and piracy in the film industry” Available at: [https://getd.libs.uga.edu/pdfs/welter\\_brennan\\_s\\_201212\\_ma.pdf](https://getd.libs.uga.edu/pdfs/welter_brennan_s_201212_ma.pdf)

78. One of the few existing studies that tests this hypothesis has been conducted by the IP Awareness Foundation in Australia. It found that piracy was down 29 percent in 2015 due to the availability of legal streaming services in the country, with 33 percent of users declaring that access to them reduced their need to pirate content. See more at: The Business Insider Australia (2015), “The Australian film industry says Netflix is reducing piracy” Available at: <https://www.businessinsider.com.au/australian-internet-piracy-drops-29-2015-10>

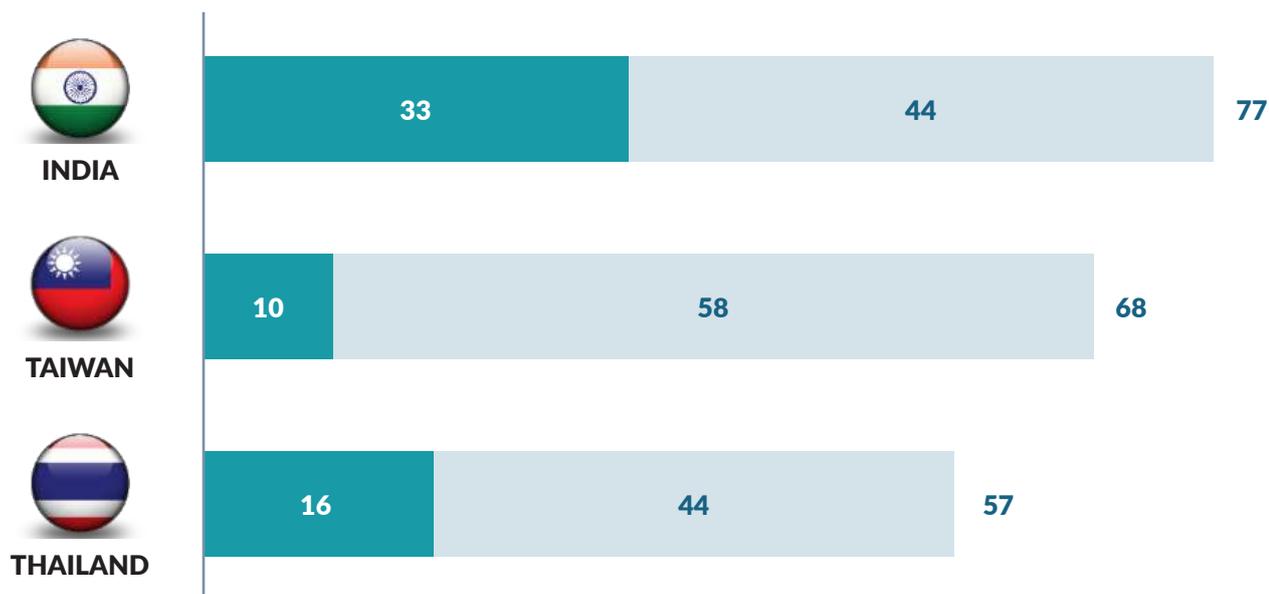
**EXHIBIT 10:**

**MOST VOD USERS SURVEYED AGREE THAT CONTENT AVAILABILITY ON LEGAL SOURCES MAKES THEM LESS LIKELY TO USE ILLEGAL WEBSITES**

■ Strongly agree ■ Somewhat agree

**“CONTENT AVAILABILITY ON LEGAL SOURCES (SUCH AS ONLINE VOD) MAKES ME LESS LIKELY TO USE ILLEGAL WEBSITES”**

% OF ONLINE VOD USERS AGREEING WITH THIS STATEMENT



SOURCE: AlphaBeta consumer survey of internet users watching paid online VOD once a month or more - in India (460), Taiwan (418) and Thailand (435)

## 2. PROMOTING LOCAL LANGUAGES AND CULTURES.

Online VOD platforms contribute to promoting local languages and cultures, by screening movies, TV series or documentaries set in foreign places and, often, where most scenes are filmed and shown in local languages.

For example:

- “3%” is an original science-fiction TV series which was produced and shot entirely in Brazil, in Portuguese. Netflix has been praised for bringing a Latin American story with a humanitarian theme to an international audience.<sup>79</sup> Over half of the shows viewing hours have been clocked in outside of Brazil.<sup>80</sup>
- “The Assassin” is a martial arts epic available on Amazon Prime, selected as the Taiwanese entry for the Best Foreign Language Film at the Academy Awards in 2016.<sup>81</sup> The film was praised at the Cannes Film Festival in 2015 for its historically accurate fight sequences.<sup>82</sup>
- “The Crown” is an award-winning, series that follows the life of British monarch Queen Elizabeth II in post-WWII Britain (see Box 3).
- “Tanna” is a love story set in the Pacific Island of Vanuatu, and details the daily life and culture of the tropical country.<sup>83</sup> It is available on the iTunes movie store, and was nominated for the Best Foreign Language Film at the Academy Awards in 2016.<sup>84</sup>

## 3. DRIVING DIGITAL ADOPTION AND ENCOURAGING INVESTMENT IN DIGITAL INFRASTRUCTURE.

Increasing the quality and the convenience of online content consumption may trigger a virtuous cycle of growth and investment in broadband infrastructure.<sup>85</sup> In fact, research indicates that higher user demand for internet access and bandwidth can spark investment by internet providers, such as network improvements, upgrades and extensions. A study by the World Economic Forum shows that internet penetration rates tend to increase with online content availability and diversification.<sup>86</sup> Using data from a wide sample of countries, researchers mapped out content ecosystem maturity (ie. the quality and variety of content available

online) against internet penetration. The data shows that “supply-side” content availability first helps penetration rates go from 5 to 13 percent in the early stages of the content ecosystem. In the later stages of this ecosystem, content diversification further helps internet penetration rise from 62 to 85 percent. VOD platforms can thus play an important role, through their content, in promoting digital inclusion – which brings with it a host of benefits such as improving education, enabling access to a host of public and health services, availability of digital financial services and enhancing small- and medium-business productivity.<sup>87</sup>

79. Bloomberg (2017), “Netflix wants the world to binge-watch” Available at: <https://www.bloomberg.com/news/features/2017-01-12/netflix-wants-the-world-to-binge-watch>

80. Media Networks (2017), “Netflix’s plans for Asia” Available at: <https://knect365.com/media-networks/article/67c813e6-7ee7-4900-807d-d85be18881b7/134083>

81. iNews (2016), “The best foreign-language films on Amazon prime” Available at: <https://inews.co.uk/essentials/culture/film/best-foreign-language-films-amazon-prime/>

82. Variety (2015), “Film Review: The Assassin” Available at: <http://variety.com/2015/film/festivals/the-assassin-review-cannes-hou-hsiao-hsien-1201501865/>

83. Variety (2015), “Film Review: Tanna” Available at: <http://variety.com/2015/film/festivals/tanna-review-venice-film-festival-1201588554/>

84. USA Today (2017), “You can stream these Oscar-nominated films right now” Available at: <https://www.usatoday.com/story/life/entertainthis/2017/01/24/oscar-nominees-available-to-stream-now/96962636/>

85. Technology Consulting, Research and Training [TRPC] (2017), “Fostering an Open Internet in Asia”, Connectivity, Innovation and Growth. Available at: [http://trpc.biz/wp-content/uploads/FosteringanOpenInternetinAsia\\_v1.pdf](http://trpc.biz/wp-content/uploads/FosteringanOpenInternetinAsia_v1.pdf)

86. World Economic Forum (2015), “Understanding digital content and services ecosystems: the role of content and services in boosting internet adoption”, Global Information Technology Report 2015. Available at: <http://reports.weforum.org/global-information-technology-report-2015/1-3-understanding-digital-content-and-services-ecosystems-the-role-of-content-and-services-in-boosting-internet-adoption/>

87. Deloitte (2014), “Value of connectivity: Economic and social benefits of expanding internet access” Available at: <https://www2.deloitte.com/content/dam/Deloitte/br/Documents/technology-media-telecommunications/ValorConectividade.pdf>

## BOX 3. CASE STUDY: “THE CROWN” — TV SERIES PROMOTING LOCAL CULTURES



“The Crown” (2016-) is a Netflix-original TV series that chronicles life in post-WWII Britain through the story of Queen Elizabeth II. It highlights her experiences as a young monarch and, according to film critics, unfurls how the modern monarchy came into being.<sup>88</sup>

The show has been widely praised for its cinematography and accurate historical depictions of the monarchy. Actors Claire Foy (playing Queen Elizabeth II) and Jon Lithgow (playing Sir Winston Churchill) have won awards at the Screen Actors Guild for their performances on The Crown.<sup>89</sup>

The show is popular in several countries, reaching out to millions of viewers and piquing global interest in the famous British royal family. It placed in the top of the US original digital series viewership charts in November 2016.<sup>90</sup>

88. Netflix invested over GBP100 million in order to accurately recreate the story of the post-War British monarchy. See *The Telegraph* (2016), “The Crown: all you need to know about Netflix’s GBP100 million series, from the ‘shocking first scene to Matt Smith’s topless rowing” Available at: <http://www.telegraph.co.uk/on-demand/2016/10/14/the-crown-all-you-need-to-know-about-netflixs-100-million-series/>

89. *The Daily Mail* (2017), “Now they’re Hollywood royalty! The Crown’s Claire Foy and John Lithgow win top acting prizes at SAG Awards... as she declares her ‘love’ for co-star Matt Smith in acceptance speech” Available at: <http://www.dailymail.co.uk/tvshowbiz/article-4170472/Claire-Foy-wins-SAG-Awards-Crown.html>

90. *The Drum* (2016), “The Crown takes the top spot as most popular digital series in the US” Available at: <http://www.thedrum.com/news/2016/11/21/the-crown-takes-the-top-spot-most-popular-digital-series-the-us>



# **DIRECTIONS FOR SOUND POLICY REFORM**

How can Asian countries take full advantage of the VOD industry as a runway for innovation and investment? Lessons from some of the most successful digital economies in the region show that sound policy reforms are guided by three principles: a collaborative approach, fair and predictable tax treatment of industry players, and light-touch regulation that supports and stimulates innovation.

Following best practices can help regulators implement new rules for the VOD industry that are truly effective in achieving the desired impact – namely, ensuring that minors only have access to age-appropriate content, incentivizing contributions to the local economy, and promoting fair competition between traditional media companies and newcomers.



## EXHIBIT 11:

## AN INTERNATIONAL REVIEW OF REGULATORY BEST PRACTICES IDENTIFIED THREE KEY PILLARS FOR SOUND POLICY REFORMS IN THE ONLINE VOD INDUSTRY

PILLARS FOR SOUND POLICY REFORMS	EXAMPLES OF INTERNATIONAL BEST PRACTICES
<p><b>Multi-stakeholder governance approach to online safety</b></p>	<ul style="list-style-type: none"> <li data-bbox="616 613 1374 667"> <b>“Safer Internet Day”</b> multi-stakeholder engagement event</li> <li data-bbox="616 703 1123 757"> <b>“Digitally Safe Consumer”</b> campaign</li> </ul>
<p><b>Clear, predictable, easily-enforceable and equitable fiscal regimes</b></p>	<ul style="list-style-type: none"> <li data-bbox="616 887 1203 949"> <b>Tax reform proposal circulated in advance</b>, for stakeholder syndication</li> <li data-bbox="616 985 1251 1048"> <b>Destination-based GST / VAT</b>, for digital goods and services</li> </ul>
<p><b>Light-touch regulation<sup>1</sup> that supports and stimulates innovation</b></p>	<ul style="list-style-type: none"> <li data-bbox="616 1146 1123 1200"> <b>“Light touch”</b> in internet governance</li> <li data-bbox="616 1236 1086 1290"> <b>“Technology-neutral”</b> legislations</li> <li data-bbox="616 1326 1310 1379"> <b>Automatic class-licensing</b> processes for OTT players</li> <li data-bbox="616 1415 1315 1469"> <b>Regulatory exceptions</b> for the nascent VOD industry</li> </ul>

1. Light-touch regulation refers to simple, efficient rules that are conducive to innovation, by removing high compliance costs and lengthy regulatory processes

SOURCE: AlphaBeta analysis, expert interviews, literature review

## CONCLUSIONS FROM THE ANALYSIS

The emergence of new media streaming services has sparked three key concerns among regulators in Asia. They are eager to ensure that VOD services enable minors to only have access to age-appropriate content, incentivize contributions from VOD services to the local economy, and promoting fair competition between traditional media companies and new players.

However, there are signs that the recent push for tighter regulation of OTT-powered services, including video-on-demand, may fail to address these concerns and result in unintended and unfavorable outcomes (see Chapter 1 for details). This finding implies an important message: new regulations, if not designed carefully, could jeopardize the innovation and growth potential of the OTT industry and limit its ability to generate benefits for local consumers, businesses and the wider society.

So, how should governments respond? A key premise, this analysis shows, is that a blanket approach has little merit. Regulation that was designed for traditional communications and media services does not necessarily suit the specific features of the VOD market.

For instance, as discussed in Chapter 2, cable and broadcast TV providers operate across a limited spectrum, whereas VOD platforms operate over the open, unconstrained internet. The premise of introducing licensing is to provide privileged access to a scarce resource. Yet for firms operating over the internet, which has unlimited capacity, licensing systems would be redundant.

Similarly, bringing together all OTT players under the same umbrella and having the same regulations



apply across the board, whether the service is a communications platform, a user-generated content platform or a curated video-on-demand platform is unlikely to result in favorable regulatory outcomes. The Body of European Regulators of Electronic Communications (BEREC) recently published a simple classification of OTT services to help regulators identify the regulatory nuances applicable to different OTT services.<sup>91</sup>

A sound framework for the OTT industry should ensure VOD providers remain a source of economic growth in Asia. Its rules should preserve the ability of VOD services to innovate and generate significant benefits for consumers, businesses and society.

As discussed in Chapter 3, consumer preferences are evolving and a growing number of people in Asia are increasingly fond of video-on-demand. In India, consumers value high-quality VOD services at US\$117 per year, in Taiwan they value them at US\$342 a year, and in Thailand at US\$211. The growth and investment power of VOD platforms is already buoying a number of businesses, including local, independent filmmakers and post-production services. This is favorable for economic diversity.

Society at large also stands to benefit, as research signals that video-on-demand services play a role in combating piracy because they offer a large variety of legally available entertainment, thus reducing the incentive for

consumers to download pirated content. VOD services also promote the provision of age-appropriate content and encourage cultural diversity by funding foreign-language TV shows and films. Their presence is expected to increase digital literacy of people in Asia and stimulate fresh investment in digital infrastructure across Asia.

Currently, some of the most vibrant VOD consumer markets and successful TV and film industries are thriving in countries where VOD platforms are treated as digital startups and regulated lightly to encourage product innovation. For instance:

- In **Taiwan**, local broadcaster Catchplay has launched its own online VOD platform to compete with global providers such as Netflix and Amazon Prime.<sup>92</sup>
- HMV Digital China Group, **Hong Kong's** largest music and DVD retailer, has launched its online VOD platform HMVOD in March 2017, with a strong focus on “genuine Hong Kong” film content catered to local tastes.<sup>93</sup> In the same country, VOD platforms are generally viewed as important distribution partners for the TV and film industry.<sup>94</sup>
- **Singapore** has a variety of global (Netflix and Amazon Prime) and regional players (such as HOOQ), which are now involved in original content production, as mentioned previously.<sup>95</sup>

91. BEREC delineates OTT services into OTT-0 (communications services such as Viber and Skype), OTT-1 (voice and instant messaging services such as Whatsapp and Line) and OTT-2 (e-commerce, video and music streaming services such as Lazada, HOOQ and Spotify). See BEREC (2016), “Report on OTT services”. Available at: [http://berec.europa.eu/eng/document\\_register/subject\\_matter/berec/reports/5751-berec-report-on-ott-services](http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/5751-berec-report-on-ott-services)

92. Variety (2017), “Taiwan’s Catchplay launches Asian movie streaming service” Available at: <http://variety.com/2016/digital/asia/catchplay-launches-asian-streaming-service-1201735811/>

93. South China Morning Post (2017), “HMV Digital China unveils online video streaming platform in challenge to Netflix, other rivals” Available at: <http://www.scmp.com/business/companies/article/2075203/hmv-digital-china-unveils-online-video-streaming-platform>

94. HKTDC (2017), “Film industry in Hong Kong” Available at: <http://hkmb.hktdc.com/en/1X0018PN/hktdc-research/Film-Entertainment-Industry-in-Hong-Kong>

95. CASBAA has compiled a comprehensive report of the evolving legislative environment surrounding Pay-TV and OTT in Asia. Cable and Satellite Broadcasting Association of Asia (2016), “Same Same But Different? Video Policies for Asian Pay-TV and OTT” Available at: <http://www.casbaa.com/publication/same-same-but-different-video-policies-for-asian-pay-tv-and-ott/>

# LESSONS FROM REGIONAL REGULATORY BEST PRACTICE: THREE PILLARS OF SUCCESS

The following overview of best practices around the region shows that countries with highly successful regulatory policies to govern the VOD industry are built on three pillars: a collaborative approach to online safety, a predictable and fair fiscal regime, and light-touch regulation conducive to innovation.

In detail, the following principles are found to be essential for VOD regulation to meet its intended objectives:

## 1. MULTI-STAKEHOLDER GOVERNANCE APPROACH TO ONLINE SAFETY.

This model prioritizes consumer interests in online safety, and empowers consumers to make viewing choices that are appropriate for them and their families. Industry and regulators work together to provide the right amount of guidance and technology. Features that platforms have implemented include:

- **Delegating content and rating control** to industry players and associations is cost-effective and could become an alternative to government-led approval processes, which can be lengthy and encourage the use of pirated content sources. For instance, to ensure children are protected from accessing adult content on VOD platforms, content providers have already equipped their services with a range of safety features (see chapter 3 for details). To ensure standards are maintained, some government oversight is useful to monitor compliance. Singapore, for instance, provides detailed guidelines on sensitive content, and requires OTT platforms to self-classify the content they post for consumer consumption, accompanied by consumer advice outlining the content elements contributing to the rating (see Box 4).<sup>96</sup>

- **Safety standards** may also become more effective when multiple stakeholders are involved, including consumer associations and international development agencies. In a “pull” content model, where consumers explore and discover new content, it is imperative for them as the decision-makers to make informed, safe viewing choices. Some Asian governments are already collaborating with a range of interested parties to make internet content safer and increase the risk awareness of consumers. For example:

1. **“Safer Internet Day”** is an annual global initiative that promotes the positive use of internet. It comprises a series of multi-stakeholder engagement events.<sup>97</sup> For instance, in 2017, Netflix organized the Digital Citizenship Dialogue in Malaysia as a part of Safer Internet Day, with speakers from the Family Online Safety Institute, Malaysian Communications and Multimedia Commission, Cyber Security Malaysia and UNICEF Malaysia. The event focused on best practices for keeping younger citizens online safe through research, policy and parental controls.<sup>98</sup>

96. IMDA (2016), “Information Circular in respect of MDA’s required baseline safeguards for over-the-top content services offering R21 content” Available at: <https://www.imda.gov.sg/about/newsroom/archived/mda/media-releases/2016/information-circular-in-respect-of-mdas-required-baseline-safeguards-for-overthetop-content-services-offering-r21-content>

97. Safer Internet Day (2017), “About Safer Internet Day” Available at: <https://www.saferinternetday.org/web/sid/about>

98. Bernama Media Relations and Event Management [MREM] (2017), “Keeping children safe is everyone’s responsibility” Available at: <http://mrem.bernama.com/views.php?idm=28444>



2. “Digitally Safe Consumer” is a campaign launched by Google with the Ministry of Consumer Affairs in India, which includes awareness and education workshops with consumer organizations, training

programs to members of the Ministry, and the establishment of a National Consumer Helpline. The goal is to make it safer for internet users to consume digital products and services.<sup>99</sup>

## **2. CLEAR, PREDICTABLE, EASILY-ENFORCEABLE AND EQUITABLE FISCAL REGIMES.**

New Zealand, Japan and India display best practices in this regard:

- **Reform proposals circulated in advance.**

New Zealand’s implementation of OECD guidelines on “base erosion and profit shifting” (BEPS) in the digital economy offers a good example of how stakeholders can be effectively involved in reforms. Well in advance, the New Zealand Minister of Revenue released three consultation papers, in which he called for feedback from industry players and pledged to take their input seriously.<sup>100</sup> New Zealand’s BEPS implementation process has been widely praised for the clarity provided in drafting

legislation, transparency in including public opinion and reducing regulatory uncertainty, and the work of its officials behind the scenes to consult and involve a wide range of stakeholders.<sup>101</sup>

- **Easily-enforceable and equitable approaches.**

Countries will follow their own approaches in implementing the OECD guidelines on BEPS and taxing the digital economy. Solutions range from value-added taxes (VAT) to diverted profit taxes. While the specific fiscal approach and tax levels are for governments to determine and beyond the scope of this study, past research indicates the importance of ensuring taxation is

99. The Indian Express (2016), “Google to launch online safety campaign for digital consumers in India” Available at: <http://indianexpress.com/article/technology/tech-news-technology/google-to-launch-online-safety-campaign-for-digital-consumers-in-india-4445330/>

100. “We pay attention to what the private sector says and proposals are always improved by feedback (...) I encourage you to submit on all three BEPS consultation papers, as your views provide important insights into how the proposals could affect business. Feedback from submitters will be critical to achieving the intended outcomes of preventing tax benefits from aggressive BEPS arrangements, whilst ensuring New Zealand remains a stable and attractive location for investment.” - Judith Collins, Minister of Revenue, March 2017. See: Inland Revenue New Zealand (2017), “BEPS consultation documents released” Available at: <http://taxpolicy.ird.govt.nz/news/2017-03-03-beps-consultation-documents-released>

101. EY Tax Insights (2017), “New Zealand a front-runner on BEPS implementation” Available at: <http://taxinsights.ey.com/archive/archive-articles/new-zealand-a-front-runner-on-beps-implementation.aspx>

easily enforceable and equitable (i.e., not unduly discriminating against one sector). This includes “ringfencing” the digital economy with sector-specific taxes.

1. One relatively simple and easily enforceable mechanism to ensure taxes are paid on sales of digital services (including VOD) is the destination-based GST.<sup>102</sup> According to this tax principle, the revenue should be taxed in the country where the good or the service is purchased – in this case, from where the subscription is purchased. Destination-based GST suits the import of digital products and services, often being provided from one location but consumed in many countries. For

example, for electronic services supplied in Japan, the place of taxation is considered “the place of domicile or residence of the person who received the services”.<sup>103</sup> India has a similar regime in place; overseas providers of digital goods and services to Indian residents are required to obtain GST registration.<sup>104</sup>

2. Another example of a non-discriminatory approach is that of New Zealand and Australia, which applies the diverted profits tax. The taxation approach of these countries to tackling diverted profits applies to all multinational companies over a certain revenue threshold, as opposed to only digital firms.<sup>105</sup>

102. The OECD guidelines on Base Erosion and Profit Shifting (BEPS) contain 15 actions that equip governments with domestic and international policy instruments needed to tackle tax avoidance. Over 100 countries have worked together to set up joint rules for common taxation issues, with the objective of getting businesses and individuals to pay their fair share of taxes without hampering growth and innovation. See OECD (2017), “Base erosion and profit shifting” Available at: <http://www.oecd.org/tax/beeps/>

103. Japan created a new Value Added Tax (VAT) under the Japanese Consumption Tax (JCT) as a levy on all cross-border digital goods and services consumed in Japan that has been in effect since October 2015. It includes foreign providers of OTT services to Japanese consumers, who must register with Japanese tax authorities, appoint a local representative, collect and then file relevant taxes with the authorities. The JCT currently stands at 8 percent. See PwC (2015), “Japan – legislation passed – foreign providers of electronic services are required to register for consumption tax as of 1 October 2015” Available at: <http://ebiz.pwc.com/2015/04/japan-legislation-passed-foreign-provider-of-electronic-services-are-required-to-register-for-consumption-tax-as-of-1-october-2015/>

104. India applies a GST to all digital goods and services, regardless of origin, under the service tax rules for Online Information and Database Access and Retrieval services (OIDAR). The definition of OIDAR includes but is not limited to electronic services such as online ads, cloud services, e-books, movies, music, software, data, and gaming. See EY (2016), “India amends service tax rules for overseas service providers regarding online formation and database access or retrievable services” Available at: [http://www.ey.com/Publication/vwLUAssets/India\\_amends\\_service\\_tax\\_rules\\_for\\_overseas\\_service\\_providers\\_regarding\\_online\\_information\\_and\\_database\\_access\\_or\\_retrievable\\_services/\\$FILE/2016G\\_03917-161Gbl\\_Indirect\\_India%20amends%20STR%20for%20overseas%20service%20providers%20re%20online%20info%20and%20database%20access%20or%20retrievable.pdf](http://www.ey.com/Publication/vwLUAssets/India_amends_service_tax_rules_for_overseas_service_providers_regarding_online_information_and_database_access_or_retrievable_services/$FILE/2016G_03917-161Gbl_Indirect_India%20amends%20STR%20for%20overseas%20service%20providers%20re%20online%20info%20and%20database%20access%20or%20retrievable.pdf)

105. In March 2017, New Zealand proposed a similar diverted profit tax as those already enacted in the UK (Diverted Profits Tax or DPT, 2015) and Australia (Multinational Anti-Avoidance Law or MAAL, 2016). Under this rule, non-resident units of multinational companies with over EUR750 million of global turnover would be treated as having a permanent entity in New Zealand and taxed as such. See Inland Revenue Department (2017), “Chapter 3 – Permanent establishment avoidance” Available at: <http://taxpolicy.ird.govt.nz/publications/2017-dd-transfer-pricing-pe/chapter-3>

### 3. LIGHT-TOUCH REGULATION THAT SUPPORTS AND STIMULATES INNOVATION.

Simple, efficient regulations are conducive to innovation by removing high compliance costs and lengthy regulatory processes. Some of Asia's most successful economies have created thriving digital sectors by simplifying regulation for technology companies and startups in the online VOD sphere. For instance:

- **The National Communications Commission of Taiwan has recently drafted a “Digital Communications Act”**, which emphasizes the need for a “light touch” in internet governance.<sup>106</sup> This is complemented by a proposal to loosen traditional Pay-TV broadcasting regulation, possibly to facilitate competition with OTT services.<sup>107</sup>
- **Singapore’s InfoComm Media Development Authority (IMDA)** has developed a model standard for the regulation of OTT services and their providers (see Box 4).
- **Hong Kong’s government** is broadly considered
- **Policymakers in South Korea** are facilitating development of the online VOD industry by presently excluding it from the explicit regulation of the Internet Multimedia Broadcasting Business Act (IMBBA).<sup>110</sup> They have also relaxed rate regulation such as fees charged for obtaining and renewing licenses for cable and Pay-TV providers (focused on domestic content), so they may compete with online VOD platforms (focused on foreign content).<sup>111</sup>

In summary, it is important for regulators to treat nascent industries like video-on-demand in a way that addresses widespread concerns without curtailing their growth potential.

An agile, multilateral governance approach would promote safety by empowering consumers to make informed, conscious decisions when browsing the internet. Meanwhile, giving both incumbents and new players the opportunity to comment on proposed fiscal

changes and time enough to adapt to them can help attract and preserve foreign direct investments. Such consultation would ensure that international companies continue to perceive a country’s tax system as stable, transparent and non-discriminatory. Finally, sound regulations would need to cater to every player in an industry – facilitating the development of new business models, while also supporting incumbents’ transitions to remain productive and competitive.

106. National Communications Commission (2017), “NBTC visits NCC to discuss OTT TV and other communications issues” Available at: [https://www.ncc.gov.tw/english/content\\_field\\_detail.aspx?site\\_content\\_sn=215&is\\_history=0&pages=0&sn\\_f=85](https://www.ncc.gov.tw/english/content_field_detail.aspx?site_content_sn=215&is_history=0&pages=0&sn_f=85)

107, 108, 109, 110. Cable and Satellite Broadcasting Association of Asia [CASBAA] (2016), “Same Same But Different? Video Policies for Asian Pay-TV and OTT” Available at: <http://www.casbaa.com/publication/same-same-but-different-video-policies-for-asian-pay-tv-and-ott/>

111. John Medeiros/CASBAA (2017), “Regulating video in internet age: Pressing challenges, slow movement” Available at: <https://www.telecomasia.net/content/regulating-video-internet-age-pressing-challenges-slow-movement>

## BOX 4. SINGAPORE'S IMDA: OTT REGULATION BEST PRACTICES



Singapore's InfoComm Media Development Authority is the country's development and regulatory authority for the information technology, communications and media sectors. Its focus is on developing both sectors to be dynamic and innovative while encouraging research, entrepreneurship and talent development.<sup>112</sup>

Singapore has a robust set of policies to capitalize on the economic potential of OTT service providers, without encouraging the proliferation of harmful content.<sup>113</sup> It has achieved this through three simple practices, developed through public consultation with industry stakeholders and consumer surveys (as discussed in Chapter 2):

- **Automatic class-licensing:** OTT service providers are automatically class-licensed and required to comply with the class license conditions and the Internet Code of Practice.<sup>114</sup> Simple requirements include basic safeguards for restricted content, such as verification of age for new subscribers.<sup>115</sup>
- **Self-rated content:** IMDA subjects OTT platforms to national standards for sensitive or "R21" content ratings as well as copyright infringements, without holding them to traditional broadcasting rules.<sup>116</sup> For content ratings, this includes alerts for recommended viewing age and potentially harmful content (such as violence, sex and nudity).
- **Consumer empowerment:** in Singapore, consumers are required to self-declare their age and are offered access controls (such as PINs) on OTT platforms; practices that recognize the consumer's central role in the enforcement of content restrictions for their families.

112. IMDA (2016), "What we do" Available at: <https://www.imda.gov.sg/about/what-we-do>

113. The IMDA held several panels at the Singapore Media Festival in 2016, where the SVOD model was praised as the way forward. See IMDA (2016), "Takeaways from the Singapore Media Festival" Available at: <https://www.imda.gov.sg/infocomm-and-media-news/buzz-central/2016/12/takeaways-from-the-singapore-media-festival>

114. IMDA (2017), "Class License Registration for Internet Content Providers" Available at: <https://www.imda.gov.sg/regulations-licensing-and-consultations/licensing/licences/class-licence-scheme/class-licence-registration-for-internet-content-providers>

115. IMDA (2016), "Information Circular in respect of MDA's required baseline safeguards for over-the-top content services offering R21 content" Available at: <https://www.imda.gov.sg/about/newsroom/archived/mda/media-releases/2016/information-circular-in-respect-of-mdas-required-baseline-safeguards-for-overthetop-content-services-offering-r21-content>

116. Variety (2016), "Singapore is evolving, says IMDA CEO Gabriel Lim" Available at: <http://variety.com/2016/digital/asia/singapore-is-evolving-imda-ceo-gabriel-lim-1201933178/>



# APPENDIX: DATA AND METHODOLOGY

# DATA

An online consumer survey was conducted amongst over 1,300 users of VOD services in India (460), Taiwan (418) and Thailand (435), with distributions of key demographic data including gender, age, income, and geography representative of the country's online population. The survey was conducted in local languages and consisted of 14 questions.

The sample size of 400+ per country was chosen to obtain point estimates that fall within a 95 percent confidence interval with a 5 percent margin of error, accounting for the size of the VOD user population in these countries. In accordance with the consensus in the economic literature, 5 percent constitutes a robust and acceptable margin of error.

## EXHIBIT A1:

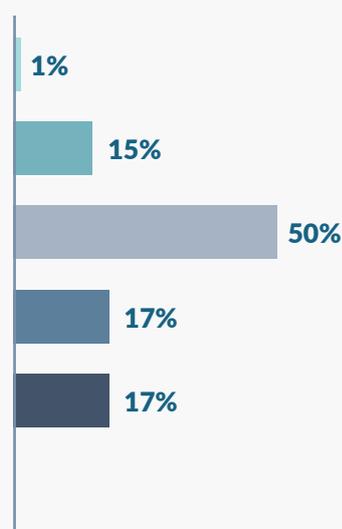
### BREAKDOWN OF VOD USERS SURVEYED BY INCOME BRACKET

THE INCOME DISTRIBUTION OF VOD USERS SURVEYED IS CONSISTENT WITH EACH COUNTRY'S ONLINE POPULATION



#### INDIA

Share of Indian VOD users surveyed



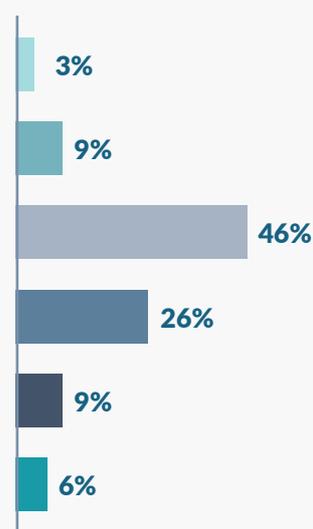
Income range (INR)

- 0 - 9,999
- 10,000 - 24,999
- 25,000 - 99,999
- 100,000 - 199,999
- 200,000+



#### TAIWAN

Share of Taiwanese VOD users surveyed



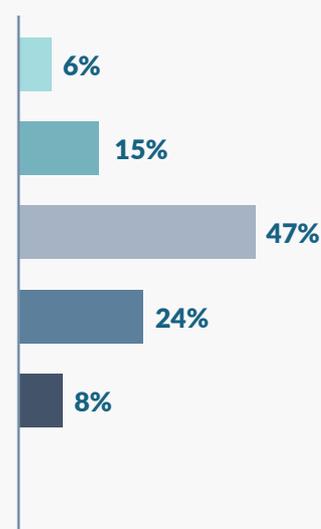
Income range (NTD)

- 0 - 4,999
- 5,000 - 49,999
- 50,000 - 99,999
- 100,000 - 149,999
- 150,000 - 199,999
- 200,000+



#### THAILAND

Share of Thai VOD users surveyed



Income range (THB)

- 0 - 4,999
- 5,000 - 14,999
- 15,000 - 49,999
- 50,000 - 99,999
- 100,000+



## METHODOLOGY

### CALCULATING AVERAGE CONSUMER BENEFITS ATTRIBUTED TO PAID ONLINE VOD

Consumer surplus is defined as the difference between a consumer's willingness to pay and the actual price paid for a given good or service; it can be considered as the satisfaction she derives from the purchased service in excess of the money she had to spend for it.

Consumer surplus is usually calculated by observing how users respond to price changes. For example, if customers reduce their consumption rapidly in response to price increases, that may be an indication that they do not value the product much higher than its current price and are not deriving much benefit from it.

The consumer benefits supported by paid online VOD services are challenging to measure and calculate, as individuals pay for both online VOD subscriptions and for the purchase of single items (on TVOD platforms), hence it would be harder to observe marginal changes in their consumption levels. In the absence of

comprehensive price indicators, we employ a willingness to pay approach.

The willingness to pay (WTP) approach estimates consumer benefits by eliciting how much individuals are prepared to pay for specific products and services. The most straightforward way of obtaining this information is simply to ask consumers. However, this method has drawbacks. For example, individuals often struggle to quantify the value a product or service holds to them. Individuals are prone to overestimate their willingness to pay, and framing can amplify these uncertainties and potential biases. However, there are ways to improve the robustness of estimates. In AlphaBeta's consumer survey, participants were confronted with the following scenario: they were offered a fixed monthly cash reward over and above their foregone paid online VOD subscription fees, in exchange for giving up **all** paid online VOD services. In other words: the method elicited a willingness to accept, rather than a willingness to pay, which recent research has shown to be less prone to biases induced by framing.<sup>117</sup> To deal with potential uncertainty about the

117. Yang et al. (2013) *Framing Influences Willingness to Pay but Not Willingness to Accept*, *Journal of Marketing Research*.



nominal size of their valuations, subjects were provided with a “discount menu” from which they could choose a valuation in local currency units, as well as an option for them to provide their own valuation.

The average of these responses was taken as the consumer benefit per person, which was subsequently converted to an annual US\$ figure. The annual average consumer benefit in US\$ was then broken down into its constituent parts, split into consumers’ declared reasons for using paid online VOD services.

### **BENCHMARKING THE VALUE DERIVED FROM VOD SERVICES WITH MOVIE TICKETS**

To provide perspective to the estimated amount of consumer benefits, the value ascribed by VOD users to video-on-demand in the exclusive survey is expressed in terms of the price of premium cinema tickets in Delhi, Taipei and Bangkok. Such tickets entitle users to services above the standard class, such as 3D experiences, reclining chairs or exclusive customer service.

In AlphaBeta’s analysis, the prices of premium movie tickets in public cinema complexes in Delhi, Taipei and Bangkok were listed in local currency units and then converted to US\$ figures. The consumer benefit derived from the previous analysis was then expressed as a rounded-down number of tickets purchasable.

The prices for premium tickets observed are listed below:

- Delhi – PVR Cinemas: INR600 or US\$9
- Taipei – Vieshow Cinemas: NTD312 or US\$10.3
- Bangkok – Paragon Cineplex: THB450 or US\$13

### **AGGREGATING COUNTRY RESULTS**

Despite the minor differences in the size of the samples, when aggregating survey results each country was assigned an equal weight, i.e. 1/3 for India, 1/3 for Taiwan, 1/3 for Thailand.

Prepared by AlphaBeta for Netflix

alphaBeta  
strategy x economics