31 Aug 2023

Global Entertainment & Media Outlook 2023-2027: Annual briefing





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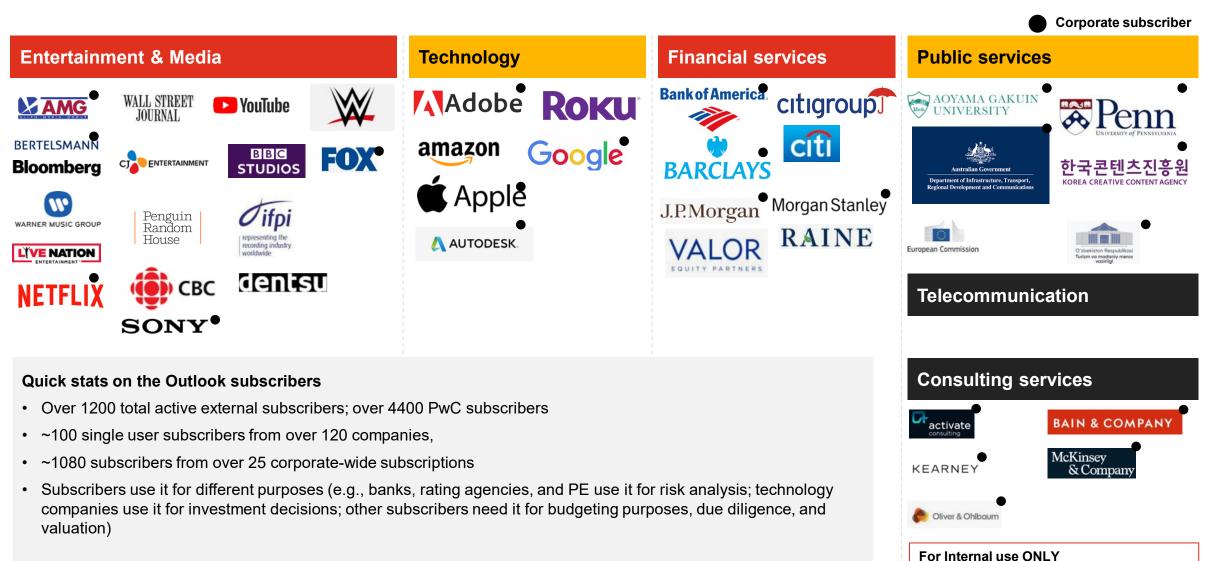
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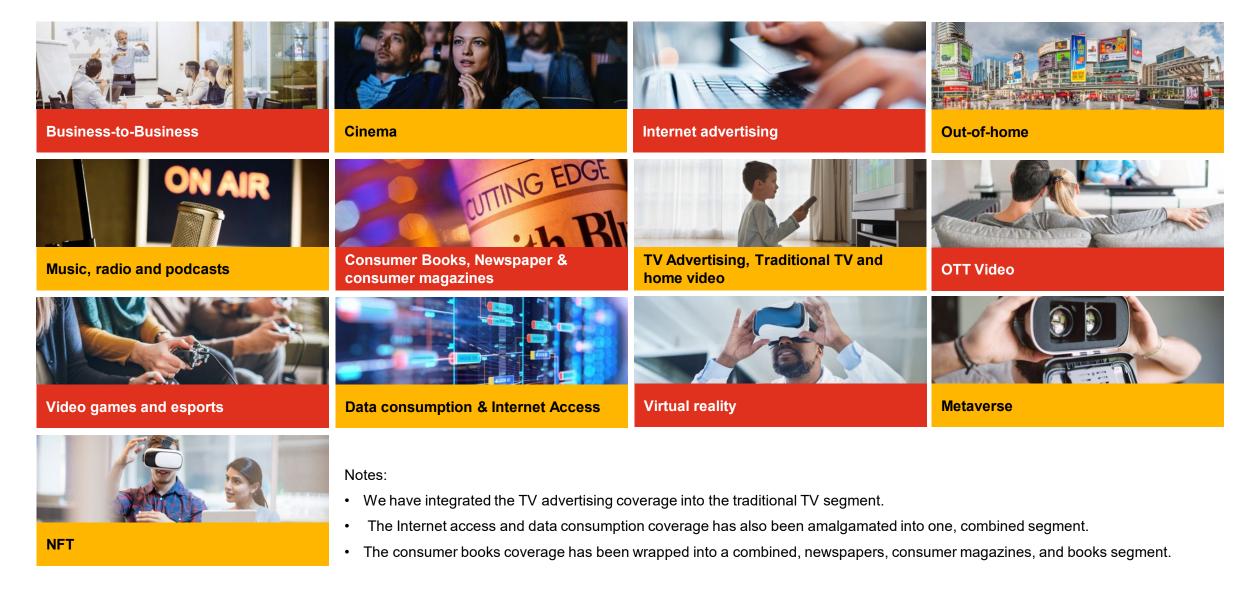
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Subscribers to the Outlook come from 200+ companies

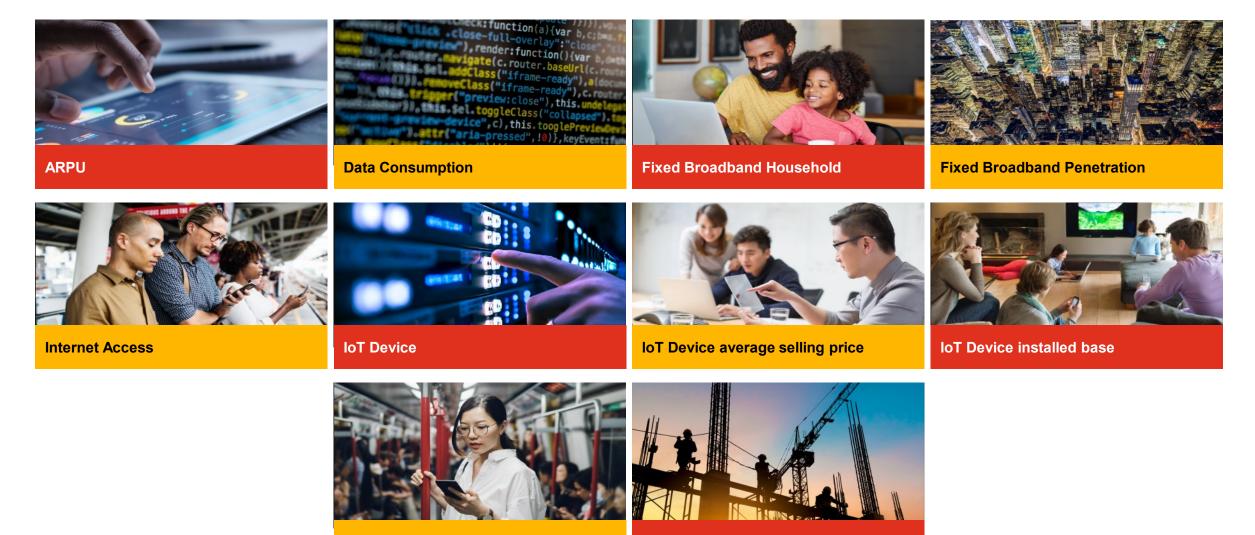


All active subscribers

13 segments industry segments...



New addition : Telecoms Outlook





... and 53 territories.

Argentina Australia Austria Belgium Brazil Canada Chile Mainland China Colombia Czech Republic Denmark Egypt Finland France

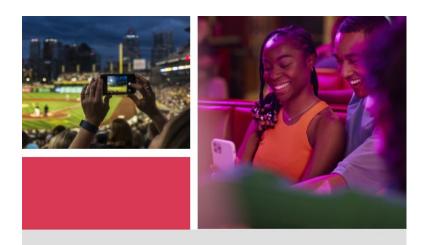
Germany Greece Hong Kong Hungary India Indonesia Ireland Israel Italy Japan Kenya Malaysia Mexico Middle East/ North Africa*

Netherlands New Zeland Nigeria Norway Pakistan Peru Philippines Poland Portugal Romania Saudi Arabia Singapore South Africa

South Korea Spain Sweden Switzerland Taiwan Thailand Turkey UAE **United Kingdom United States** Uzbekistan Azerbaijan New

*Middle East comprises of Algeria, Bahrain, Jordan, Kuwait, Lebanon, Morocco, Oman and Qatar

Perspectives report



Perspectives from the Global Entertainment & Media Outlook 2023–2027

Resetting expectations, refocusing inward and recharging growth

Scan the QR code for the full report



_⊒ pwc



Perspectives from the 2023 Entertainment & Media outlook

Resetting Expectations. Refocusing Inward. Recharging Growth



Resetting expectations, refocusing inward and recharging growth

2022 – Important inflection point in the E&M industry – there was sharp deceleration from 2021's 10.6% growth rate to just 5.4%

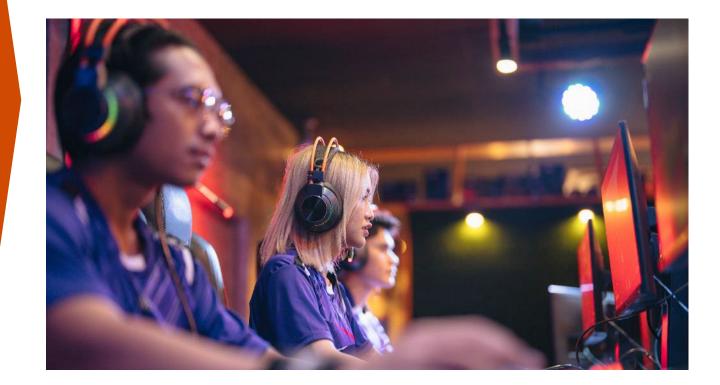
Companies are now harnessing technology namely power of AI to enable productivity & creativity

03

E&M Products become more digital leading to decline in cost of production & distribution

40% of E&M CEOs said their current business model would be viable in 10 years

- Creative about business models.
- Creative about using technology.
- Creative about how you distribute and monetise products and services.
- Creative about approaches to profits, customers, and markets.



Evolving E&M landscape

Growth in NFT, Metaverse, AI and VR are ruling the consumer behavior, but advertising overtaking now.

Changing dynamics

- Smartphones are the key drivers for internet access growth
- VR, AI are providing more immersive consumer experience
- Cloud Gaming is the future for wase of accessibility
- Crowdfunding sites like Patreon have exploded to help fans support creators directly

Changing dynamics

- OTT (over-the-top) streaming, a key driver of growth, is expanding most rapidly in emerging markets.
- The fastest-growing metric covered in the Outlook will be mobile AR consumer revenue, with a five-year 26.0% CAGR expected to 2027.
- Second fastest-growing metric is VR gaming revenue. **Gaming** will continue to be the powerhouse of Global E&M industry.
- Digital Music downloading revenue is fastest declining matrix.

Facts & Figures

- Consumer spending reduced during FY 22 across segments due to higher cost of living leading to lesser spend on subscriptions across markets. It will grow at just a 2.4% CAGR between 2022 and 2027, when it will total US\$903.2 billion
- Overall E&M advertising revenue still saw faster growth than its consumer counterpart in 2022. Between 2022 and 2027, global advertising revenue will rise from US\$763.7 billion to near US\$1 trillion in annual revenue, representing a CAGR of 4.5%



2

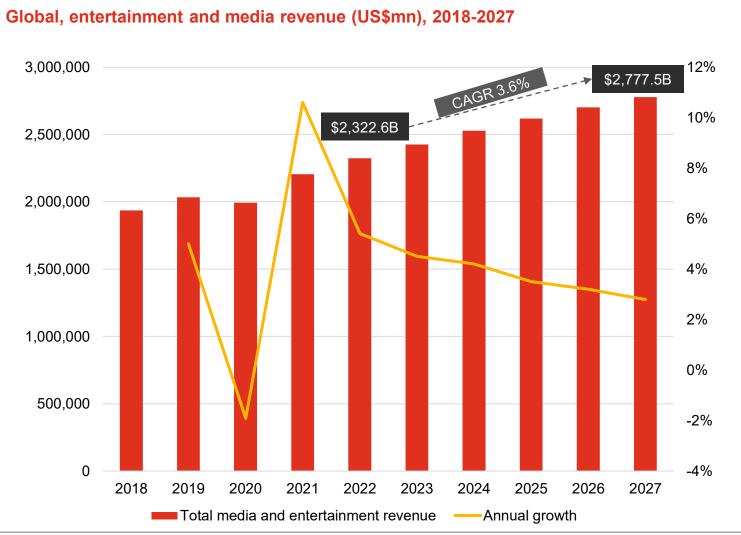
Global Entertainment and Media Outlook 2023-2027 Macrotrends

Global and Hong Kong summaries



Global E&M Outlook 2023-2027: Annual briefing

Growth in global E&M revenue slowed in 2022



- Total entertainment and media (E&M) revenue totaled US\$2.32 trn in 2022, up 5.4 %, marking a deceleration in growth from 10.6% compared to 2021.
- The slowdown was most pronounced in the advertising sector, as the Global Internet advertising growth slowed to 8.1% in 2022, leading to a total market value of US\$484 bn for the year. 2.
- Consumer spend per capita falls while digital trends play out.



Note: 2022 is the latest available data. 2023-2027 values are forecast projections

Source: PwC Global Entertainment & Media Outlook 2023-2027, www.pwc.com/outlook

After a strong rebound in 2021, projections show E&M growth in Hong Kong will slow down with a CAGR of 3.47% between 2022 and 2027

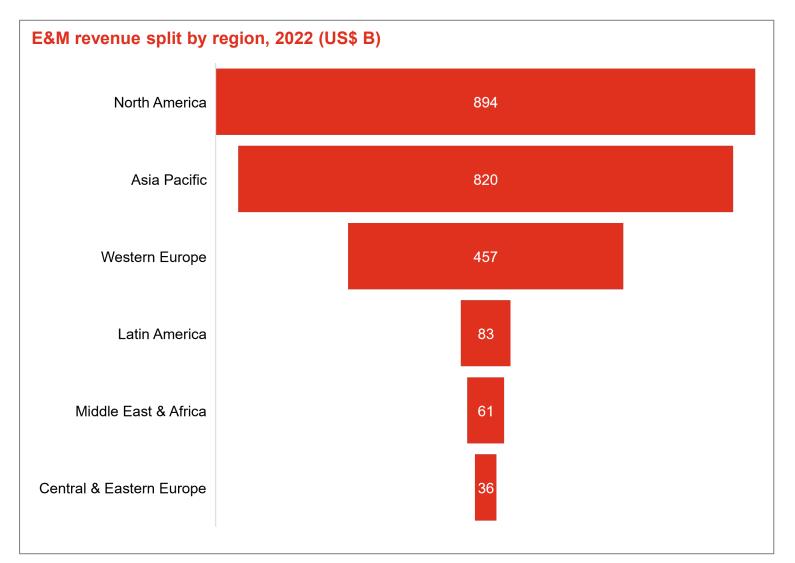


Projected E&M revenue in 2027 and growth 2022-2027 (CAGR)

Global	Hong Kong
3.6%	3.47%
(US\$2,832 bn)	(US\$11 bn)

- The growth in Hong Kong was mainly driven by cinema and business-tobusiness segments.
- Hong Kong E&M revenue is expected to reach US\$11bn in 2027.

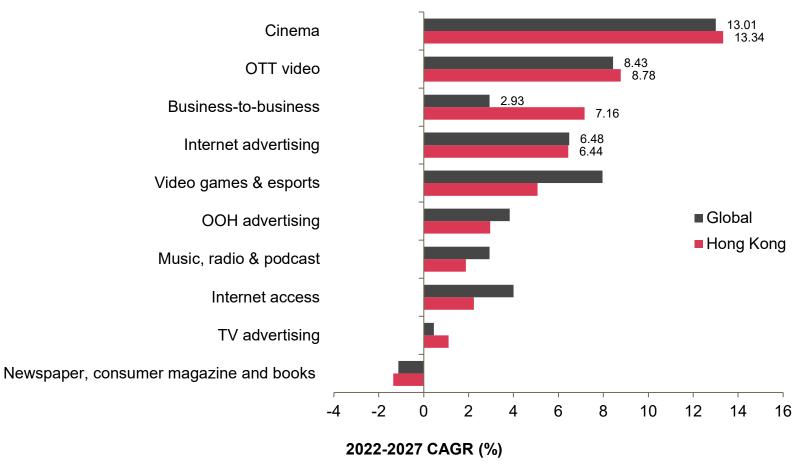
North America is the largest E&M region by revenue, followed by Asia Pacific and Western Europe



- The largest market throughout the forecast period will continue to be the US, expected to grow from US\$819bn in 2022 to US\$943bn in 2027.
- The second-largest E&M market is China, with total revenue growing from US\$388bn to US\$480bn over the forecast period.
 - China to grow at a CAGR of 4.3%, more than the US with 2.9% CAGR
- Argentina is the fastest-growing country for E&M revenue (excluding Internet access revenue).
 - This is in part, a result of the ongoing economic problems faced in the country, including high inflation.
- Nigeria is expected to have the secondfastest rate, from a similarly small revenue base of US\$1.2bn in 2018 to US\$2.9bn in 2027.
 - The 2022-27 CAGR for Nigeria is 9.0%.

Global & Hong Kong summary & macro trends

2022-2027 Compound Annual Growth Rate (CAGR) of the segmented market



Note: 2022 is the latest available data. 2023-2027 values are forecast projections Source: PwC Global Entertainment & Media Outlook 2023-2027, www.pwc.com/outlook

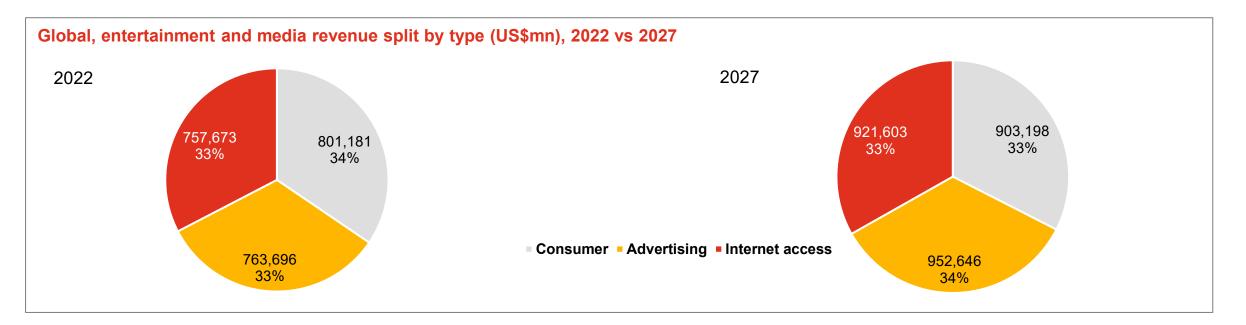
Global

- The **fastest-growing metric covered in the Outlook will be mobile AR consumer revenue**, with a five-year 26.0% CAGR expected to 2027.
- The second fastest-growing metric is VR gaming revenue, which is forecast to grow at a 19.5%
 CAGR and is predicted to be the primary contributor of growth in the VR market.
- Esports consumer ticket sales revenue has remained in the top ten fastest-growing metrics, with a five-year CAGR of 13.8%.
- Fastest-shrinking metrics are either physical or print metrics which are losing out to more convenient digital alternatives. The fastest declining metric, however, is digital music downloading revenue, forecast to decline at a -27.2% CAGR.

Hong Kong

- Hong Kong CAGR in cinema, OTT video, and business-to-business segments demonstrate higher growth than Global
- Hong Kong cinema will return to pre-pandemic levels in 2025 and reach US\$273 mn in 2027.
- Sharp growth of trade shows in Hong Kong expected in the post-COVID era, to propel a total business-to-business revenue at a 7.2% CAGR to US\$944 mn in 2027.
- The growth of traditional TV advertising and printed media continues to fall below average as digital advertising becomes the dominant channel here

Advertising & Access revenues will overtake consumer revenues by 2027

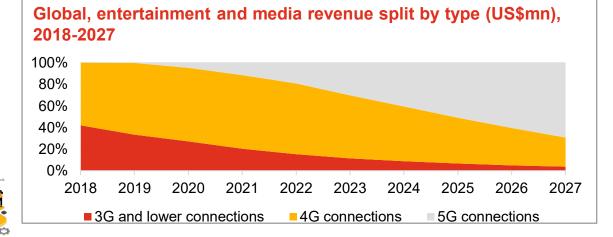


The consumer category will move from first to third by 2027; A tipping point will be reached in 2025, when global 5G penetration surpasses that of 4G.

5G will account for the majority of smartphone connections from 2025

The 5G smartphone connections are expected to grow with a CAGR of 32.7% from 2022 to 2027 and reach 3.8 billion connections

3G and 4G smartphone connections may fall with negative CAGR of 22.5% and 13.8%, respectively, from 2022 to 2027



Hong Kong's Entertainment and Media revenue composition would remain stable, with Advertising slightly more dominating

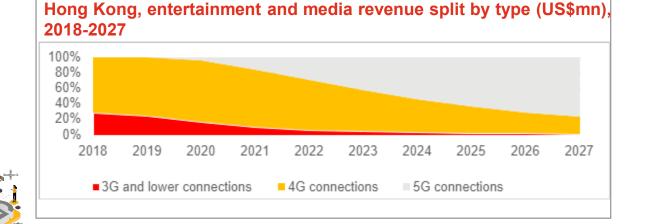


Hong Kong's 5G penetration is expected to surpass that of 4G in 2024.

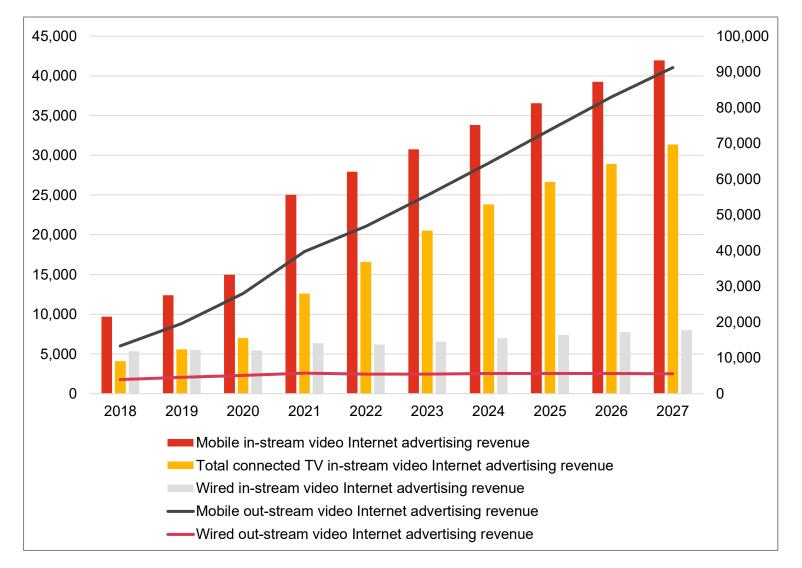
5G will account for the majority of smartphone connections from 2024

The 5G smartphone connections are expected to grow with a CAGR of 23.1% from 2022 to 2027 and reach 9 million connections

3G and 4G smartphone connections may fall with negative CAGR of 28.5% and 17.7%, respectively, from 2022 to 2027



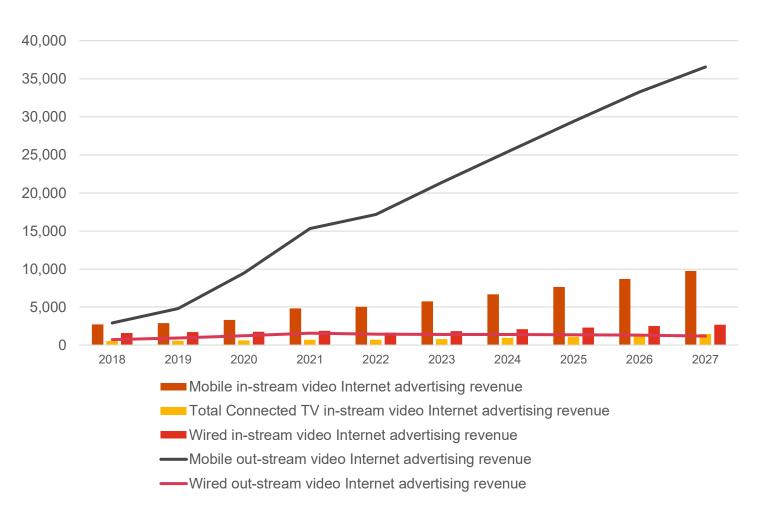
Total in-stream and out-stream video Internet advertising revenue will grow at 11.6% CAGR



- The global Internet advertising market experienced a marked slowdown in 2022. Although pockets of substantial growth remained, overall global Internet advertising growth slowed to 8.1% from 30.8% in 2021
- Google and Meta continue to lead the online advertising market, but they're now facing multiple headwinds
- TikTok, which continues to capture the attention of young digital audiences and advertisers across the globe, and Amazon, which has become a key advertising platform.
- Video Internet advertising revenue will continue to grow apace, reaching US\$189bn in 2027, and social video will be a key driver of this expansion.



Mainland China in-stream and out-stream video Internet advertising revenue will grow at 14.7% CAGR



Note: 2022 is the latest available data. 2023-2027 values are forecast projections Source: PwC Global Entertainment & Media Outlook 2023-2027, www.pwc.com/outlook

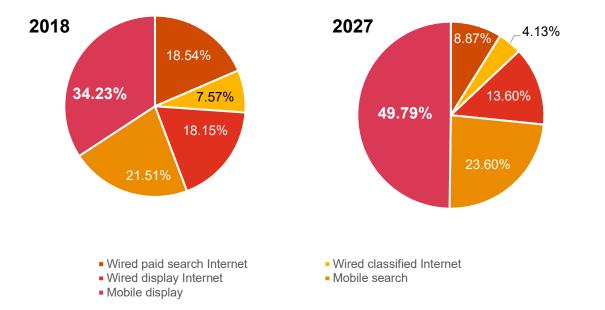
- The Internet advertising market in Mainland China is the second-largest in the world.
- It experienced a negative growth of -2.2% in 2022, as compared to the growth of 20.3% in 2021.
- The big tech firms in the Mainland China have had a difficult two years in the face of economic slowdown induced by the COVID-19 pandemic and regulatory pressure from the government.
- In both the wired and mobile sectors, video is the fastest-growing sub-segment, with a 7.2% CAGR expected in the wired sector and a 15.8% CAGR predicted for the mobile sector.



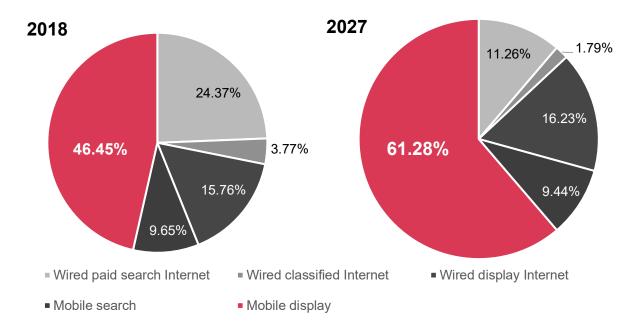
Global Entertainment & Media Outlook macrotrends – Global and Hong Kong summaries

Hong Kong's Mobile display advertising will reach 61.28% of the market by 2027

Global – Internet advertising revenue, % of total



Hong Kong – Internet advertising revenue, % of total



Mobile display advertising revenues will grow at a CAGR of 8.8% for 2022-2027, comparing to 7.2% of the whole internet advertising segment

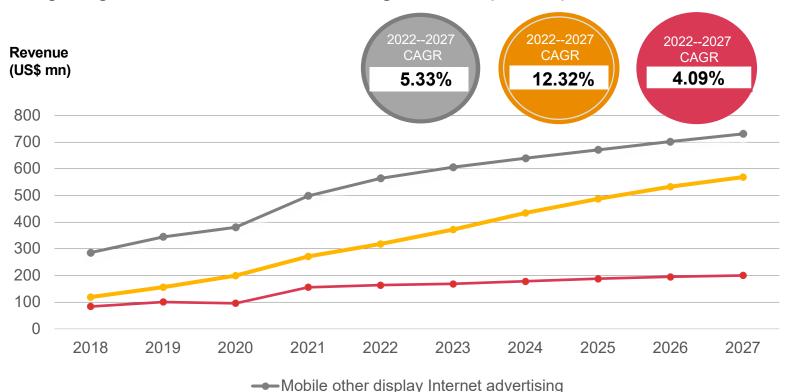
Note: Not all figures add up to 100%, as a result of rounding percentages.

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Mobile display advertising revenues will grow at a CAGR of 8.1% for 2022-2027, comparing to 6.4% of the whole internet advertising segment

Mobile video remains the key driver in the growth in the Internet advertising

Hong Kong mobile video Internet advertising 2018-2027 (US\$ mn)



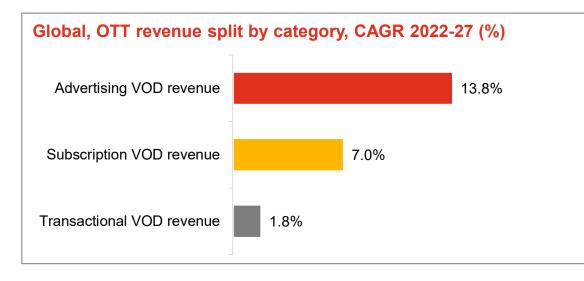
Mobile video Internet advertising

Mobile paid search Internet advertising

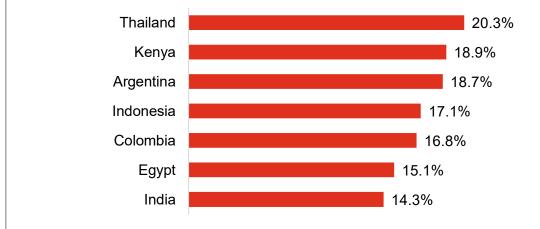
Drivers of mobile video advertising

- Mobile video internet advertising will growth at 12.32% in 2022 to 2027.
- The acceleration of 5G application and increase in data usage drive the growth
- More and more content creators in **social media platforms**

Growth in OTT video revenue is set to slow as the market matures, with AVOD witnessing the fastest growth by 2027



Top-7 markets with the highest 2022 vs. 2027 CAGR (%)

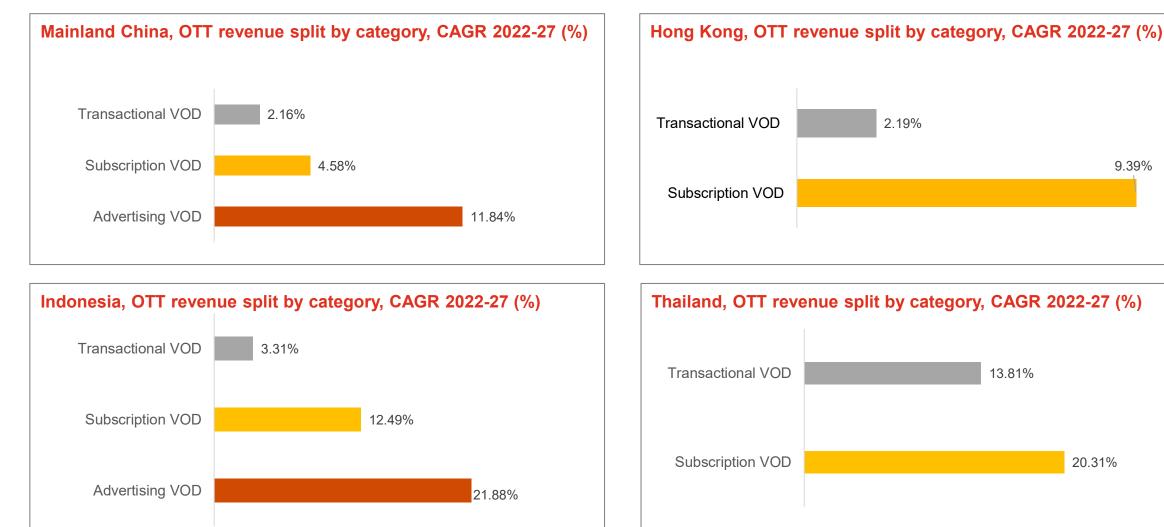


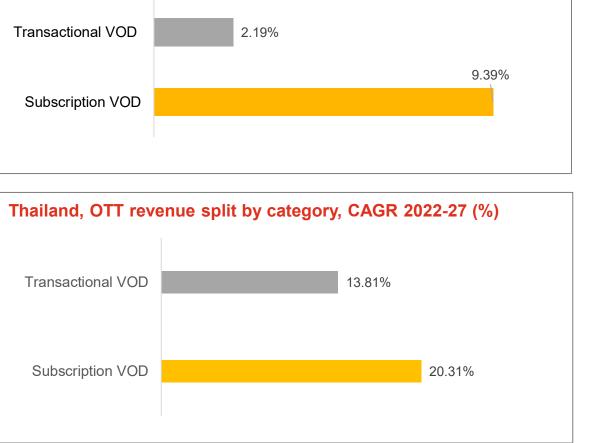


Overall, the global OTT market will grow by US\$58.1bn across the five-year forecast period.

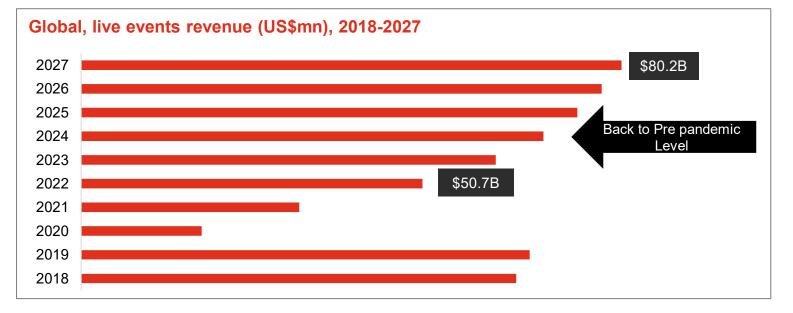
- **SVOD will account for the majority** US\$31.1bn due to existing scale.
- But AVOD won't be far behind, with a 13.8% CAGR leading to US\$26.1bn being added to the sub-sector to 2027.

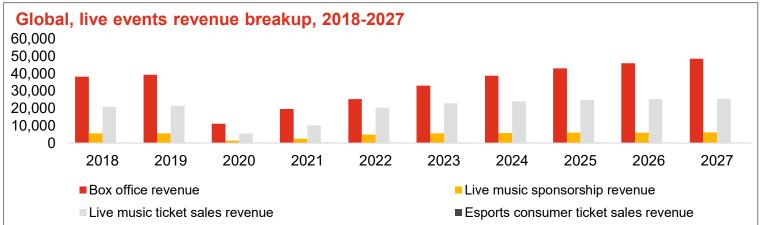
AVOD growth would be the driving engine for Mainland China and Indonesia markets





The enduring appeal of experiences sees live events lead consumer revenue



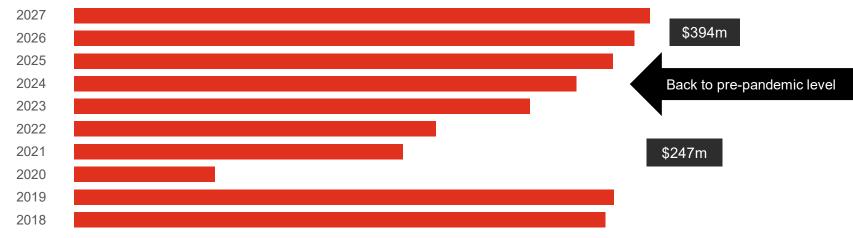


- Live sectors have returned to growth and are poised to outperform the E&M industry at large.
- Pre-pandemic levels will be reached in 2024, when revenue will total US\$68.7 billion, up from US\$66.6 billion in 2019. Through 2027, live experience revenue will grow at a 9.6% CAGR, four times the 2.4% CAGR predicted for overall consumer revenue.
- Global esports ticket sales revenue returned
 to pre-COVID-19 levels in 2022 after growing
 102.3% in 2021 and 147.8% in 2022.



The enduring appeal of experiences sees live events lead consumer revenue

Hong Kong, live events revenue (US\$mn), 2018-2027



Hong Kong, live events revenue breakup, 2018-2027





Hong Kong remains a major film distribution hub in the Asia-Pacific region

Top ten highest-grossing movies of 2023 (as of 10 July 2023)

Ranking	2023 Hong Kong's box office	2023 Global' s box office
1.	A Guilty Conscience	The Super Mario Bros. Movie
2.	The Super Mario Bros. Movie	Guardians of the Galaxy Vol. 3
3.	Guardians of the Galaxy Vol. 3	Fast X
4.	Avatar: The Way of Water	Full River Red
5.	John Wick: Chapter 4	Spider-Man: Across the Spider-Verse
6.	The First Slam Dunk	The Wandering Earth 2
7.	Fast X	The Little Mermaid
8.	Ant-Man and the Wasp: Quantumania	Ant-Man and the Wasp: Quantumania
9.	The Flash	Lost in the Stars
10.	Suzume	John Wick: Chapter 4

Hong Kong cinema globalisation and localisation

- In 2023, a local movie A Guilty Conscience grossed US\$14.6 million. Due to the impact of the pandemic, Hong Kong audiences have started to support local film production.
- Another positive sign is the government's commitment to funding local production through new schemes set up by the Hong Kong Film Development Council to promote co-production with other Asian partners.

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Source from: Box Office Mojo by IMDbPro (艺恩中国年度票房)

The influence of China's box office on the global rankings has been increasing, fueled by domestic films

Top ten highest-grossing movies of 2023 (as of 10 July 2023)

Ranking	2023 China's box office	2023 Global' s box office (including China Box Office)
1.	Full River Red	The Super Mario Bros. Movie
2.	The Wandering Earth 2	Guardians of the Galaxy Vol. 3
3.	Lost in the Stars	Fast X
4.	Bonnie Bears: Guardian Code	Full River Red
5.	Godspeed	Spider-Man: Across the Spider -Verse
6.	Fast & Furious 10	The Wandering Earth 2
7.	Hidden Blade	The Little Mermaid
8.	Deep Sea	Ant-Man and the Wasp: Quantumania
9.	Born to Fly	Lost in the Stars
10.	Suzume	John Wick: Chapter 4

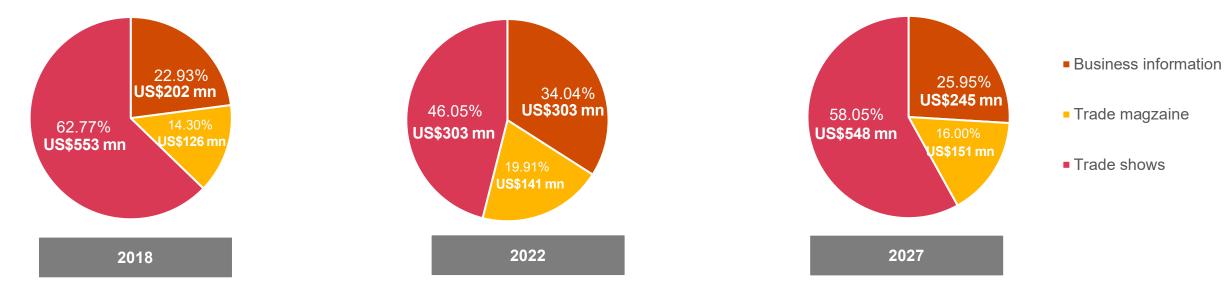
China's box office mainly fueled by domestic films

- In 2022, Chinese domestic films accounted for 85% of the total box office revenue, showing a slight increase compared to 2021. Despite the successful release of approximately 59 foreign films, the box office was still dominated by Chinese films.
- The availability of high-quality domestic content has become a key driving factor.
- In the first quarter, the number of newly released domestic films decreased by 11 compared to the previous year. However, the box office performance showed an upward trend. During the Spring Festival season, the combined box office of Full River Red and The Wandering Earth 2 reached RMB 8.57 billion yuan, surpassing the Q1 total of the same period in 2022 by RMB1.9 billion.

Source: 艺恩中国年度票房, Box Office Mojo by IMDbPro

Trade shows in Hong Kong comprised nearly two-thirds of business-tobusiness market in 2018, yet hard hit by the COVID-19 pandemic

Hong Kong revenue by segments, 2018 vs. 2022 vs. 2027



Trade shows is having a turbulent recovery since 2022, but can only resume to pre-COVID level in 2027 with expected revenue of US\$548 mn.

Games' stock rises as IP adaptations succeed in film and TV

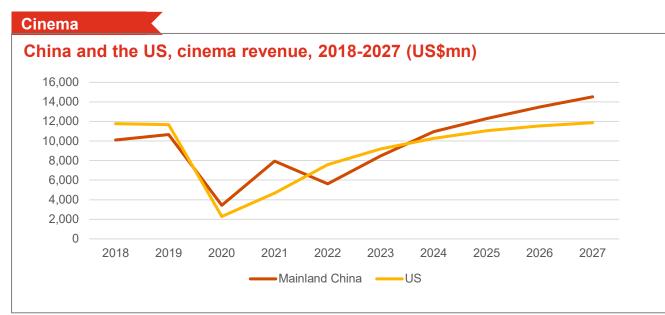
Traditional **studios are increasing their investment in gaming IP** as they seek to build new franchises after successfully mining comic book adaptations.



- Movies based on gaming intellectual property (IP) had a record year at the box office in North America in 2022, reaching a new high in total revenue from just two titles, Paramount's Sonic 2 and Sony's Uncharted.
- The year 2023 has already broken this record thanks to Dungeons and Dragons and, especially, The Super Mario Bros. Movie, the first film based on games IP to gross more than US\$1mn at the worldwide box office.
- Netflix has gaming IP movies in the planning/production stages



Traditional studios are increasing their investment in gaming IP as they seek to build new franchises after successfully mining comic book adaptations. China Cinema revenue will surpass the US by 2024 & Chinese DOOH market will dethrone the US in 2023



- China and the US battle to become the largest global box office market. By 2024, China will overtake US to be the biggest global market in box office terms.
- In China, the national market share is generally over 80%, due to local blockbusters like The Wandering Earth 2, Full River Red, this trend is expected to continue throughout the forecast period.

OOH



- In 2023, global OOH revenues are expected to rise by 8.5%, and this growth will continue to trend down over the next five years as pent-up advertising demand from the pandemic abates.
- By 2026, China will claim 25.4% of global OOH spend.

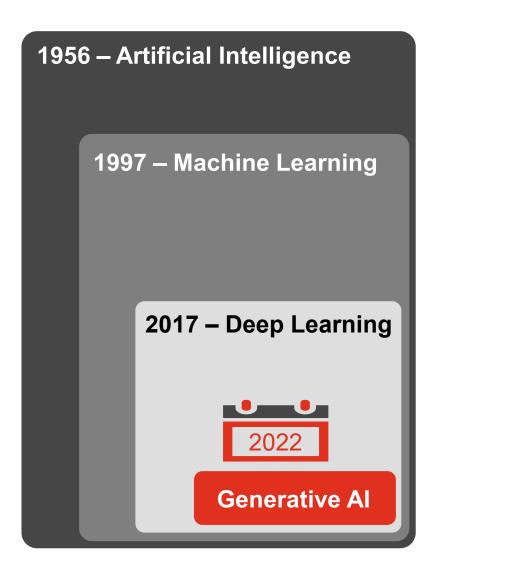
3

Generative AI



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What is Generative AI?



Expedia launches ChatGPT-powered travel planning tool



Microsoft CEO Satya Nadella says OpenAl will democratise artificial intelligence

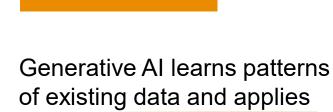


PwC will invest \$3B RMB in AI over the next five years in Mainland China and HK

Generative AI

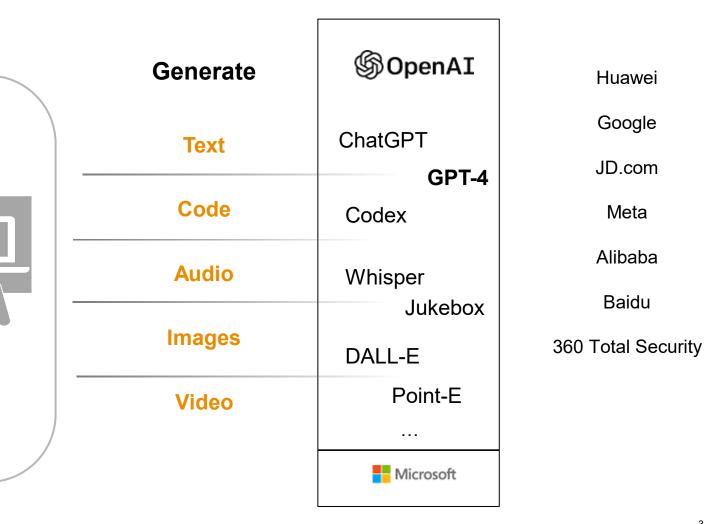
Create new written, visual, and auditory content given prompts or existing data

ChatGPT is just one example of Generative AI models, and OpenAI is just one of multiple players in this market

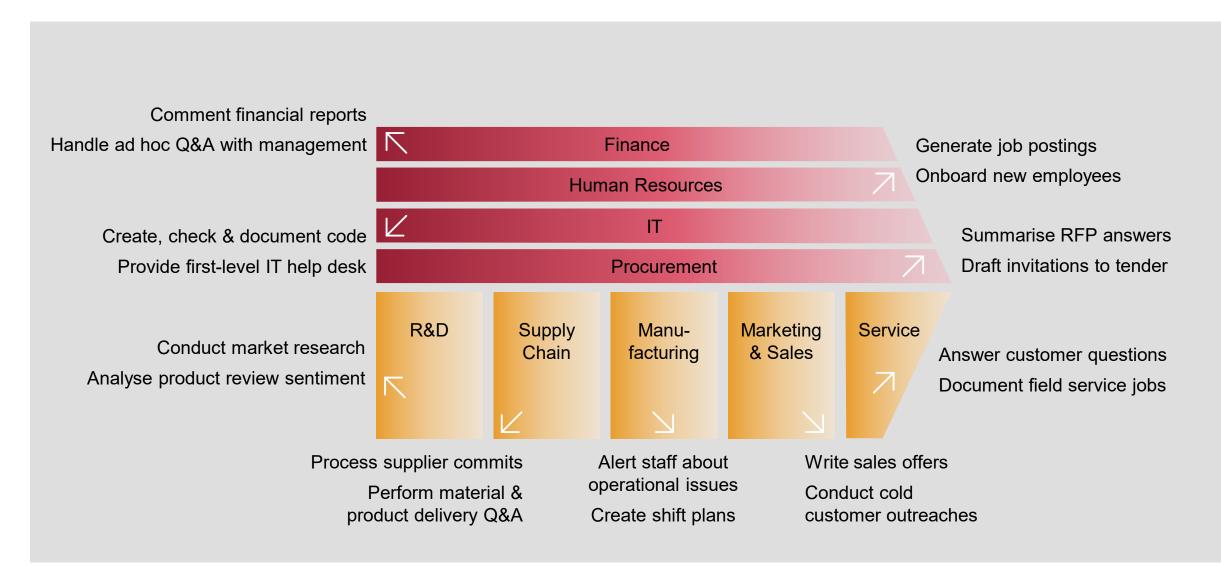


Generative Al

- them to <mark>generate new data,</mark> images, or text based on user's prompt
- These AI models are capable to interact with the user and generate content in a human-seeming way



Generative AI use cases are manifold across all business domains



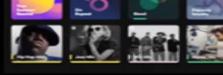
Global & local companies are already using Generative AI

Spotify[®]

Coca:Cola

Marketing transformation using GPT-4 and DALL-E

We've always tried to stay on the front edge of what's new and engaging with consumers and OpenAl is a unique opportunity [...]. If you stand still, you're going to fall behind. [...] We need to embrace risks intelligently, experiment, build on those experiments, drive scale [...]. Personalized listening experience through AI DJ







How can Generative AI reimagine the business world?

01



Reimagine

Engagement

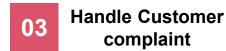
Enhanced customer engagement and participation

Brand image enhancement





Enhanced customer understanding on products Increased conversion rate



COMPLAINT ANALYSIS (POWERED BY AZURE OPENAI)

Complaint Category BILLING ISSUES

Complaint Summary

A customer topped up his phone card with \$100 in WeChat, but the balance reflected on his account was only \$80. The customer has tried to contact customer service to report this issue, but he has not received any helpful response. The customer would like the company to investigate this issue and refund him the missing \$20 as soon as possible.

Suggested Agent Response Dear Valued Customer,

telecom service provider

We are sorry to hear that you have encountered an issue with your recent topup. We apologize for any inconvenience this may have caused you.

We have investigated the issue and found that there was a system error that caused \$100. We have taken immediate action to rectify the issue and have refunded the

business days for the refund to be processed and reflected in your account.

We hope that this resolution meets your satisfaction. If you have any further questions or concerns, please do not hesitate to contact us.

Best Regards,

Summarized customer queries Suggested agent responses

24-hour CRM



Intranet Search

Agency Chatbot

04

Hello. I am an AI assistant designed to help you with any questions you have regard your insurance contract. How can I help you?

> What are the approved professional examinations eligible for examination fee reimbursement?

The approved professional examinations eligible for examination fee reimbursement for Senior

Write a message. Send

Swift information retrieval from company documents

Ability to cite answer sources

Values Unlocked

Use cases sharing How to leverage Generative AI for Brand Marketing?

Tom Designer As an in-house designer of the firm, it is a very **manual and time-consuming process** to design or source suitable graphics for visualisation and have it market-ready. It would be truly amazing if we can have a system that can **interpret and swiftly turn my creative ideas into reality**.

Future-state brand & marketing

The power of Generative AI will completely **transform how brand marketing** can be done, at a level of **speed and creativity** never seen before. Designers can fully utilise the technology to **generate initial visualisation** for the campaign, or even the actual image for marketing graphics within minutes, dramatically shorten the production time.



What can Generative Al offer to Marketing Team?



Reduce time required for designing creative materials



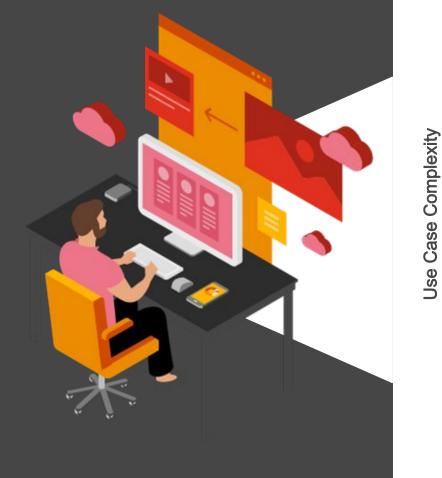
Lower production cost for creating marketing visuals



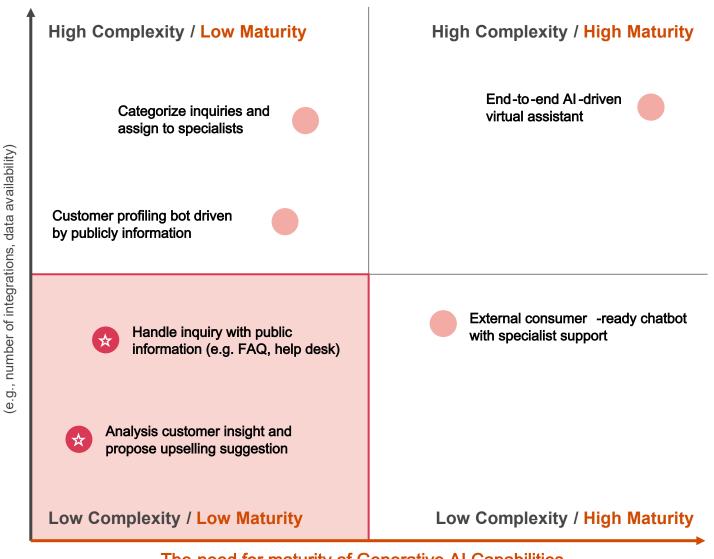
Leverage the same tech for unique customer engagement

Applying Generative AI

How to get started with Generative AI in Retailers?



During this initial adoption period, retailers will move for 'quick win' opportunities that require no or simple integrations. Over time, as the technology and technical competence matures, we will see more ambitious use cases that require more complex core system integrations and training.



The need for maturity of Generative Al Capabilities (e.g., type of integrations, type of GenAl patterns)

Responsible AI should not be an afterthought for Generative AI

Strategy

Data & AI Ethics

Consider the moral implication of uses of data and AI and codify them into your organization's values.

Policy & Regulation

Anticipate and understand key public policy and regulatory trends to align compliance processes.



Responsible Practices

Interpretability &SecurityExplainabilityEnhance theEnable transparentcybersecurity of systems.model decision-making.PrivacySustainabilityDevelop systems that

Develop systems that preserve data privacy.

and empower people Safety

Design and test systems to prevent physical harm.

Bias & Fairness

and reliable systems.

Minimize negative

Robustness

environmental impact

Enable high performing

Define and measure fairness and test systems against standards.



1 minute read - May 19, 2023 6:29 PM GMT+8 - Last Updated 2 days ago

G7 leaders confirm need for governance of generative AI technology

Reuters

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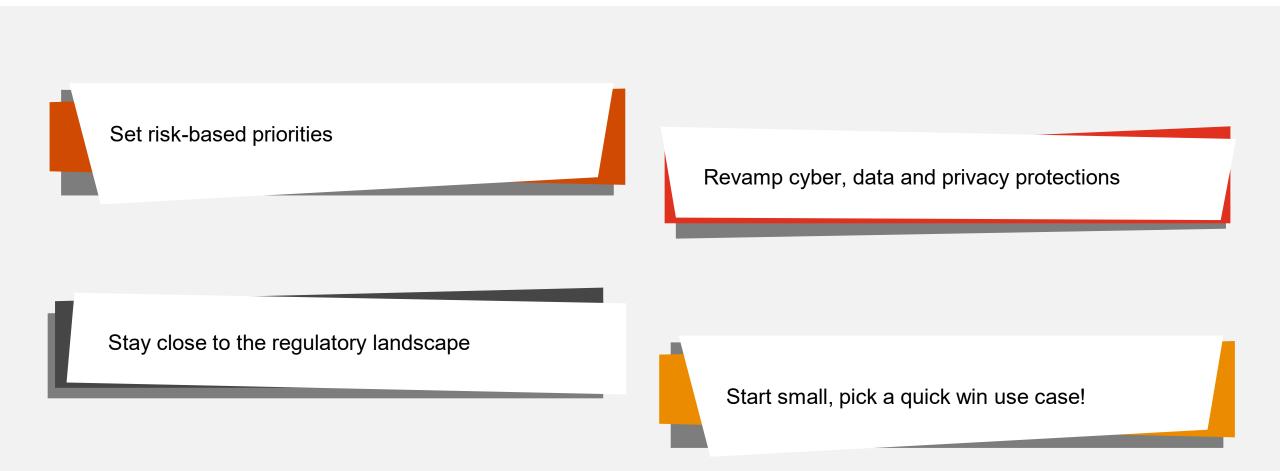
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U.S. President Joe Biden and other G7 leaders visit the Itsukushima Shrine on Miyajima Island in Hatsukaichi, Japan, Friday, May 19, 2023. Kenny Holston/Pool via REUTERS

Key considerations for adopting Generative AI



About the Global Entertainment & Media Outlook and glossary

Global Entertainment & Media Outlook

- PwC's 24th annual edition of the Global Entertainment & Media Outlook is a comprehensive online source of global analysis for consumer and advertising spending. With like-for-like, five-year historical and five-year forecast data and commentary for 13 defined industry segments in 53 territories, the Outlook makes it easy to compare and contrast consumer and advertising spending across segments and territories. Find out more at <u>www.pwchk.com/emoutlook</u>.
- A total of 53 territories are represented within the Outlook spread across North America, Western Europe, Central Europe, Middle East & Africa, Latin America and Asia Pacific.



Glossary

- Revenue includes: Advertising and consumer revenue streams
- Digital revenue Digital is revenue delivered through the Internet. Internet access revenue is obviously included in, and the majority part of, "digital." In advertising, this is effectively Internet advertising and digital OOH advertising. In consumer it's areas like OTT video revenue, digital forms of books/newspaper/magazine purchases, video game downloads and online/microtransaction revenue, VR revenue, and digital music revenue (downloads, streaming, ringtones).

Key contacts



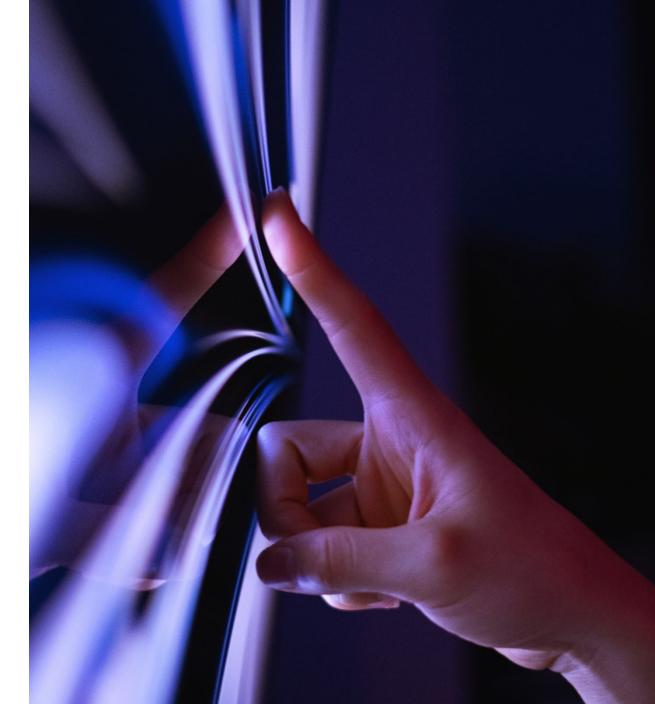
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