

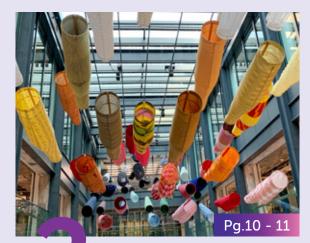
Creative Industries

Nestled in the heart of Asia, Hong Kong is the global creative output leader. Long touted as the Asian Creativity Capital, Hong Kong houses a plethora of multinational creative companies, spanning art and culture, design, media, entertainment, gaming, advertising, film, music and beyond.

Creative-Driven Transformation

Placing creative at the heart of transformation allows businesses to create lasting impact, garnering long-term sales growth and brand building, directly influencing their bottom line, helping them to outperform their peers.



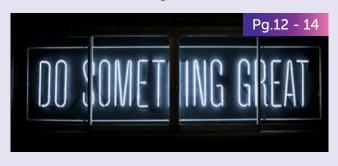


Robust Creative & Design Sector

Hong Kong's creative and design industries are increasingly export-oriented, acting as a gateway to Mainland China, as well as the wider Asia Pacific region.

Marketing & Advertising Foundation

Changing consumer behaviours have caused a shift towards digital platforms in order to increase the impact of the marketing efforts. With online channels providing a demonstrable return on investment, advertisers are investing more in new technologies.





The Progression of Digital Advertising

Disruptors are changing how consumers interact with digital media services and content. This is forcing marketers to adapt and evolve. Marketing technologies have become an important tool for companies to create, execute and measure success.





World Leading Art Market

The Hong Kong art market has witnessed unprecedented growth, becoming the second largest art auction market in the world.² This is the result of developed infrastructure and its unique position as an entry point into the Chinese art market.

Differentiating

Virtual, augmented, mixed, and extended reality are the newest disruptors within the art worlds. The use of interactive media provides new tools for immersive experience, audience engagement and education. To facilitate this change, Hong Kong provides fertile soil for necessary creative innovation exploration.





The pandemic has propelled digital behaviours in many areas of life. Fueled by increasing broadband speeds and penetration, the demand for OTT video is growing and shows no sign of abating.

All-encompassing **Entertainment Technologies**

As virtual entertainment events become the "new normal", emerging technologies are being leveraged to create fully immersive experiences through interactive content, enhancing user connectivity and demonstrating value for money.





Hong Kong's first-class infrastructure, digitally savvy population and open access to the largest esports market in the world in Mainland China have put it in a highly advantageous position to capitalise on future economic opportunities.

Hong Kong's Leading Creative Digital Ecosystem

Situated perfectly in the heart of Asia, Hong Kong's numerous competitive advantages have positioned it as the global leader in creative output, due in large part to the creative outputs of the economy, specifically its world beating position in printing and media output, creative goods exports, and online creativity, which provide a sense of the international reach of creative activities of Hong Kong.³

Hong Kong has been touted as the Creativity Capital of Asia, and it is easy to see why. Hong Kong houses a plethora of multinational creative companies, spanning art and culture, design, media, entertainment, gaming, advertising, film, music and beyond. It employs 5.7 percent of Hong Kong's total employees. As one of the most dynamic economic sectors, the creative economy accounts for 4.2 percent of Hong Kong's GDP.⁴



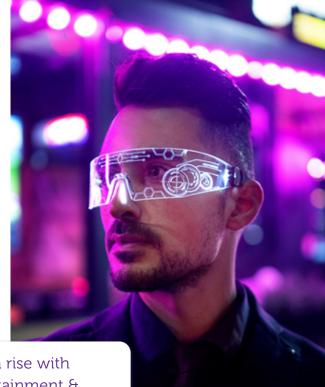
³ WIPO - Global Innovation Index 2020

Census & Statistics Department - The Four Key Industries and Other Selected Industries

As with many industries, COVID-19 presented many challenges and opportunities for the creative industries. The rate of digital adoption amongst consumers accelerated through the pandemic, forcing businesses to play catch up. Companies have reframed their business models in response to the amplification of preexisting trends, as well as the emergence of new opportunities.

There is more demand for access to content online, creating an online-first ecosystem. People now see digital entertainment & media (e.g. content streaming subscription, mobile data allowance and access) as a utility, putting it on par with water or electricity in terms of necessity to their daily lives.

Innovative companies have adapted to these rapidly changing consumer preferences. Advertisers are shifting to subscription-based models that can provide more relevant and tailored content. Live events and gaming platforms are being transformed to help reach audiences at home in a more personalised and engaging way.



As demand for data and bandwidth rise with consumption of home entertainment, entertainment & media companies using 5G networks can expand their service offerings and improve live entertainment by investing in emerging technologies of Artificial Intelligence (AI), Augmented Reality (AR), and Virtual Reality (VR). The low latency, high bandwidth and fast download speeds of 5G can power immersive experiences and drive cloudbased entertainment services.

Wilson Chow

GLOBAL TMT INDUSTRY LEADER, PwC



Both the uptake of 5G and the shift in consumers' media usage have spurred growth in digital advertising. Companies have been forced to upgrade and update traditional ways of working and doing business, which has triggered increased demand for digital media, tools and skills to stay connected and engage with customers. This presents rich opportunities for all the creative industries, from large-scale agencies to small creatives, to fuel digitalisation efforts.

Omnicom Media Group, a global media, marketing and corporate communications company, recently built a robust Performance Marketing Hub of Excellence to help their clients build in-house data management platforms, enable programmatic advertising and facilitate real-time behavioural targeting across

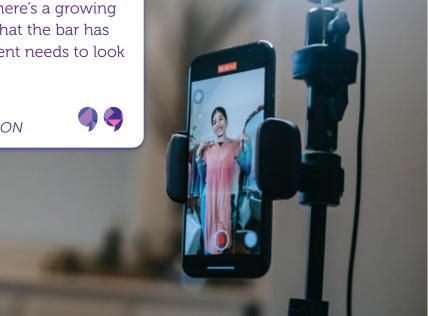
numerous media and advertising platforms. As a result, their client became one of the pioneers in Hong Kong to incorporate predictive analytics and to take advantage of machine learning and probability equations to maximise programmatic ad investments.

Meanwhile, DDB Group, a worldwide marketing communications network, evolved their operating model to create a dedicated division that develops high quality digital and social content. This newly launched division, called Motion, focuses primarily on film production and photo studio quality work for the online space. It brings together film making, animation and photography specialists to help address client's expectations for differentiated and high-quality content.

Whether it's a Netflix show, a blockbuster movie, or the work of social media influencers, people have become accustomed to seeing things that look amazing every time they look at a screen. And so, audiences have soaring expectations that the content they consume will be made with impeccable production values. Those same expectations hold true for content created by brands. That's why there's a growing realisation amongst marketers that the bar has been raised, and that their content needs to look better than ever before.

Jamal Hamidi

MANAGING DIRECTOR, DDB MOTION





The Hong Kong consumer is driving significant change and demand in the market. By 2024, high-speed mobile internet penetration in Hong Kong is set to reach 87 percent, up from 85 percent in 2021, with the overthe-top (OTT) video market expected to bypass traditional TV revenues in the same year.⁵ Regardless of maturity, businesses are reforming their existing strategies to open up new revenue opportunities.

The pandemic accelerated the shift to digital platforms as people switched to home entertainment. The segments that stayed resilient had digital platforms, a trend that is globally evident in OTT video, video games and internet advertising. To recover revenues and renew subscribers, media companies pivoted from advertising to subscription models. To keep up with changing habits, a focus on higher quality, niche content and direct-to-user connections will prolong engagement.

Cecilia Yau

MAINLAND CHINA & HONG KONG MEDIA LEADER. PwC



It is this diversity and development of the Hong Kong market that has made it into a launchpad to the rest of the region. As well as servicing a local creative market worth HK\$116 billion (US\$14.9 billion),6 businesses in Hong Kong are primed to formulate, test and implement strategies for expansion into Mainland China, specifically through the Guangdong-Hong Kong-Macau Greater Bay Area (GBA), and the broader Asia Pacific (APAC) region.



Image credit: Information Services Department

- ⁵ PwC Global Entertainment & Media Outlook 2021-2025
- ⁶ Census & Statistics Department The Four Key Industries and Other Selected Industries

Stepping into Creative-Driven Transformation

Creativity is a major driver of new behaviours. The standard response to the convergence of technologies is to further double down on technology investment. However, 80 percent of traditional digital transformation programs fail to achieve expectations or fail completely.⁷



What we hear from clients is very consistent: they want our creativity and they want us to help them transform their business in a world reshaped by technology. This is at the heart of what we do. We are fundamentally repositioning WPP as a creative transformation company with a simpler offer that allows us to meet the present and future needs of clients.

Mark Read CEO, WPP DIGITAL





Companies that invest in high-quality creativity garner long-term sales growth and brand building. This directly impacts their bottom line, helping them to outperform their peers in organic revenue growth and shareholder returns in the process.⁸ A recent Forrester study examined the return on investment of creativity compared to technology adoption, finding that a shift of US\$19 billion from technology into creativity over six years would provide an increase in ROI as high as 18 percent — a potential return of US\$66 billion.⁹

activating that capability and driving progress.

Potential ROI for Creative-Driven Transformation9

Shifting
US\$19 billion
from technology
into creativity
over 6 years

ROI increase

18%

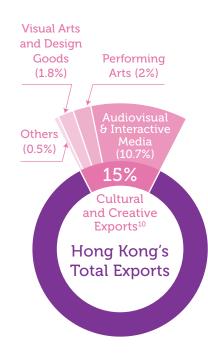
Potential return
US\$66
billion

⁸ Cannes Lions & WARC - The Effectiveness Code

⁹ Forrester - The Cost of Losing Creativity

2 Robust Nature of the Creative & Design Sector

Hong Kong's creative and design industries are increasingly export-oriented, acting as a gateway to Mainland China, as well as the wider Asia Pacific region. Cultural and creative exports totaled HK\$618 billion (US\$ 79.4 billion) in 2018, accounting for 15 percent of Hong Kong's total exports. The largest component was audiovisual and interactive media (HK\$442 billion/ US\$56.8 billion), followed by performing arts (HK\$82) billion/US\$10.5 billion) and then visual arts and design goods (HK\$72 billion/US\$9.3 billion).10 As Mainland China continues to rely on Hong Kong Creative & Design Services, creative professionals based out of the city find themselves in high demand due to their quality-assured creative output, whilst meeting both Mainland Chinese and international standards and traditions, spearheading innovative digitisation efforts.





With the founding of CreateHK in 2009, a dedicated agency under the Commerce and Economic Development Bureau, Hong Kong took a major step in coordinating Government policy and efforts to support and develop the creative economy. The Hong Kong Government further established the CreateSmart Initiative to provide financial support to initiatives that develop and promote creative industries in Hong Kong. An additional HK\$1 billion (US\$ 128.5 million) was injected into the initiative in the recent 2021-22 budget.¹¹

Image credit: Information Services Department

¹⁰ Census & Statistics Department - The Cultural and Creative Industries in Hong Kong

¹¹ The Hong Kong 2021-22 Budget

As of 2020, Hong Kong is home to 7,600 design establishments, acting as a regional design centre and providing a rich source of products and design talent.¹² Hong Kongbased initiatives like The Mills, a landmark revitalisation project, are incubating local talent with funding and space for co-working, prototyping and experimentation. The nascent businesses emerging from these projects offer opportunities to companies that are stepping into Creative-Driven Transformation. They allow entrants to pilot in the market before expanding their transformation efforts globally.

Another revitalisation project, PMQ (the Former Police Married Quarters), has been transformed into a design nucleus to serve the evolving startup creative entrepreneurs and designers of Hong Kong. Offering 130 studio units, it is a platform for designers to showcase their design, and has fast become one of the city's most exciting creative exhibition spaces.

Traditional ways of working are evolving, and year on year digital design is becoming a much larger element of design services. This type of work extends across a spectrum of services, and engages graphic designers, web/app designers, UX/UI designers, interaction designers, product designers, interior designers, architects and animators. This results in immersive experiences that incorporate virtual, augmented, and mixed reality to create previously incomprehensible moments.

Demand for digital design is set to grow at a rate of 18 percent year on year. LinkedIn has listed creativity and UX design as two of the Top 20 Skills to learn in 2020 and most organisations expect their design teams to grow by at least 21 percent in 2020. Hong Kong is well-positioned to meet the continuous upsurge in demand for digital marketing, multimedia, and design services. The city has a diverse and rich supply of talent that is multi-cultural and multi-lingual, with competency to manage campaign content for both Western and Chinese audiences.



As part of this thriving design scene, the Business of Design Week (BODW), Asia's flagship event on design, innovation and branding, is held annually in Hong Kong. The latest edition of BODW was held as a hybrid event that connected global creative visionaries with international participants from around the world. The event attracted over 300,000 viewers globally.¹⁶

Image credit: Business of Design Week 2020 organised by Hong Kong Design Centre

¹² Census and Statistics Department - Quarterly Report of Employment and Vacancies Statistics

¹³ CNNMoney/PayScale's Top 100 Careers with Big Growth, Great Pay and Satisfying Work

¹⁴ LinkedIn - Skills Companies Need Most in 2020

¹⁵ InVisions Product Design Hiring Report 2020

¹⁶ BODW - Vision 20/21 Summit Digest

3 Well Established Marketing & Advertising Foundation

Changing consumer behaviors have caused a shift towards digital platforms in order to increase the impact of marketing efforts. Hong Kong saw internet advertising revenues of HK\$5.4 billion (US\$694.1 million) in 2019. Revenues sustained through 2020, with Hong Kong's internet advertising spend projected to reach HK\$6.54 billion (US\$840.6 million) in 2021 and HK\$8.2 billion (US\$1.1 billion) by 2025. With online channels providing demonstrable return on investment, advertisers are investing more in new technologies, including technology applications, big data management, fintech applications and mobile payments. 18

HK\$6.54
billion
projected internet
advertising spend
in Hong Kong
(2021)¹⁷

Hong Kong serves a major role for penetrating the Mainland Chinese market using its modern infrastructure and professional manpower. Hong Kong is also part of the GBA (an advanced technology area promoted by the Chinese Government) so having a hub in Hong Kong means we can easily reach out to other parts of China from this strategic location whilst taking care of our business in other Asian markets. Most importantly, as we are a publicly traded company, we are tied to strict regulations and require world-class professional services that are offered in Hong Kong.

Gal Itkin

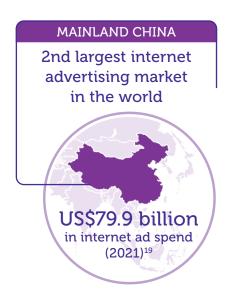
GENERAL MANAGER, ADCORE GREATER CHINA





¹⁷ PwC Global Entertainment & Media Outlook 2021-2025

¹⁸ Nielsen's Advertising Spending Projections 2020





Mainland China continues to be the world's second largest internet advertising market, with a projected ad spend of US\$79.9 billion in 202119 (Figure 1). Hong Kong-based agencies have helped to reshape the Mainland China market by delivering top-quality creative talent and infrastructure.

Top 10 Markets by Internet Advertising Revenue in 2021 (US\$ bn)

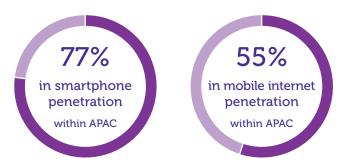


¹⁹ PwC Global Entertainment & Media Outlook 2021-2025

Increasing competition and more savvy consumers have forced Mainland Chinese enterprises to pay greater attention to market intelligence. This has resulted in Mainland companies seeking support from creative and communications professionals with relevant experience and expertise. Given the time zone, language and cultural proximity, Mainland China is inclined to entrust Hong Kong-based marketing and communications services firms to advise them on achieving a quick and seamless integration with the international market.

However, Mainland China is not the sole focus of businesses within Hong Kong. The rest of Southeast Asia continues to accelerate towards more prosperous digital life, due in large part to increases across the board in smartphone penetration (77 percent within APAC), mobile internet penetration (55 percent within APAC), as well as growth in digital payments, online shopping, social media activity, and overall policy support.²⁰

Digital Penetration Across APAC (2021)²⁰



As a result, there is ample opportunity for Hong-Kong based creatives to grow in APAC. First Page is a marketing agency that first set up in Hong Kong in 2013 to help enterprises capture new markets while keeping ahead of the technology curve. From Hong Kong, First Page has gradually grown into a global digital marketing agency with offices in Australia, Dubai, South America and Southeast Asia.

A lot of our clients have set up their regional headquarters in Hong Kong, so we could work very closely with their regional teams in the hub. After the pandemic outbreak, many businesses either want to explore a smarter way to adapt to the new normal or want to make digital a core channel to drive sales. We are very busy working with these clients to fulfil their business goals and have plans to double up our headcount in Hong Kong to beef up our capacity.





The Progression of Digital Advertising

The growing number of connected devices has fueled the changing ways in which consumers interact with digital media services and content. 86 percent of traditional marketing efforts are failing to align with new business goals.²¹ This is forcing marketers to adapt and evolve.

Hong Kong internet users spend 1 hour 57 minutes per day on social media on average.²² The number of social media users in Hong Kong increased by 110,000 people (+2 the total population. Of these users, 6.32 million

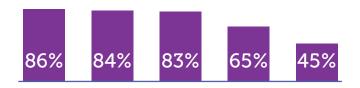
percent) during 2020, reaching 86 percent of (98 percent of users) access social media via their mobile phones.²²

High usage of both Eastern and Western social media platforms in Hong Kong allows for easy integration with existing international advertising campaigns. The transition to serving the local market is much simpler than other countries in the APAC region that have more localised and unique platform expectations.

As an industry, luxury brands are investing heavily in data-driven approaches to evolve the ways in which they connect and engage with their customers. They have noticed a need to replicate the exclusive personalised services they usually offer in-store in order to win the attention of the Hong Kong luxury consumer. They are leveraging artificial intelligence and user data to inform real-time creative decisions. The results can be seen in targeted ads, channel usage, influencer partnerships, and sensory experiences.



Social Media Usage in Hong Kong²³



YouTube WhatsApp Facebook Instagram

²¹ Bright - Future of B2B marketing 2020

²² We Are Social - Digital 2021: Hong Kong

²³ PwC Global Consumer Insights Survey 2021

Creatively Innovating through a Mobile-First Approach

Better ROI, Driven by Sensory Advertising



Adludio is a global, creative first, advertising scale-up that is defining the next generation of mobile brand solutions. Going to market in 2015 and headquartered in London, they create, deliver and optimise advertising campaigns at scale, using mobile-first technology, algorithms and proprietary creative tools to deliver brilliant creative and engage with audiences on their first screen, involving touch and moving away from passive advertising. By seamlessly marrying consumer engagement data and innovative formats, Adludio delivers effective advertising for many of the world's most iconic brands.

Whilst many traditional players in the space can be gimmicky, Adludio aims for their interactive experiences to be beneficial and enjoyable for the end consumer. Their focus is to find ways of capturing brand engagement, using technology to offer optimal creative. In their experience, their Hong Kong campaigns are smashing standard benchmarks on mobile compared to normal campaigns engagement rates, with 15 percent - 20 percent engagement not being uncommon.

Hong Kong's Mobile-Focused Consumer

Hong Kong piqued their interest very early. Hong Kong is a leading luxury market in Asia due to its strong and mature domestic market, and its proximity to Mainland China. Having the ability and technology to add a subtle interactive element to advertising efforts, Adludio can help their clients evolve towards premium microbrand experiences, allowing their respective audiences to create better connections through short but memorable content.





As a mobile-first market, people are glued to their phones, making it an extremely dynamic market for digital advertising. Hong Kong is also a market the

advertising. Hong Kong is also a market that rewards innovation and acts as a great launchpad for entering North Asia due to its geographic location.

Benjamin Pavanetto

MANAGING DIRECTOR ASIA, ADLUDIO



Adludio is operating in three profit and loss centers in Asia Pacific including Hong Kong, Singapore and Taipei and has the ability now to instantly service clients in most Asian markets. They are actively looking at expanding based on client needs. Adludio has found success working with Chinese brands who are looking

to expand and go to market outside of Mainland China, meaning their clients would likely focus on upper-funnel campaigns. Hong Kong's geographic proximity and existing networking infrastructure allows Adludio to utilise Hong Kong as a key strategic hub to facilitate such relationships.

The Future is More Creative than Ever

Going forward Adludio is looking to collaborate with various platforms to go further, integrating where possible, and identifying greater benchmarks around viewability and engagement. As everything they build is made for mobile, they are ahead of the curve.

Moreover, excitement is building around technology advancements and creative growth, which will help brands to move away from traditional means of advertising that is currently saturating the market. In response, they are investing in developing creative, mobile engagement, and algorithms, and are raising funds that will allow them to transform their product to the next stage.



Making Luxury Retail More Relevant Online

A New Approach to Targeting the Asian Luxury Consumers

Founded in 2008 in Paris, Ykone is a leading international influencer marketing agency for travel, beauty, fashion and luxury brands. Ykone works with brands to create impactful stories and content for social media. They support their brand concepts and strategies with their proprietary real-time tracking solution and unique data-driven approach.

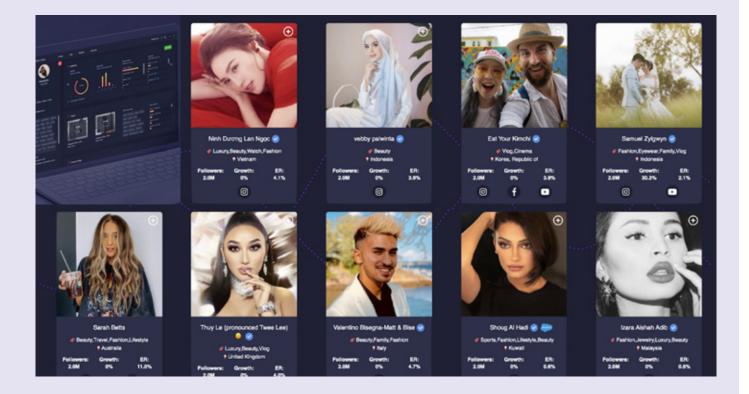
In parallel with the strong growth in luxury spending from the Millennials and Gen Z shoppers in Asia, luxury brands require greater visibility online, thus accelerating their investment in digital to capture these young affluent customers. And while Asian customers still like to shop in physical stores, especially during travel, it is still crucial for brands to build an online-to-offline (O2O) strategy.

Ykone's technology helps traditional luxury clients to transform the way they connect, interact and service new luxury customers in Asia. For instance, when supporting Cartier's



Hong Kong retail approach, Ykone noted that despite the brand being quite well known locally, a more innovative approach was needed to engage the younger customers. Similarly, when discussing with Hermès, their existing approach was to take a very hands on in-store approach to customer service, and it was realised that these elements were needed to be carried through to online channels as well. Taking advantage of their data and consulting knowledge, Ykone can help clients to choose the most relevant channels to target their audiences based on their real interests.





Hong Kong, the Regional Headquarters to Deploy Innovative Ideas

Ykone chose Hong Kong as the regional headquarters of their Asia network because their business serves all of APAC, with a strong focus on the Mainland China market. The company is able to work with major stakeholders of the business including the regional teams of international luxury brands based in Hong Kong. It is also in a good position to assist Chinese luxury brands that are expanding overseas, with a strong demand seen to be expected from the Chinese industries. Hong Kong has always been able to reach the

latest brands and innovations. The ability to take learnings from Mainland China and Japan around new digital and online trends have helped Ykone to deploy interesting campaigns for their clients. As a regional hub, Hong Kong allows Ykone to mildly localise, whilst rely on the support of international experts.

Being based out of Hong Kong allows us to legitimately serve Mainland China whilst at the same time staying connected to

the Western world. It is the perfect meeting of both worlds. We can tap into the region, ensure the artistic vision of the West is relayed, and find multi-faceted talent who can adapt and cater to the specific needs of the region.

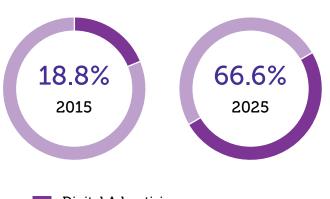
Julien Gaubert-Molina

PARTNER & CEO ASIA, YKONE



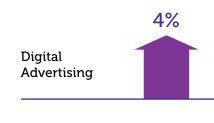
Total advertising revenues in Hong Kong are estimated to grow from HK\$17.8 billion (US\$2.3 billion) in 2021 to HK\$20.4 billion (US\$2.6 billion) by 2025.²⁴ Digital advertising currently covers 57.4 percent of the market in 2021 and is estimated to reach 66.6 percent of the market by 2025.²⁵ The shift towards digital advertising will continue to generate new creative opportunities. Firms increased their digital advertising research budgets by 4 percent in 2020 from 2019, whereas the budget for non-digital fell by 12 percent, with this trend set to continue.²⁵

Growing Shares of Digital Advertising Revenues in Hong Kong²⁵



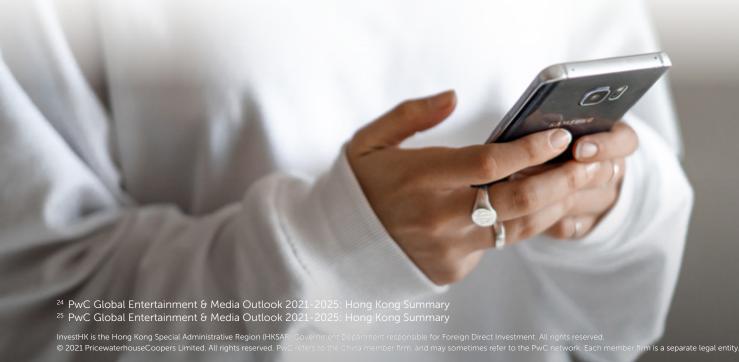
Digital AdvertisingNon-Digital Advertising

Advertising Research Budgets in Hong Kong (from 2019 to 2020)²⁵



Non-Digital Advertising

12%



Marketing technologies (MarTech) have become an important tool for companies to effectively create, execute and measure the success of marketing assets and campaigns. The MarTech industry is now valued at over US\$121 billion worldwide²⁶ and it is earning an average of 29 percent of marketing budgets.²⁷

Spending on advertising technologies (AdTech) and MarTech is expected to grow by 10 percent through 2022.²⁸ Globally, there have been several high-profile MarTech acquisitions worth over US\$1 billion from the likes of Adobe, Salesforce, and Publicis. They demonstrate the impact that these tools are set to have on the market.²⁹

Within APAC, there are an estimated 600+ MarTech vendors, compared to 8000+ globally. 'Social & Relationships vendors' are by far the largest subcategory, accounting for 34 percent of all vendors. This section includes social listening and CRM technologies. 'Content & Experience' and 'Commerce & Sales' vendors follow shortly behind, forming 24 percent and 15 percent respectively.³⁰

7%

9%

Management

Advertising & Relationships

11%

Data

Global

MarTech

Breakdown³⁰

15%

Commerce & Sales

24%

Content & Experience

These MarTech solutions enable brands to harness the power of data to proactively reach out to the right target audiences and convert prospects to sales. In a highly competitive market like Hong Kong, advertisers require robust data insights to roll out their local or regional marketing campaigns. There is demand for solution providers who have access to data across major international markets. Enterprises and agencies seek experienced and highly developed data pools and analytical capabilities to underpin their in-house proficiencies.

For example, Hybrid Theory, a digital marketing solution company that recently expanded to Hong Kong, is leveraging on its rich and fresh data sets to help brands better understand their customers and solve real marketing challenges. Recently, they helped a top local university identify and promote its executive programs to potential new students internationally.

Processing over 25 billion browse, search and share events, that are turned into actionable data, we can adapt to each client's unique needs and goals - from audience profiling, increasing brand awareness to directly driving sales and improving ROI.

Ines Martins

APAC REGIONAL HEAD, HYBRID THEORY



²⁶ BDO, WARC, and University of Bristol - MarTech: 2020 and Beyond

²⁷ Gartner - CMO Spend Survey 2019-2020

²⁸ Forrester - The Cost of Losing Creativity

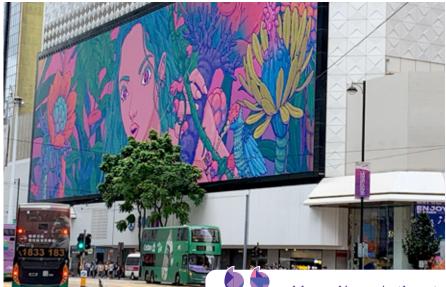
²⁹ MarTech.org Report

³⁰ MarTech Alliance - The APAC Marketing Technology Landscape 2020

Programmatic technology is transforming the advertising sector. Programmatic AdTech enables the automatic purchase and real-time optimisation of digital campaigns as the customer loads the webpage. Human negotiations are replaced by real-time artificial intelligence bidding that increases speed, efficiency and transparency of advertising.

Last year, JCDecaux, the world's largest outof-home advertising company, launched programmatic trading capabilities at the Hong Kong International Airport (HKIA), making it the first major international airport to do so. The programmatic platform connects HKIA's premium advertising inventory to leading demand-side platforms and key buyers for intelligent trading in near real-time. Programmatic digital out-of-home (DOOH) offers brands and advertisers precise audience targeting with location base, movement pattern and data-triggered decision making, campaign measurement, and real-time optimisation. Due to Hong Kong's dense distribution of digital screens enabled for data-driven activation, the city is primed for a positive future of programmatic DOOH.

Earlier this year, a Canadian fast-growing AdTech company, Hivestack, expanded to Hong Kong to target the increasingly popular programmatic advertising market in Asia. Hivestack offers a full-stack programmatic DOOH advertising solution, empowering the buy-side and sell-side of DOOH inventory to create measurable campaigns and maximise ad revenues.



Hong Kong is the strategic business hub for our North Asia region. It serves as an important springboard for Mainland China expansion and empowers our swift access and connection with business in Japan and Korea. With international brands and agencies' strong foothold and marketers' enthusiasm for brand and performance led campaigns, Hong Kong is no doubt a great test market for programmatic DOOH planning & buying in the region.

Troy Yang

MANAGING DIRECTOR, NORTH ASIA, HIVESTACK



The adoption of programmatic advertising is in its relative infancy in Hong Kong and Asia compared to European countries that have more homegrown services available. However, we are seeing a strong trend of exporters shifting from a pure marketplace strategy to investing in their own web stores to sell directly to their consumers within APAC. This has created new demand for MarTech and AdTech solutions.

An Overview of Programmatic Landscape in Hong Kong

Agency
Trading Desk

AFFIPERF
amnet

matterkind

OmincomMediaGroup
PROGRAMMATIC

PUBLICIS
MEDIA

XAXIS

Ad Serving

adform

Campaign
Manager

Sizmek
by amazon

DMP

salesforce
audience studio

ORACLE
bluekai

CLOUDERA

LOTAME

DSP

Adobe DSP

AMOBEE

Display & Video 360

TheTradeDesk

verizon
media DSP

xandr

Publisher Ad Server

Google
Ad Manager

FREEWHEEL

mopub

xandr

Exchange/SSP

Google

Ad Manager

INDEX EXCHANGE

Magnite

mopub

OpenX

PubMatic

smaato

SPOTX

verizon

media SSP

xandr

cosmose
crosswise
experian
eyeota
LOTAME
TAPAD

Location
blis
factual
near

Travel
ADARA

SOJERN

Data

AlikeAudience

comscore

Verification

comscore

DoubleVerify

ORACLE

grapeshot

Integral Ad

Science

nielsen

Programmatic Consulting
BIDMATH
CRIMTAN
delvify
FiveStones
MIGHTYHIVE

Creative
Format/
Ad Serving

bonzai

Celtra

flashtalking

INSKIN

Jivox

PLAYGROUND

XYZ

Sizmek
by amazon

wootag

DSP (Managed Service) Travel Re-targeting **ADARA Appier SOJERN** criteo <u>Video</u> RTB HOUSE **Teads** Location UNRULY blis **Native** Innity **Others** CTRL/SHIFT Outbrain Taboola Vpon

AA STOCKS facebook JOOX MYTV SUPER **OpenRice** South China **Publishers** yahoo **Morning Post** Oriental NEW MEDIA CNN **HK01** MING PAO Daily News viu GROUP YouTube SING TAO WarnerMedia engadget hket now News m s n

Source: IAB Hong Kong Programmatic Landscape 2020 (Version 18: updated 14 Jul 2020)

Hong Kong as a Gateway to Regional Digital Expansion

Shifting from Print to Digital

Originally founded in London, Tag acts as a creative production and sourcing partner to brands across many sectors. Their services range from content creation to retail activation. Hong Kong's shift in demand towards digital has prompted further evolution of their service capabilities. With clients across consumer, retail, financial services, professional services and life sciences, Tag has evolved from a print and point-of-sale advertising agency, to creating content and experiences across all customer touchpoints.

As consumer expectations globally pivot towards omnichannel experiences and marketing, Tag has continued to explore new ways in which their channel-specific services can be combined to create end-to-end solutions. Tag has helped traditional brick-and-mortar retailers develop their online offering, whilst also updating their physical spaces to keep up with the expectations of the on-demand consumer.



Tag's team continues to grow year on year. Their Hong Kong office benefits from a symbiotic relationship with their international counterparts and can transfer talent and innovative best practices between teams. Hong Kong is a strategic imperative for Tag's presence in Asia. For them, Hong Kong is not only a hub city for travel, but also a gateway for brands coming into the region. Particularly for new entrants, Hong Kong can give a softer landing into Asia.

Our Hong Kong business has been the fastest growing globally in the last year. We have organically

grown our existing clients and added exciting new client partnerships. The next chapter for Tag in this market is to drive further into the digital and eCommerce space, and we are poised to announce an exciting acquisition that will greatly accelerate the pace of this ongoing journey.

Dan Healy

MANAGING DIRECTOR HONG KONG & TAIWAN AND HEAD OF GROWTH APAC, TAG





A Shift to New Offerings

For Tag, content adaptation across digital channels has grown exponentially in recent years to meet demands in APAC for omnichannel customer experiences. Fluctuating marketing budgets have challenged Tag's clients to do more with less, so Tag maximises content adaptability across physical and digital touchpoints, creating effective assets that help to enhance ROI.

In Hong Kong, many clients are only just starting to embrace the full potential of digital services, when compared to Mainland China. Hong Kong offers a wealth of investment opportunities for companies offering such services, as consumers here start to expect the same 24/7 digital connectivity experience.

Hong Kong's growing channel demands have highlighted the opportunities for Tag to expand their eCommerce capabilities. Currently, they are working to further develop their in-house digital commerce and content experience design offering as part of their strategy to meet the customers where they are.



up the majority of our team. This combination of creativity, spirit and local market understanding, has been the catalyst of Tag's recent success.

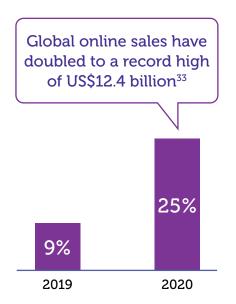
Customers for Tag's digital services in Hong Kong are primarily retailers who are looking to build more compelling and convenient customer experiences. Technology is key to these developments, so Tag has added a predictive analytics program to their design process. This technology improves the effectiveness of content and experiences across physical and digital channels prior to production by accurately predicting how design influences customer behaviour.

Hong Kong's fast-moving consumer goods retailers are also leading the implementation of Tag's cloud-hosted platform named Digital Interact (Di). The platform integrates creative production, digital asset management, sourcing, eCommerce, automation, analytics and integration capabilities. The system allows clients to achieve operational efficiencies, brand consistency and centralised asset management across teams and borders, as well as utilise powerful analytics dashboards to produce actionable insights. Systems like Di are crucial services for local and international companies in Hong Kong that are digitising their workflows and unifying their regional and global operations in the cloud.

The Hong Kong Art Market Continues to Grow

Over the last decade, the Hong Kong art market has witnessed unprecedented growth. It is now the second largest art auction market in the world after New York, overtaking London, rising from 18 percent in 2019 to 23 percent of the global art auction market share in 2020.³¹ This has occurred in the same year that the global art market dipped 22 percent to US\$50 billion.³² This is the result of a developed infrastructure of galleries and auction houses and its unique position as an entry point into the Chinese art market.





The city has for some time been in the crosshairs of the major auction houses, with Christie's opening a gallery in 2010 and Sotheby's in 2012, with an increasing number of major galleries setting up outposts in the city. Along with museums, art fairs are maintaining the momentum that makes Hong Kong one of art's buzziest centres, with all eyes on where the city will go next.

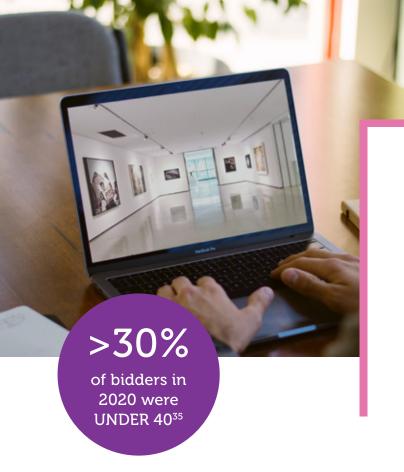
In October 2020, Sotheby's recorded HK\$684.1 million (US\$87.9 million) of sales in its first-ever live-streamed contemporary art auction in Hong Kong. Two million viewers across digital and social platforms saw the star lot, Gerhard Richter's Abstraktes Bild (649-2), sell for HK\$214.6 million (US\$27.6 million), making it the most expensive western work of art ever sold at an auction in Asia, as well as being sold online.³⁴

³¹ ArtTactic - The Art Market 2020

 $^{^{32}}$ The Art Basel and UBS Global Art Market Report 2021

³³ The Art Basel and UBS Global Art Market Report 2021

³⁴ Sotheby Asia - Press Release (06.10.2020)



As travel restrictions and social distancing measures remain in place, virtual viewings are becoming a norm in the art world. Collectors have become accustomed to seeing images and videos of artwork virtually, without being able to view it in-person. This has created a more flexible market, opening up opportunities to further blend art and technology in the future, making it more accessible to a younger audience. Both Christie's and Sotheby's reported that bidders aged 40 or younger accounted for more than 30 percent of sales in 2020, compared to 8 percent in 2016.³⁵

A number of new digital innovations brought virtual access to clients regardless of physical boundaries, who responded enthusiastically to new tools and means of engagement, including enhanced digital catalogues, virtual specialist-guided tours, virtual exhibitions and social media communications.

Kevin Ching

CEO, SOTHEBY'S ASIA



Galleries have also been hit by reduced foot traffic from the pandemic. This is an opportunity for them to advance and accelerate by increasing their digital presence. Emerging and internationally renowned galleries alike are joining platforms like Artsy. In Asia alone, more than 300 galleries are active on the platform.³⁶ Artsy continues to evolve by introducing new digital-only features like the "Buy now and make offer features", drastically reducing the amount of time it takes for galleries to close a sale and for collectors to clinch an artwork. Many well-resourced galleries, such as Lévy Gorvy, have long been experimenting with digital outlets as a way to share their unique approaches to art.

Before, the audience wasn't either aware of it or focused enough. We have invested time as well as money into this digital world. It won't disappear.

Brett Gorvy
CO-FOUNDER & PARTNER,
LÉVY GORVY

³⁵ The Economist - The Art of Making Money: How Hong Kong Became a Hub for Asia's Biggest Art Deals

³⁶ Artsy Gallery Insights 2020 Report

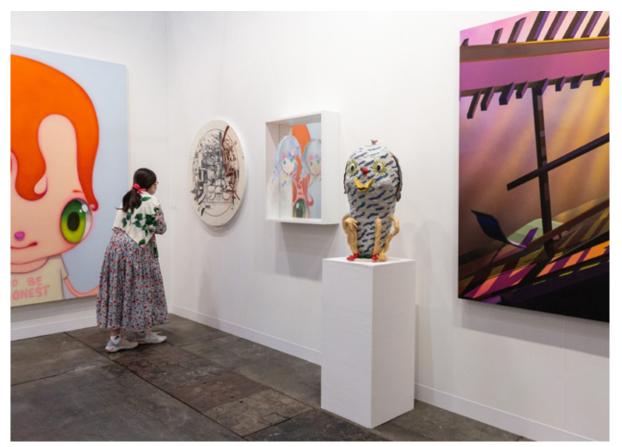


Image credit: Nanzuka. Courtesy Art Basel

In May 2021, the 9th edition of Art Basel Hong Kong ran successfully amid reports of consistently strong sales across all sectors and market segments, both to collectors present in the halls and those connecting with galleries digitally. Over the five days, the attendance at the show was just under 30,000 visitors.³⁷ Many of the fair's biggest sales were works by Western artists, echoing a recent trend of Asian collectors consistently competing for major lots by blue-chip and emerging artists from Europe and the United States. These reported good sales prove the persistent vitality of Hong Kong's art market despite the ongoing implications of the pandemic, and demonstrates consistent strength of the marketplace.

The first day VIP preview opened with a breathtaking sale of Joan Mitchell's 12 Hawks at 3 O'Clock, which had an asking price of around HK\$151 million (US\$19.4 million). Other major sales in the fair's opening days included a George Condo painting for HK\$13.6 million

(US\$1.7 million) and an untitled 1983 work by Keith Haring priced between HK\$11.6 million (US\$1.5 million) and HK\$15.5 million (US\$2 million).³⁸

The fair featured a strong line-up of 104 galleries from across Hong Kong and overseas, many of whom opted to participate via satellite booths, a new concept introduced to support gallerists whose physical attendance in Hong Kong was not possible. Running in parallel to the physical show, 'Art Basel Live: Hong Kong', brought a rich experience through Online Viewing Rooms, daily broadcasts, and public and VIP walkthroughs live-streamed from Hong Kong.³⁹ Galleries reported strong activity at every price point throughout the event, often driven by local Hong Kong collectors, as well as institutions and individuals in Mainland China and elsewhere in the region, demonstrating the persistent strength of the regional market.

³⁷ Art Basel Hong Kong

³⁸ Artsy - What Sold at Art Basel in Hong Kong 2021

³⁹ Art Basel Hong Kong Press Release (23.05.2021)

6 Arts Tech as a Differentiator

Virtual, augmented, mixed, and extended reality are the newest disruptors within the art worlds. When the zeitgeist moves, art moves with it. The use of interactive media provides new tools for audience engagement and immersive experience.



Image credit: Awethentic Studio

Eazel is one of the multi-functional digital art platforms that allows people to explore virtual exhibitions. Similarly, by using immersive technologies, startups like Awethentic Studio have been marrying art and technology to provide unique audience experiences. They aim to provide access to mesmerising historical or natural worlds that cannot otherwise be experienced. Awethentic Studio recently achieved this by creating a motionactivated interactive art wall for a Christie's Hong Kong event.

We believe in the transformative power of art to inspire, engage and raise awareness for global causes. We use the latest interactive technologies, such as virtual and augmented reality, to enable you to engage with art in new ways.

Sean Lee-Davies

CEO & FOUNDER, AWETHENTIC STUDIO





Globally, museums have turned their investment towards interactive installations. VR exhibitions are becoming more common. teamLab's immersive multi-media exhibitions are a perfect example of the transformative impact that Arts Tech can have when applied to an exhibit. The Tokyo exhibit attracted 2.3 million visitors within its first year of opening, surpassing the Van Gogh Museum in Amsterdam as the most visited single-artist museum in 2018.⁴⁰



Image credit: teamLab



Image credit: Information Services Department

In Hong Kong, the 2021 Hong Kong Museum of Art (HKMoA) exhibition "Honouring Tradition and Heritage: Min Chiu Society at Sixty" applies augmented reality technology, complemented with interactive exhibits and animations, to facilitate visitors' appreciation of the production of traditional paintings, ceramics, jade carvings and silk works. Additionally, the HKMoA launched Art For Everyone, a city-wide art campaign that features 100 images of artwork from the Museum's collection showcased on over 450 billboards, digital displays and transport hubs across Hong Kong. A custom-made augmented reality mobile app "ArtForEveryone.hk" was released alongside the campaign, allowing the public easy access to the list of artworks, locations and AR experiences.

Recent developments with blockchain technology and the sale of non-fungible tokens (NFTs) have also potentially revolutionised the global art market. For a long time, the traditional art worlds did not see a way to monetise digital art because you could not hold onto it or prove ownership. However, in March 2021 Everydays: The First 5000 Days by Beeple sold for US\$69+ million at Christie's. 41 This sale marked the first major auction of a fully digital work of art with a unique NFT and was the first to accept cryptocurrency as payment. The sale also put the artist Beeples among the top three most valuable living artists.

We're in uncharted territory now. This is a validation of the collecting category. NFTs clearly are more than just an emerging nascent collecting space. I hope it empowers digital artists to make interesting work, and for everyone to have more confidence in NFTs.

Noah Davis

SPECIALIST IN POST-WAR & CONTEMPORARY ART, CHRISTIE'S

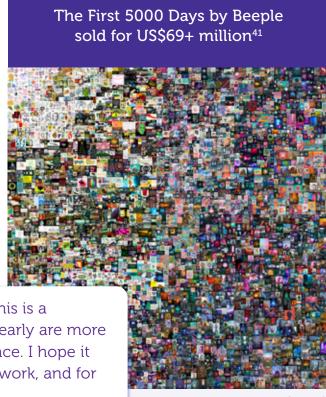
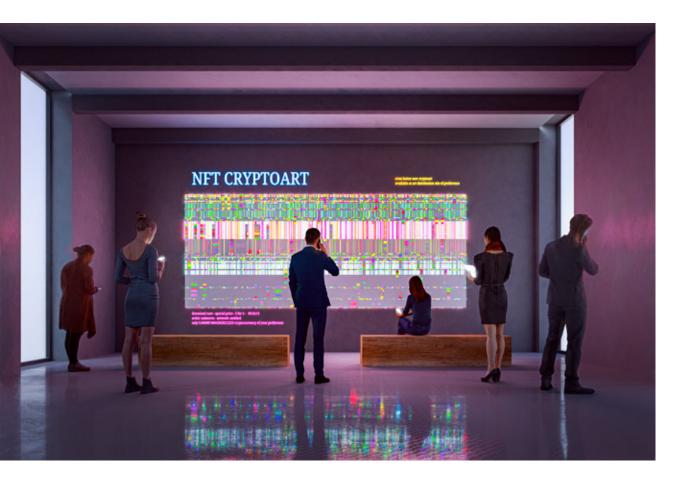
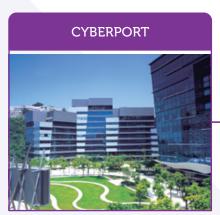


Image credit: Christie's



Launching in September 2021, Digital Art Fair Asia will be the first art fair in Hong Kong with a focus on new media art and Arts Tech. The Inaugural Edition in Hong Kong during September 2021 will showcase exciting new media and NFT art through virtual and augmented reality, curated Arts Tech exhibitions, public digital art installation, webinars and seminars and networking events. Hong Kong provides fertile soil for creative innovation that is necessary to cultivate homegrown Arts Tech solutions. Testing spaces and venues for research, prototyping, and experimentation are vital to foster a robust foundation for the development of Arts Tech in Hong Kong. The presence of both Cyberport⁴² and Science Park⁴³ locally act as a solid foundation to support Arts Tech companies to blossom in Hong Kong.







⁴² Cyberport is a creative digital community with a cluster of technology and digital content tenants in Hong Kong

⁴³ The Hong Kong Science and Technology Parks Corporation is Hong Kong's largest research and development hub

City University of Hong Kong's School of Creative Media is offering spaces for Arts Tech development,⁴⁴ while the Hong Kong Polytechnic University School of Design and the Hong Kong Design Institute place a greater emphasis on the power and application of Arts Tech within their courses. Additionally, The Hong Kong Academy for Performing Arts provides programs covering Arts Tech at the School of Theatre and Entertainment Arts to nurture talent for the industry, and Hong Kong Baptist University (HKBU) is building a brand new campus, the "Jockey Club Campus of Creativity". It is slated for completion in 2024 and will serve as an incubator for the creative industries.



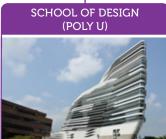








Image credit: Hong Kong Baptist University (HKBU)* and Information Services Department

Hong Kong government
has set aside

HK\$100 million
(US\$12.9 million)
to support Arts Tech projects⁴⁵

68
projects were supported
from Jan to Jun
2021⁴⁶

In Hong Kong, the government has taken the first steps to set up an inter-bureau task force to formulate development strategies for Arts Tech. HK\$100 million (US\$12.9 million) has been set aside under various existing funds to support Arts Tech projects.45 The long-term goal of the Task Force is to provide employment and industry development opportunities for art practitioners and technology talents. The Hong Kong Arts Development Council (HKADC) also supports the government's new initiatives in promoting Arts Tech, launching the "Arts Go Digital Platform Scheme" in July 2020. The scheme supports artists and arts group to develop digital or virtual artistic contents through the use of technology, with the aim of delivering content in response to social needs, creating innovative online arts programs and imagination in the arts, supporting 68 projects between January and June 2021.46

⁴⁴ Our Hong Kong Foundation - Innovating Creative Cultures - Arts Tech

⁴⁵ The Chief Executive's 2020 Policy Address

⁴⁶ HKADC Press Release (25.11.2020)

At a community level, the East Kowloon Cultural Centre (EKCC), which is set to open in 2023, promotes Arts Tech through diversified programs and interactive educational activities, such as live-streamed holograms, 3D projection mapping, immersive audio and virtual reality. It strives to foster interest in and understanding of the arts and technology within the community, and will soon launch a testbed studio called "The Lab" to be used as



The Tai Kwun Centre for Heritage and Arts is a joint partnership between The Hong Kong Jockey Club and the government, representing one of the most significant revitalisation projects that further cements Hong Kong's position as an artistic epicenter.

an incubator for the development of Arts Tech as well as curating and creating new works that use such technology. With the growing opportunities in Arts Tech, the market is now ready for different players to adopt a strategic approach for the entire cultural ecosystem to revolutionise the landscape.

The Hong Kong government has invested significantly in art and cultural initiatives in recent years. The West Kowloon Cultural District will be developed into one of the world's largest cultural quarters, blending art, education and public space. The opening of M+, a world-class museum of visual culture, with a total footprint of 65,000 sq m, including 17,000 sq m of exhibition space, will further cement Hong Kong's position as a cultural beacon, providing a vital platform for young, emerging and established artists to experiment, explore, create and collaborate.

West Kowloon Cultural District



East Kowloon Cultural Centre

This initiative will promote Arts Tech through diversified programs and interactive educational activities, and will soon launch a test bed studio "The Lab".

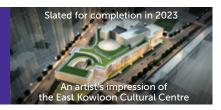


Image credit: Information Services Department, West Kowloon Cultural District Authority, © ROCCO Design Architects Limited, © Eason Tsang Ka-wai and Leisure and Cultural Services Department

7 Over-the-top (OTT) Video is Growing Exponentially

Hong Kong has developed a broad cluster of media and entertainment companies that use the city as their regional hub. The availability of the latest telecommunications technology and global talents have attracted many international companies to establish regional headquarters or offices in Hong Kong to develop their markets in APAC. Hong Kong has one of the largest and most dynamic film-entertainment industries in the world, dominating the box office in East Asia, earning a great respect in the West, and long enjoying global success within the film industry at large. This history and foundation have made Hong Kong a perfect gateway to film and broader entertainment industries in Asia, with 25 percent of Mainland China's 20 top grossing films of all time coming from Hong Kong productions, all of which were released in the last five years.⁴⁷

Hong Kong's geographic location makes it an ideal hub for the buying and selling of Chinese Mainland and western TV dramas and films through the Hong Kong International Film & TV Market (FILMART). This four-day virtual content marketplace event held in March 2021 attracted over 7,000 industry participants from over 81 countries and regions with the release and promotion of some 2,200 film and television productions.⁴⁸



Image credit: Hong Kong Trade Development Council

⁴⁷ Endata Analysis

⁴⁸ The Hong Kong Trade Development Council



In recent years, producers, distributors and exhibitors are being compelled to respond to the dramatically changing ways in which people consume entertainment. As the world continues to digitise, and the customer remains king, the distinctions between traditional media and social, print and digital, pay-TV and OTT video platforms, video games and sports are blurring, creating new opportunities for the sector.

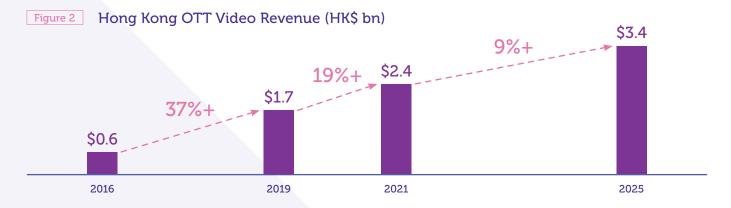
The pandemic has propelled digital behaviours in many areas of life. Fueled by increasing broadband speeds and penetration, the demand for OTT video is growing and shows no sign of abating. Every major entertainment player is entering the streaming game. This rise and expansion of global OTT video platforms, such as Disney+, Apple TV+, and HBO Max are increasing consumer expectations within an already crowded marketplace. As a result, local players such as ViuTV and myTV Super Limited are responding accordingly to meet rising expectations by serving more localised content to the masses.

One of the things we see as a real opportunity is that
Hong Kong hasn't lost its talent - it has had so many great exports in the past - but it's been stuck doing the same kind of projects for too long. Right now, the talent just needs the right opportunities. Its location enables swift transport to all key markets within Asia. The opportunities provided by the Greater Bay Area will act as a catalyst towards the entertainment industry's resurgence.

Bizhan Tong

FOUNDER & CEO,
PHOENIX WATERS PRODUCTIONS

The global video streaming market size was valued at US\$50 billion in 2020 and is expected to expand at a compound annual growth rate of 21 percent from 2021 to 2028.⁴⁹ OTT video revenue in Hong Kong will increase at a 9 percent CAGR from HK\$2.4 billion (US\$308 million) in 2021 to HK\$3.4 billion (US\$437 million) in 2025⁵⁰ (Figure 2). As a region, APAC is expected to overtake North America as the largest OTT video region in terms of revenue in 2021. Hong Kong OTT video specifically is forecast to sustain rapid growth and will bypass traditional TV revenues by 2024⁵¹ (Figure 3).

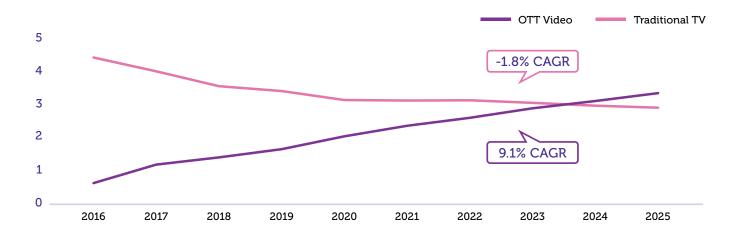


⁴⁹ Grand View Research - Video Streaming Market Size & Share Report, 2021-2028

⁵⁰ PwC Global Entertainment & Media Outlook 2021-2025

⁵¹ PwC Global Entertainment & Media Outlook 2021-2025: Hong Kong Summary

Figure 3 Hong Kong OTT Video Revenue 2016-2025 and 2021-2025 CAGR (HK\$ bn)



In 2020 consumption of visual media rose by around 60 percent, due in large part to the rise of social distancing, quarantining and stay at home orders in North Asia.⁵² The average amount of time consumers spent at home increased by 12 percent,⁵³ increasing TV viewership. Ratings for all-day and all-time periods increased by 43 percent in February 2020 compared with February 2019, while primetime ratings during the same period increased by 44 percent.⁵⁴

Taking advantage of such changes in behaviours, homegrown player myTV SUPER continues to grow with weekly watch-time exceeding 20 million hours pre-pandemic. Their growth and investment sit perfectly parallel with the local rise of Netflix, which has been available since 2016. In 2020, Netflix increased in penetration to 30 percent in Hong Kong, and viewing time from 2.4 to 3.5 hours per week, across demographic segments. Overall, Netflix gained substantial growth in subscriptions, with downloads of Netflix in Hong Kong doubled in 2020, as people were forced to stay indoors.



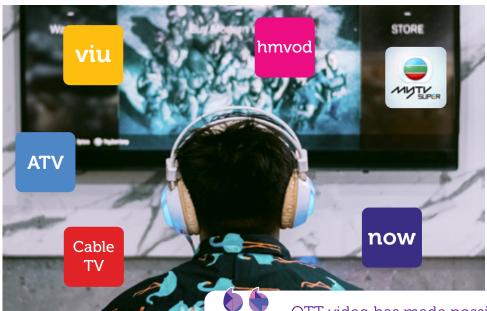
⁵² Nielsen - The Impact of COVID-19 on Media Consumption Across North Asia

⁵³ Nielsen Media Index

⁵⁴ Television Broadcast Ltd. - The Big Data Project

⁵⁵ Omnicom Media Group Hong Kong - Video Content Viewing Landscape Study

⁵⁶ Credit Suisse Analysis



OTT video has made possible what traditional media has failed to do, by providing large databases of video content inexpensively, with consumer choice and viewing capabilities across multiple connected devices. Viewers welcome the ability to select and watch a wide range of programs anywhere and anytime via set-top box, mobile phone, tablet or computer.

Lam Kwai Hing

COO OF BUSINESS DEVELOPMENT, MYTV SUPER LIMITED

The recent acceleration of OTT video adoption is not a temporary trend, but the start of a paradigm shift for the entire industry. Entertainment as we know it has changed. The OTT video landscape is adapting year on year as new disruptive forces challenge traditional players. Consumers want convenience, and OTT video providers are matching this rise in demand in abundance.

The appetite within the market for online video in APAC, and Hong Kong in particular, has created and attracted rising investment and competition for the audience. Advertising-supported business models can be expected

to continue to hold their leadership position over the next five years, especially outside of Mainland China. Many emerging players are benefitting from the blend of data and technology, and will continue to grow consumption and advertising. As the last few years have demonstrated, there is always room to disrupt the OTT video market. As Hong Kong's watch-time and platform options increase, only time will tell just who will come out on top within this diverse local market. What is clear is that as more Hongkongers make the decision to cut the cord with cable TV, OTT video subscriptions are showing no sign of slowing.

8 Acceleration of Entertainment Technologies

Extensive communication networks allow companies to reliably transmit and receive information at a very low cost. The rapid development and roll-out of 5G from CSL, China Mobile, SmarTone and 3HK and the pandemic have accelerated data consumption growth.⁵⁷ This rise will feed directly into the growth of emerging technologies, such as artificial intelligence, machine learning, and extended reality (xR), which will improve and enhance existing user experiences across gaming, esports, and broader entertainment.

We hope to explore whether AI can help us to write. The usual scriptwriting process involves research and interviews to imitate a different reality, which is time-consuming. The way we speak, and the topics we talk about, vary according to different demographics such as gender, age, educational background, religious beliefs etc. With enough data, the AI system should be able to provide the keywords, dialogue of specific character groups that the scriptwriters want.

Mani Man

DEPUTY GENERAL MANAGER, MM2

From artificial-intelligence-assisted scriptwriting to viewer analytics, content technology is revolutionising the content creation process and helping creators to make more data-driven decisions, driving more customised experiences in the process.



The Kai Tak Sports Park (KTSP), Hong Kong's first major multi-purpose sports and entertainment complex, is set to open in 2023. The main stadium provides 50,000 seating capacity, the first of its kind in Hong Kong. The venue opens up opportunities for all sorts of entertainment, live events, festivals etc., servicing the local demand for entertainment content and differentiated experiences.



Image credit: Kai Tak Sports Park

Over the past year, virtual entertainment events have become the "new normal" out of necessity. Organisers are leveraging emerging technologies in order to create higher quality content with interactive elements, as seen with recent virtual concert experiences hosted within Fortnite and Minecraft, partnering with international and local musicians Travis Scott and C AllStar respectively. For content development, a fully immersive experience through interactive content is key to enhancing user connectivity and demonstrating value for money. Companies must capture the right price-to-experience balance to justify entry prices, encourage player purchases of in-game items and refer friends to join virtual events in order to sustain the longevity of the medium.

Bridging the gap between online and offline, Zicket, a complete end-to-end event technology solution, was launched in Hong Kong in 2018. Despite being in operation for just 2 years they have become a top ticketing & RFID provider in Hong Kong, now servicing companies across the region including Singapore, Mainland China, Macau, Indonesia, Thailand, UAE and Vietnam with their cloudbased platform, selling over 5 million tickets and processing HK\$375 million (US\$48.2 million) in total in the process. Initially formed to align technology, data and payment platforms for intra-group properties, Zicket utilises industryleading technology & experienced event professionals to deliver in-class solutions for event management & event operations.

Hong Kong was the obvious choice for us as a regional base. It's the perfect location as a jump-point to all of Asia and with a history and close ties to the UK, as well as high English-Proficiency, it's been an easy and smooth start. The city makes finding a work-life balance easy and crams so much art, culture and areas of natural beauty into such a small footprint. We love Hong Kong.

Aidan Dean Pawson MANAGING DIRECTOR, ZICKET



Bringing New & Disruptive Technology to APAC via Hong Kong

Transitioning with the Times

Founded in London, disguise has been delivering traditional live experiences for around 20 years, primarily on large screens at concerts, festivals, expos etc. However, in response to growing demands and technological advances, they now offer a live viewing platform that allows creatives to deliver spectacular live visual experiences to audiences around the world, from small scale corporate broadcasts, to the finals of American Idol. This shift occurred pre-COVID, putting them ahead of the curve, and positioned disguise to take full advantage of this necessary shift to digital broadcasting, conferences, and exhibitions.

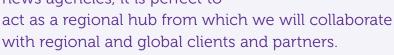


Working with Extended Reality (xR), disguise utilises camera-tracking systems with live presenters/hosts to create a hybrid of the viewer's own environment extended by digital objects. Unlike a green screen or AR, this technology allows participants to see each other and interact in a way that feels like an in-person concert-goer

experience. This approach shortens the distance between the artist and the audiences, who no longer need to wait to travel around the world to perform, giving artists increased flexibility, creative freedom, and exposure, whilst helping audiences gain access to their favourite artists during periods of disruption.

The Evolving Landscape of APAC Broadcasting

Over 200 stages around the world, 9 of which are in Hong Kong, are running on disguise's technology, allowing festivals, films, esports, live TV broadcasts, corporate and entertainment events, and product launches to transform their viewing experiences. As Hong Kong is home to multiple international media organisations including broadcasters, TV channels and news agencies, it is perfect to



Alan Lam

VICE PRESIDENT. DISGUISE APAC





disguise expanded across the rest of APAC and has additional entities in Mainland China, Korea and Japan. Hong Kong's geographical location and easy access to its neighbouring countries make it an advantageous place for the company to operate. It is through this Hong Kong regional hub that disguise can manage their efforts in Mainland China and connect with their global network to ensure timely provision of technical support and deliver projects to deadline. The company is also looking at cultivating local talents to embrace technological advancements for the benefit of the creative and entertainment industries in Hong Kong.



Additionally, as consumer expectations grow, efforts to revolutionise broadcasting to meet these expectations must allow the medium to grow alongside it. In a crowded marketplace, there is strong competition for eyeballs.



Hong Kong is a global city that is rich in history, celebrates diverse cultures and entails stunning sights. A balanced amalgamation of the West and East that allows both local and international businesses to develop and flourish. Going forward, we predict a trend of hybrid virtual and physical events/productions for many, as we have come to learn the efficiency of utilising innovative xR technology. It is complimentary for the creative and entertainment industries that can syndicate traditional methods with innovative technology.

The Future of Live Entertainment

disguise believes that COVID-19 has changed consumer habits for good, forcing production to become more resilient. For corporate events, digitisation has been a long time coming, but it has also made many performing artists realise that there is an opportunity to transform how audiences engage with performers. After a year filled with video conferencing, audiences are seeking out distinguished viewing options, and are looking to be wowed.

disguise is enabling a new hybrid model that allows businesses to offer virtual and in-person tickets of equal experiential value at varying price points which would open the possibilities to new methods of monetisation. Within the virtual viewer ticketing option, packages where they meet the act virtually could be made available. This new end-to-end experience differentiates vastly from traditional live-streamed shows and online Q&As, providing immersive performance, with interactive elements, completely changing the model for providing fan-driven connections. This, in turn, allows global event companies to expand their offering to international viewers from their own homes. Chart-topping artists can now offer intimate virtual shows, giving their fans a unique experience for a comparably reasonable price.

Scan to view disguise showreel - 2020

Delivering Tomorrow's Impactful Experiences Today

Reimagining, Reinvigorating, Reinventing



Established in 1969 in Singapore and headquartered in Hong Kong, Pico is a global total brand activation company that has always been an innovator, quick to embrace new technologies and concepts. Their ability to drive change has transformed them into a global Group with a workforce of over 2,000 in 36 cities.

Hong Kong is a city at the intersection of trends and ideas from East and West, within easy reach of major markets in Mainland China and around Asia, and in itself is a vital market for brands from around the world. Hong Kong also offers a well-educated, sophisticated and diverse workforce.



Gregory Crandall

SENIOR VICE PRESIDENT. PICO'S GLOBAL ACTIVATION TEAM



All the qualities Crandall mentions were more prized than ever during recent months. Recently, when clients ranging from show organisers and associations to global finance, tech, telecoms, automotive and esports brands suddenly found their traditional means of operating severely curtailed, Pico drew on years of digital expertise to create their own virtual and hybrid solution set.



'Hydeout: The Prelude' - A Digital Music Entertainment Platform

Exploring New Horizons

In the last year, Pico has delivered a dizzying variety of online product launches, virtual exhibitions, conferences, showrooms, fashion shows, sporting events and festivals for clients around the globe. As with traditional in-person brand experiences, Pico pushed for creative content using technologies such as VR and AR, and techniques such as gamification to engage and excite clients' unique audiences from the safety of their own homes.



Cars in the Cloud Virtual Showcase



The Fifth Global Virtual Reality Conference

An increasing number of Pico's clients are coming to appreciate virtual and hybrid experiences on their own merits, rather than as a temporary substitute for the 'real' thing. Indeed, virtual events offer the prospect of bigger, more far-flung integrated audiences. Pico is taking it further by driving creative spaces where the pipelines of live audiences and virtual audiences combine and feed and interact with each other.

Just as Pico envisioned years ago when they began their digital journey, virtual and integrated experiences are set to continue as a significant part of the company's business in the post-pandemic future, right alongside 'pure' in-person events. It means clients can rely on Pico to 'connect the dots' across total brand activation, experiential marketing and digital expertise, using know-how gained over 50 years of service. It's a recipe for more exciting, more engaging brand experiences yet to come.

Scan to view Pico corporate video



Gaming & Esports are Changing the Game

Hong Kong's high demand for video games and streaming is highly conducive to publishers and developers of games and gaming apps, as well as esports organisers. The local gaming market is worth HK\$8 billion (US\$1 billion) and is ranked 19th globally in terms of revenue.58 As of January 2021, 86.6 percent of the population play some form of video game, with 76.5 percent doing so on their smartphones⁵⁹ (Figure 4).

Playing Video Games: Device Perspective in Hong Kong

86.6%



Device

76.5%



Smartphone



Laptop or Desktop



Console

28.6%



Device



17.5%

Handheld Gaming Device



6.4%

Media Streaming Device



Reality Headset

Almost 30 percent of the Hong Kong population own some form of traditional game console, with the average person spending an hour a day gaming and 5 percent owning a virtual reality headset. 60 People are not only spending more time playing games, they are also spending more money, with 37 percent of Asian mobile gamers spending more than they typically did before the pandemic. 61 Video gaming as a segment is expected to hit HK\$9.5

billion (US\$1.2 billion) in revenue by 2025, at 4 percent CAGR. This growth rate is higher than that of Mainland China. Currently, video game revenue per capita is at HK\$1,058 (US\$136) per person in Hong Kong, compared to US\$22 per person in Mainland China. 62 This is the fourth-largest revenue per person in the world, behind South Korea, Japan, and Singapore at US\$183, US\$164, and US\$163 respectively.63

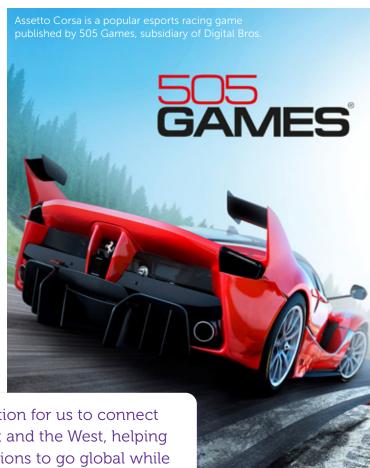
Leading Global Video Game Revenue per Capita in 2021 (US\$)62



- ⁵⁸ PwC Global Entertainment & Media Outlook 2021-2025
- ⁵⁹ We Are Social Digital 2021: Hong Kong
- $^{\rm 60}$ We Are Social Digital 2021: Hong Kong
- 61 Google Game On: Asia Rising
- 62 PwC Global Entertainment & Media Outlook 2021-2025: Hong Kong Summary
- 63 PwC Global Entertainment & Media Outlook 2021-2025

Image credit: Digital Bros

This is in large part due to Hong Kong's status as a regional distribution centre for games, and its unrestricted access to global game titles. Digital Bros, an international video game developer and publisher listed in Milan, set up its APAC headquarters in Hong Kong two years ago. This is due to the strong local market and its geographical advantages in accessing both the APAC market and Guangdong Province where two-third of the gaming revenues in Mainland China is generated. As part of the Guangdong Province, Hong Kong enables companies to maintain a strong tie with clients and partners in the Greater Bay Area.



Hong Kong is a strategic location for us to connect the gaming industry players in the East and the West, helping independent developers from both regions to go global while introducing our own IPs into Mainland China and Asia.

Thomas Rosenthal

GENERAL MANAGER OF ASIA PACIFIC. DIGITAL BROS



Additionally, this strong foundation attracted Koch Media, a global developer, publisher and distributor of video games, to choose Hong Kong as their Asia headquarters to tap into the immense opportunities across APAC. This follows the lead of Riot Games, which established its first international game development studio in Hong Kong in early 2016. The ability to source both international gaming titles and international talent, combined with an active local user base who are eager to beta-test initial launches, positions Hong Kong uniquely to work with games publishers, distributors and developers in Asia Pacific and Greater China.

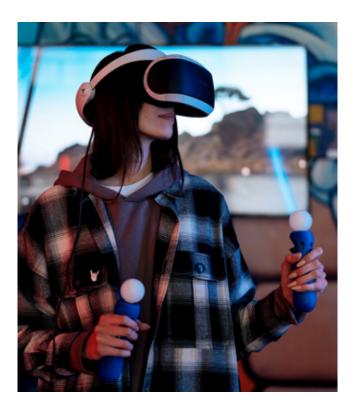
This is supported by Government-owned digital business community Cyberport through its Incubation Programme, which has cultivated multiple mobile game developers who have produced games catering to diverse user preferences. Moreover, the Hong Kong gaming scene is supplemented by multiple homegrown games developers and publishers. 6 Waves, Animoca Brands, Gameone, Outblaze, Mad Head and wizQ, to name a few, who are all taking advantage of Hong Kong's prominent mobile gaming culture.

In July 2021, Animoca Brands, the Hong Kongbased company that brings digital property rights to gamers via NFTs, announced that it had completed its US\$138.88 million unicorn capital raise.⁶⁴ The company is spearheading the use of blockchain-based in-game rewards and creating innovative ways to monetise video games going forward.



Image credit: Animoca Brands

As gaming has become one of the world's most popular forms of entertainment, it has quickly been recognised as a sophisticated marketing tool to create unique customer experience, especially for the younger generations. The number of mobile gamers peaked at 2.8 billion in 2021,⁶⁵ of which 38% will pay for games.⁶⁶ Mobile game consumer spending is estimated to reach US\$90.7 billion in 2021, representing a 4.4 percent rise year-on-year, accounting for more than half of the global games market.⁶⁷



Through installations and mobile applications, it has the potential to impact various industries, from luxury goods to financial services. For example, brands like Chanel, YSL Beauté and Burberry are turning to gaming to drive brandconsumer interactions, offering compelling activations to satisfy shoppers who crave experiences. Shadow Factory, a leading Hong Kong headquartered VR/AR production company, has created several branded titles for brands across APAC, including wind and snowsurfing simulators and a reflex-based "ride and catch" game for a Michael Kors promotional campaign. This game, which was developed in Hong Kong, won the agency a Centauri at the 2017 Vega Digital Awards and was cited as one among the Top 4 VR Experiences at the 2018 MIPTV Conference in Cannes. 68

Moreover, virtual reality is currently promising to be the future of the immersive experience technology market. Global and Asia Pacific VR revenues are set to grow by 30.6 percent and 36.4 percent CAGR between 2021 and 2025 to US\$6.9 billion and US\$3.7 billion respectively. ⁶⁹ Virtual reality enhances existing user engagements, enriches existing gaming environments and expands the content. Today there is a diversity of devices offering freedom of choice. Technology giants, such as HTC, Google, Microsoft, Samsung, Facebook, and Sony have all contributed to the industry's development and are driving prices down in the process, making the technology more accessible.

⁶⁴ Animoca Brands Press Release (01.07.2021)

⁶⁵ Newzoo - Global Games Market Report 2021

⁶⁶ Newzoo - Global Games Market Report 2020

⁶⁷ Newzoo - Global Games Market Report 2021

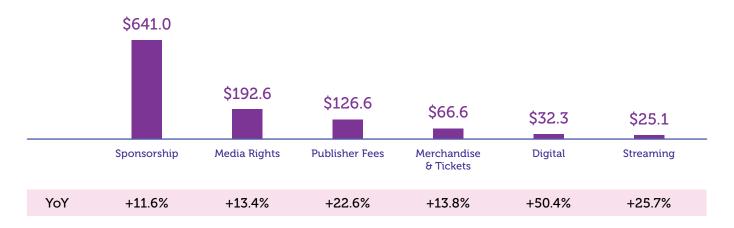
⁶⁸ HKTDC - HKMB - Hong Kong firm spans virtual globe

⁶⁹ PwC Global Entertainment & Media Outlook 2021-2025

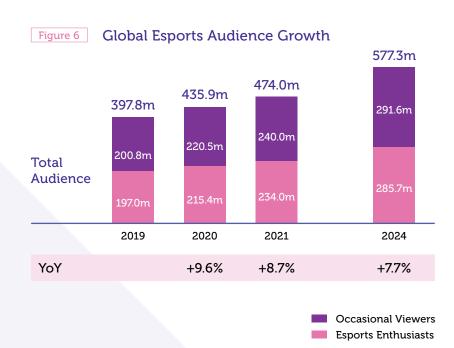
Hong Kong's first-class infrastructure, digitally savvy population and open access to the largest esports market in the world in Mainland China have put it in a highly advantageous position to capitalise on future economic opportunities generated by esports. Plus, Hong Kong is only a few hours away from Southeast Asia, one of the fastest-growing markets in the gaming industry.

In 2021, global esports revenues will hit US\$1.1 billion, a year-on-year growth of 14.5 percent, up from US\$947.1 million in 2020. Of that, US\$833.6 million will come from media rights and sponsorship deals alone (Figure 5). This will exceed US\$1.1 billion by 2024.⁷⁰

Figure 5 Global Esports Revenue Streams in 2021 (US\$ mn)



This revenue is directly tied to growth in viewership figures yearon-year. In 2021, the total esports audience will grow to 474 million, a year-on-year growth of 8.7 percent. On top of this, esports enthusiasts (viewers who watch pro esports content more than once a month) will make up 234 million of this number, growing 8.7 percent year-on-year (Figure 6). The global average revenue per esports enthusiast will be US\$4.63 in 2021 and is expected to jump up to US\$5.25 in 2022 after live events are restored.71



⁷⁰ Newzoo - Global Esports & Live Streaming Market Report 2021

⁷¹ Newzoo - Global Esports & Live Streaming Market Report 2021

The video game market in Mainland China is currently the second largest in the world. It is expected to reach US\$36.1 billion by 2022⁷² (Figure 7), usurping the United States to become the world's largest video game market.

The growth rate is in line with what is projected within APAC and globally. By establishing in Hong Kong, companies are able to build on their knowledge of the Chinese market with a global perspective allowing them to manage business activities and partnerships across the border more easily and take advantage of the largest video game market in the world.⁷³

Talon Esports, a Hong Kong-based organisation that is one of the fastest-growing teams in Asia Pacific, started a dedicated creative studio and marketing agency focused solely on esports and gaming in 2017.⁷⁴ The company raised HK\$15.5 million (US\$2 million) funding in late 2020,⁷⁵ with plans to use this new capital to groom esports players and expand the operations across Asia.

In the 2018-19 budget, Cyberport, Hong Kong's leading innovative digital community, was granted HK\$100 million (US\$12.9 million) to

Figure 7 Top 10 Markets by Video Game Revenue Forecast in 2022 (US\$ bn)



incubate esports growth as an industry. Half of this was earmarked for the development of the Cyberport Arcade into a top venue for esports tournaments. Besides physical infrastructure funding, several initiatives were launched with a focus on tournament organisation, the acquisition and development of new talent and outbound business development.



Image credit: Hong Kong Cyberport Management Company Limited

⁷² PwC Global Entertainment & Media Outlook 2021-2025

⁷³ PwC Global Entertainment & Media Outlook 2021-2025

⁷⁴ Newzoo - Global Esports Market Report 2020

⁷⁵ PR Newswire Report



Image credit: CGA eSports Stadium

In early 2019, CGA eSports
Stadium, one of Asia's largest
integrated esports stadium,
opened in Hong Kong with a total
floor space of 25,000 sq ft. In
the same year, the city hosted its
biggest esports event, the E-Sports
& Music Festival, which drew more
than 80,000 visitors and an online
viewership of 12 million people
from around the world.⁷⁶

There is absolutely no doubt that the growth of esports in large part defines the future of investment in sport and entertainment, in Hong Kong, this region, and around the world. For brands looking to such platforms to connect with their audiences, we know that esports fans come from a demographic that is notoriously hard to reach – these people are young, affluent and tech-savvy. Therein lies the power for an investing brand. With the right strategy, it's a significant opportunity to generate loyalty and affinity at a time of change, amongst a colossal and passionate fan base in Asia and around the world.

Kathryn Rhodes

REGIONAL DIRECTOR ASIA, CSM SPORT & ENTERTAINMENT



While it is estimated Hong Kong has over 300,000 active esports players,⁷⁷ and over 4 million casual gamers,⁷⁸ most of whom are male, there is a growing number of female gamers in the market. Thus, the business potential of game development, advertising, sponsorship, ticket sales, media broadcasting and webcasting, software engineering, game management, live broadcasting, directing, and marketing is tremendous. Traditional economic sectors can also benefit, including tourism, hotel, food and beverage, retail, entertainment, and real estate.

Eyeing this opportunity, a leading international advertising agency DDB Group has recently launched a local branch of its global gaming agency, DDB FTW, in Hong Kong to provide local and regional esports and gaming solutions for clients, as well as marketing and advertising support for gaming brands. With esports being approved to be a medal sport in the 2022 Asian Games in Hangzhou, China, the growth in popularity across the region has created ample opportunities for international players to get involved and utilise Hong Kong as an entry point into the competitive Asian esports market.

⁷⁶ South China Morning Post - Fans swarm openings of E-Sports and Music Festival and Ani-Com Hong Kong

⁷⁷ Office of the Government Chief Information Officer - Report on Promotion of E-sports Development in Hong Kong

⁷⁸ Marketing Interactive - The next big opportunity: Gaming 101 for brands in Hong Kong

Continued Growth of Asia's Creative Capital

Creative Industries in Hong Kong have long made up a strong section of the business landscape, but the recent and rapid period of digitisation and development have further prompted new offerings and innovations, whilst bolstering existing players. This recent growth has been enabled by the vast digital network of Hong Kong, which has driven the Creative Industries to new heights. From the digitisation of traditional creative services, to the upsurge of the art market in online and NFT sales, and the greater attention being placed on the developments in Arts Tech, gaming, and esports, all of these developments have been fortified by a prevalent penetration of digital, and it is clear that Hong Kong is poised to advance with the shifting habits of today's consumer.



Hong Kong has always been a hotbed for competition, where the strongest offering has always come out on top. The city presents vast opportunities for companies of any size or maturity to enter Asia and Mainland China, in particular GBA, with minimised risks, an open business environment, low tax, well established legal system, rich pool of creative talents, and a digital savvy population. There is a wealth of burgeoning technologies that will enable further growth, ready for new players to take full advantage of, it is an exciting time to be part of the Hong Kong creative ecosystem.

Doris Fong

HEAD OF CREATIVE INDUSTRIES, INVESTHK







Visit our website:

Contact us:

Doris Fong Head, Creative Industries **Invest Hong Kong**

Tel: (852) 3107 1011

Email: dfong@investhk.gov.hk

www.investhk.gov.hk

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Visit our website: Contact us:



Cecilia Yau Mainland China and Hong Kong Media Leader, PwC China

Tel: (86) 755 8261 8989

Email: cecilia.yau@cn.pwc.com

www.pwchk.com

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