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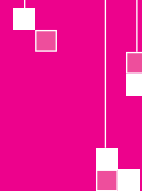
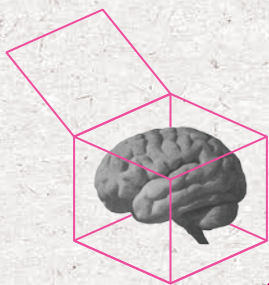
藝術創新研究報告

Arts Innovation Research Series

## 數字時代的文創產業發展

Be *Virtually* Ready:

Strategy for Future Cultural Creative Industries







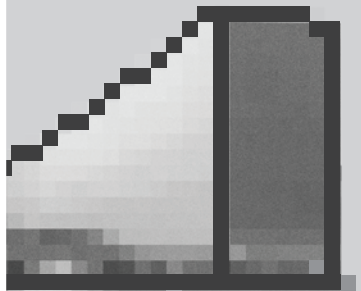
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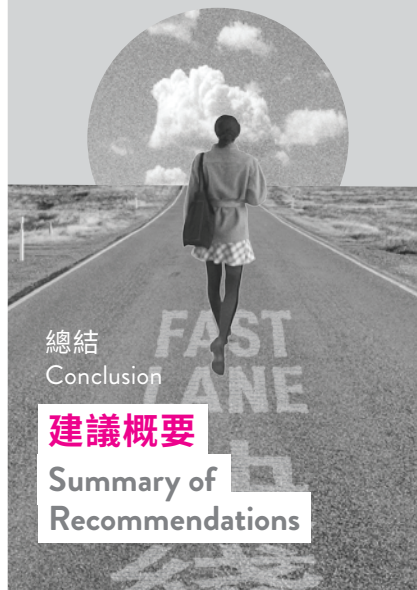
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# 報告摘要

## Executive Summary

### 序言

#### Introduction

文化乃軟實力之源，其重要性在全球所有先進的經濟體系中已是不爭的共識。香港現時正處於制定新文化政策的關鍵時刻——適逢香港特別行政區成立25周年，特區政府將迎來換屆選舉和架構重組的重大調整機遇，業界期待已久的文化體育及旅遊局（文體旅局）亦有望於期內成立。更重要的是，中央將香港納入「十四五」規劃的發展大局。因此，我們決定在這重要時刻，發表這份報告，提出未來文化政策的要義。

2021年3月，國家《「十四五」規劃綱要》確立了香港在國家發展大局中的八項定位，當中首次提出支持香港建設「區域知識產權貿易中心」及發展「中外文化藝術交流中心」（國家發展和改革委員會，2021）。這兩個定位對文化及創意產業（文創產業）<sup>1</sup>的發展意義非凡。事實上，文創產業佔本地2019年生產總值的4.7%（1,293億港元）和總就業人數的6.2%（237,150名從業員）。數據顯示，「軟件、電腦遊戲及互動媒體」

The stars have aligned for new policymaking in Hong Kong. This year marks the 25th anniversary of the establishment of the Hong Kong Special Administrative Region (HKSAR). It witnesses the election of a new Chief Executive and the transition to a new Administration, the possibility of a new bureau of culture, sports and tourism, and last but not least, an ambitious vision for Hong Kong set out in the latest National 14th Five-Year Plan. This timing is critical for policymaking and hence our report strikes at this hour.

In March 2021, the 14th Five-Year Plan set out eight positionings for Hong Kong in relation to the overall development of the country. Of those, it promulgated for the first time the support for Hong Kong to enhance its status as a **regional intellectual property (IP) trading centre**, and to develop into a **hub for arts and cultural exchanges** between China and the rest of the world (National Development and Reform Commission, 2021). These two positionings present direct implications to the cultural and creative industries (CCI),<sup>1</sup> a sector that contributes to 4.7% (HKD 129.3 billion) of the city's GDP and 6.2% (237,150 persons engaged) of total employment in 2019. Furthermore, statistics show the main driving force of the CCI in

<sup>1</sup> 香港的文化及創意產業包含11個類別：i) 藝術品、古董及工藝品；ii) 文化教育及圖書館、檔案保存和博物館服務；iii) 表演藝術；iv) 電影及錄像和音樂；v) 電視及電台；vi) 出版；vii) 軟件、電腦遊戲及互動媒體；viii) 設計；ix) 建築；x) 廣告；以及xi) 娛樂服務。  
Hong Kong's CCI comprises 11 domains including: i) art, antiques and crafts; ii) cultural education and library, archive and museum services; iii) performing arts; iv) film, video and music; v) television and radio; vi) publishing; vii) software, computer games and interactive media; viii) design; ix) architecture; x) advertising; and xi) amusement services.



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更是近年來文創產業發展的主要驅動力，對2019年文創產業的總增加價值和就業人數的增幅貢獻最大，分別為44%和27%（政府統計處，2021）。

值得注意的是，自2020年香港特別行政區政府（政府）將藝術科技劃為一個新的政策領域後，藝術科技便成為文創產業的發展重點之一，並以「提升香港在國際藝壇的地位，促進文化交流，鞏固香港國際文化大都會的地位」為目標，推動藝術與科技融合（民政事務局，2022）。可見，文創產業的數碼轉型正如火如荼地進行。

同年，香港亦首次成為僅次於紐約的全球第二大藝術品交易中心（ArtTactic，2020），其中藝術品電子商務（線上銷售）所佔份額更首次超過藝術品的一般零售（McAndrew，2021）。

recent years, to be the “software, computer games and interactive media” sector, contributing the largest portion to both CCI’s total value-added and total employment in 2019, at 44% and 27% respectively (Census and Statistics Department, 2021).

Notably, this is the sector that drives developments in the field of Arts Technology (Arts Tech)—a new area of policy rolled out by the Government of the Hong Kong Special Administrative Region (the Government) in 2020, and has since become a key direction for the CCI, aimed at promoting impactful convergences between the arts and technology sectors to “enhance Hong Kong’s standing in the international arts arena, facilitate cultural exchange and strengthen [its] role as an international cultural metropolis” (Home Affairs Bureau, 2022). Clearly, the digital transformation of the cultural and creative sectors is in full swing.

It is also worth mentioning, that same year was also the first time Hong Kong became the second largest art trading centre in the world—after New York (ArtTactic, 2020), and the first time the share of eCommerce (online sales) in the Hong Kong art market exceeded that of general retail (McAndrew, 2021).

## 數字文化策略

### Digital Culture Strategies

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數字化為文化交流與貿易帶來許多新機遇，驅使世界各地政府對其文化政策作出相應調整。去年，內地相繼出台了多份藍圖，以規劃及推動文創產業「數字化」和「產業化」的進程。其中不乏具體任務和績效指標，包括培育100個以上的線上演播節目、沉浸式體驗項目和數字藝術體驗場景，以及建設十個國家對外文化貿易基地等，希望實現中國於2035年成為文化強國的目標。

再舉例，英國自從於2018年發布《數碼文化藍圖》後，已建立了國家級機構，專門培育具備**沉浸式敘事能力**的創意人才，為數碼轉型鋪路。

新冠疫情下，此發展趨勢更加明顯。2021年，南韓政府撥款1,139億韓元（約7.96億港元）用以發展**文化科技**，旨在打造「文化內容」出產強國（韓國文化體育觀光部，2021）。台灣也於近年成立專門機構，透過推進文創產業數碼轉型，向世界推廣台灣文化品牌，並且大力投資以**區塊鏈為主導的網上平台，促進文化內容授權與交易**（台灣文化部，2020）。

The emerging possibilities of digitalisation in cultural exchange and trading have led to the recalibration of policies by many administrations around the world. In the past year, the Mainland has published multiple blueprints that emphasised “digitalisation” and bolstering “industry-building” within the CCI, setting out clear performance indicators and concrete steps, such as the short-term goals of incubating more than 100 online productions, immersive projects and digital art installations, as well as setting up at least ten national bases for foreign cultural trading to make China a cultural superpower by 2035.

The UK, for instance, since the release of its initial *Culture is Digital* blueprint in 2018, has paved the way for the establishment of a national institution aimed specifically at building capacity in **immersive storytelling** for the UK’s creative workforce.

Amidst the pandemic, this trend has become more apparent. In 2021, South Korea allocated KRW 113.9 billion (approx. HKD 796 million) to develop **cultural technology** across the board, with the aim to become a major cultural content powerhouse in the world (MCST, 2021). Similarly, Taiwan has recently established a dedicated agency to promote its cultural brand to the world through championing digital transformations, and is now investing heavily on **blockchain-led platforms that facilitate cultural contents licensing and trading** (MOC, 2020).



本報告在響應國家政策號召的同時，更考量到本地社會和業界的實際情況。我們針對四個主要政策範疇，提出八項建議，為來屆政府提供參考，作為數字文化策略的執行綱領：

This report acknowledges the time-sensitivity of the opportunities at hand, takes into consideration the national call-to-action, and stays grounded in local developments. We offer eight recommendations under four main policy arenas, for the next Administration to consider as key action items for a Digital Culture Strategy:

## 1.

### 新局的機遇 Opportunities in the New Bureau

從管治架構而言，文創產業事務分散於兩個決策局——民政事務局（民政局）和商務及經濟發展局（商經局）。這導致政策方針與資助計劃均缺乏協調，政出多門，不利於產業的長遠發展。

有關「文化」部分，我們研究了新文體旅局的架構組成策略，探討決策局改革和職能部門再規劃。另外，我們敦促政府制訂由業界主導、科技驅動的藍圖，為文創產業領航。

Under current government structures, matters pertaining to the CCI are split across two existing policy bureaux—the Home Affairs Bureau (HAB) and the Commerce and Economic Development Bureau (CEDB). This has led to siloed directives and funding practices in the past, which is detrimental to long-term cultural development.

Focusing only on the policy portfolio in respect of “Culture”, we explore opportunities in the restructuring and strategy of the Government’s newly announced Culture, Sports and Tourism Bureau. We hope to revamp existing bureaux and departments, and urge for the formulation of a comprehensive and industry-driven blueprint that embraces technology, to guide Hong Kong’s CCI development going forward.

## 新局架構

**我們建議**新局架構包含四個元素：i)文化與藝術；ii)創意產業；iii)版權；以及iv)媒體。

首先，**我們建議**將目前負責推動(i)文化與藝術及(ii)創意產業的部門，包括民政局的文化部和西九文化區部，以及商經局的創意香港辦公室，整合及編入新局。

至於(iii)版權及(iv)媒體的部分，**我們建議**政府將商經局轄下的知識產權署、香港電台和經濟貿易辦事處的部分功能納入新局。

此外，香港是時候創立一個專門負責未來文化創意政策的機構，進一步鞏固新局在促進文化內容創造上的職能。政府可成立一個全新的機構或將現有的部門重新定位並合併，例如香港電台、創意香港辦公室，以及藝術科技專責小組等部門。

## New Bureau's structure

**We recommend** the new bureau's structural makeup to comprise four components—(i) arts and culture; (ii) creative industries; (iii) copyright; and (iv) media.

To begin, **we recommend** the key departments that drive developments in (i) arts and culture, and (ii) creative industries currently, such as HAB's Culture, West Kowloon Cultural District (WKCD) Branches, and CEDB's CreateHK Office respectively, to be moved to the new bureau.

As for (iii) copyright and (iv) media components, **we recommend** the Government to consider including certain elements from CEDB's Intellectual Property Department (IPD), Radio Television Hong Kong (RTHK), and Economic and Trade Offices (ETOs) in the new bureau.

To fortify the new bureau's cultural portfolio, it is high time for Hong Kong to establish its own dedicated agency to champion cultural and creative contents of all kinds. The Government can consider setting up a new agency, or amalgamating existing departments or agencies, such as RTHK, CreateHK, and the Arts Tech Task Force.



## 新局策略

新政策局所制訂的發展藍圖，既應響應國家號召，亦要緊貼並幫助本地業界發展。我們建議藍圖覆蓋建議 1.1 所提到的四個重要範疇，提供策略性規劃及撥款。

此外，數項應優先納入發展藍圖的執行要項包括：鼓勵**內容創作和開發**（第二章）；強化**文化數據和知識產權（文化IP）貿易的數碼建設**（第三章）；及培育**新一代文創產業人才**和促進交流（第四章）。

這些執行要項總結了全球不同經濟體之文化政策的要領，並結合對國家政策和香港自身實力的分析和思考。

## New Bureau's strategy

The new bureau should be responsible for devising a blueprint that takes into consideration the national call-to-action while keeping abreast of local developments and sensitivities. **We recommend** the blueprint first delineate funding priorities and strategic game plans for the four components mentioned in Recommendation 1.1.

More concretely, first action items in the Government's next cultural blueprint should include new policies to: invigorate **content creation and development** (Chapter 2); strengthen **digital infrastructures for cultural data and IP trading** (Chapter 3); cultivate **next-generation CCI talents** and talent exchanges (Chapter 4).

These action items take into consideration important cultural policy features from around the world, alongside our own capacities and alignments with the national policy direction.

## 內容創作

此處的「內容」既指傳統文化藝術，亦指當代創意表現形式。行業發展趨勢表明，傳統的內容，包括不同非物質文化遺產，都能夠通過新的形式再展活力。

香港既推出首個藝術科技政策，當局應訂立清晰的目標和明確的指標，制訂更有影響力的藝術科技策略。**我們建議**政府將「支持內容創作」訂為政策目標，並就如何善用藝術科技提供指引。這包括為目前支持藝術科技發展的資助計劃，建立更清晰的定位，並且利用科技，從傳統文化形式和呈現方法中創造新的藝術內容。香港豐富且獨特的傳統文化資產，蘊含無限的潛能。

## Content creation

“Content” here refers to both traditional art forms and modern creative expressions. Recent industry movements within professional arts circles show that traditional contents, including different forms of intangible cultural heritage (ICH), can be reinvigorated as a form of new content creation.

With Hong Kong’s first policies on Arts Tech, there is need for the Government to devise an Arts Tech strategy that is more impact-driven, by defining clearer policy goals and outcomes. Specifically, **we recommend** the Government to set **the creation of new artistic content** as a policy goal, and offer directions on how to create content through Arts Tech with purpose and impact. This includes setting strategic roles and targets for the funding schemes that currently support Arts Tech proposals and leveraging technology to create new artistic content from traditional cultural forms and expressions. There is a wealth of unique traditions and cultural assets in Hong Kong for our Arts Tech policies to uncover.



## 內容開發

創意作品和知識產權的內容開發是指將一個原創作品（如一本書）改編成不同形式，例如電影、遊戲、戲劇或動畫的過程。這種開發過程帶動創意產業之間的互動，及巨大經濟收益和文化影響力。這亦解釋了為什麼我們必須在政策中建立相應機制，鼓勵和促進原創內容知識產權開發。

現時與文創產業相關的資助當中，並沒有專門支持創意內容和其知識產權開發的計劃。資助計劃大多都是針對單一行業、單一項目或特定行業的一次性撥款，計劃之間通常沒有關聯，故此亦未能提供後續發展的縱深。此機制無法產生協同效應，亦無助於行業健全發展。

**我們建議**政府在新局下設立一個新的資助機制，打破文創產業資助計劃之間的隔閡，避免部門各自為政，從而促進和**支持創意內容和其知識產權的開發**，包攬各種形式的內容開發，並從現有資助項目中整合經驗、廣泛汲取行業反饋。

## Content development

Imagine an original work (e.g., a book) being adapted into various formats such as film, video game, theatrical production, or animation—this describes the content development process of creative works and intellectual properties (IP). It suggests dimensions of intermediality and interactivity between creative industries which could bring about immense economic gain and cultural influence, and is why we must build mechanisms into policy to encourage and facilitate the IP development process of original contents.

Currently, there is no CCI-related funding policy with specific mandate to support the IP development of creative contents. Our funding schemes champion one-off, sector-specific projects, and are kept quite separate from other funding schemes. This undermines creative IP developments and shows that fundings are not working together, nor contributing to one wholesome industry.

**We recommend** the Government break down current barriers between all CCI-related funding schemes and devise a new funding mechanism under the new bureau, which transcends current silos promotes and supports the **IP development process of creative contents**, and embraces the development of content across sectors, amalgamating lessons learnt and industry feedback from existing funding practices.

## 文化數據建設

大數據和知識產權是當下全球熱話，世界各地的文化政策中均有涉獵：許多政府都有計劃構建文化數據生態系統，用作數據收集和分析，從而輔助公共和私營機構作出科學決策。香港長期以來缺乏一個完善的數據系統，零碎的數據就只能停留於表面，而未能將數據化為洞悉，將洞悉化為文創產業戰略。

無論是擴展「資料一線通」的範圍與功能，抑或是開發一個新的基礎建設系統，**我們建議**政府建立一個貼近時代步伐的文化數據系統，整合與文創產業相關的數據並加以分析，為公共和私營機構決策提供精闢見解。該文化數據建設應開放予粵港澳市場使用，以建立一個覆蓋面更廣的文化數據庫。

**我們建議**該建設應具備以下八個特點：i) 利用人工智能、區塊鏈等新興科技；ii) 促進傳統和新興文化內容的公私營數據共享；iii) 為數據收集、處理、分發和存取訂立範圍；iv) 協助針對文創產業的政策制定和行內決策；v) 公開資訊予公眾使用；vi) 與文化IP交易平台結合（詳見建議3.2）；vii) 建立認證機制；以及viii) 符合監管機制。

## Cultural data infrastructure

Big data and IP are hot topics in the global discourse, featuring prominently in cultural policies around the world: Governments are making plans to build cultural data repositories for data collection and analyses, to help public and private sectors make better informed decisions. In Hong Kong, we have long suffered from the lack of a comprehensive data system. The current one is scattered and disintegrated, which has been a longstanding hindrance to CCI development.

Whether this is through expanding the scope and functionalities of Data.Gov.HK, or developing a new separate infrastructure, **we recommend** the Government build a cultural data infrastructure that is fit for the era, thus making available a comprehensive collection of CCI-related data to better inform decision-makers in public policymaking and private industries. This can also be opened to the Guangdong-Hong Kong-Macao markets for a bigger and fuller cultural data bank.

**We recommend** the cultural data infrastructure bear these eight features: i) utilise new technologies such as artificial intelligence and blockchain; ii) facilitate private-public data sharing across traditional and new cultural content; iii) define scope for data collection, processing, distribution and access; iv) assist decision making in public and private sectors; v) make publicly available; vi) integrate with the cultural IP trading infrastructure (see Recommendation 3.2); vii) establish an authentication mechanism; and viii) comply with regulatory measures.



## 文化 IP 交易平台

「文化 IP」一詞泛指多元的非物質文化及文創產品，受版權和其他類別的知識產權法例保護，例如出版、電影、遊戲、視頻、音樂、漫畫、角色設計等。一個具有競爭力的創意經濟體系，建基於知識產權及其對文化和經濟發展帶來的貢獻。隨着文創產業與數字化日漸融合，這促使我們思考，知識產權制度如何能夠容納更多創新技術、鼓勵更多交易。

目前香港未有如南韓和台灣般，充分發揮文化 IP 的經濟潛力。知識產權，包括版權、商標、專利和外觀設計等都是創意的貿易載體。要知道，版權構成了文創產業中大部分經濟活動，全球版權產業對國內生產總值的貢獻平均為 5.54% (WIPO, 2021)。<sup>2</sup> 若開發得當，香港的版權制度是有龐大的發展空間，專門推動文創產業發展，特別是在文化 IP 交易方面，促進線上貿易。

## Cultural IP Trading Infrastructure

The term “cultural IP” is used to broadly cover wide-ranging intangible cultural and creative goods that could be protected under copyright and other forms of IP law, such as publications, films, videos, music, comics, character designs, etc. A competitive creative economy is underpinned by IP and its contribution to economic and cultural development. This is becoming more apparent as the CCI becomes increasingly interwoven with the digital sphere, which propels us to think about how the IP regime can accommodate more innovative technologies, as well as encourage more lucrative trading across and beyond the CCI.

In Hong Kong, we have not been able to fully leverage the economic potentials of cultural IP the same way economies such as South Korea and Taiwan have. IP rights including copyright, trademark, patent, and design are all vehicles of trade for creativity. It must be noted that copyright constitutes the basis for most economic activities in the CCI and that the average contribution of copyright industries to GDP is 5.54% worldwide (WIPO, 2021).<sup>2</sup> IP rights including copyright, trademark, patent, and design are all vehicles of trade for creativity. If harnessed properly, Hong Kong’s copyright regime has a lot of room for development as a standalone portfolio for the CCI, especially in the realm of cultural IP trading—and an online one at that.

<sup>2</sup> 根據世界知識產權組織 (2021)，南韓的版權產業對國內生產總值的貢獻為 9.89%，中國內地則為 7.35%。雖然沒有香港的相關數據，但若與我們最相近的數據相比，文創產業對本地生產總值的貢獻只有 4.7%，仍低於全球平均數字。  
According to WIPO (2021), South Korea’s copyright-based industries account for 9.89% of GDP, while mainland China’s account for 7.35%. Although no figures are available for Hong Kong, but our most comparable figure—cultural and creative industries’ contribution to GDP, which is 4.7% of GDP—is still lower than the global average.

建議  
RECOMMENDATION 3.2

**我們建議**政府建立一個致力於推廣文化IP交易的數碼平台，並藉此促進香港文化「走出去」和發揮經濟作用。政府可以完善現有的亞洲知識產權交易平台，或建立一個全新、專為文化IP交易而設的平台。

該建設應具備數據庫和交易功能，與文化數據建設結合（詳見建議3.1），並且供本地、區域及國際市場使用。這將有助進一步實現國家「十四五」規劃中，將香港打造成為中外文化藝術交流中心和區域知識產權貿易中心的兩個願景。

**We recommend** the Government build a digital platform dedicated to the facilitation and promotion of cultural IP trading and exchange, and recognise the economic potentials of copyright as part of culture “going out” for Hong Kong. The Government can consider building on the existing Asia IP Exchange platform, or establish a new digital infrastructure dedicated to cultural IP trading entirely.

We propose the infrastructure bear database and trading functions, synchronised with the cultural data infrastructure (see Recommendation 3.1), and is made accessible to local, regional, and international markets. These will further contribute towards our greater ambitions of being a cultural exchange and IP trading hub as per the National 14th Five-Year Plan.

建議  
RECOMMENDATION 4.1

## 跨境文創合作和培訓機構

人才培育是助香港落實「十四五」新文化願景和定位的關鍵。**我們建議**政府探索與粵港澳大灣區（大灣區）研究機構和產業合作的可能性，建立提升文創產業發展的跨境機構，實踐新一代創意人才的培訓。這些機構應具備文創產業相關技術的研發能力、能夠提供產業培訓的機會、並跨越粵港澳三地，以便加強大灣區的文化交流，拓寬人才培養的渠道。

**我們建議**未來的跨境培訓機構必須建基於三大支柱：業界、政府和高等院校，並涵蓋以下要素：i) 提供包括實時遊戲引擎、實時3D和其他沉浸式技術等面向未來的培訓；ii) 以業界為主導，並提供實習機會；以及 iii) 注重人才發展，對人才建設有長遠規劃。在政策的支持和推動下，香港定能把握住大灣區的機遇。

## Cross-border collaborations and CCI institutions on talents-grooming

Nurturing talents is a key strategy to realising Hong Kong's new cultural visions and positioning under the 14th Five-Year Plan. **We recommend** the Government explore establishing cross-border institutions with research institutes and industry partners in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) that are centred around CCI development and aimed at grooming the next-generation creative workforce. These institutions shall have research and development (R&D) capacity to develop CCI-related technologies, offer training opportunities with industry partners, and cross Guangdong-Hong Kong-Macao borders to enhance cultural exchanges within the GBA to broaden talent training avenues.

**We recommend** the proposed institution find support and anchorage from industry, government, and higher education institutions (HEIs), and demonstrate they: i) can offer future-proof programmes including proficiency with Real-Time Game Engines and other immersive and real-time 3D technologies; ii) are industry-led and fuelled by practical work placements; and iii) are talents-driven in that they contribute to a long-term talent pipeline that aims to upscale and cultivate the next generation creative workforce. Powered by policy support, Hong Kong is well-positioned to capitalise these opportunities in the GBA.



## 未來文化及創意產業人力規劃

極為關鍵的是，政府需制訂並實施文創產業的未來人才策略，才能確保該行業的創造力和競爭力。正如《2021年施政報告》中指出，藝術科技人才在未來將起到至關重要的作用。

然而，籌建於2020年的藝術科技專責小組原定應有教育局的參與，並負責制訂包括人力規劃在內的策略和措施，惟至今仍未公布任何具體措施。

**我們建議**政府透過新局、藝術科技專責小組或其他方式，制訂長遠人才培育策略，以激勵行業的發展。此人才發展規劃尤須注重數字化和沉浸式趨勢下所需的技能。

## Strategic manpower planning for future CCI talents

It is of utmost importance that a government-initiated strategy on future CCI talents is devised, and implemented, to ensure a competitive future for the industry. As per *Policy Address 2021*, Arts Tech talents will play an important role in the future of the CCI.

The Arts Tech Task Force effective as of 2020 rightly involved the Education Bureau and was supposed to be accountable for devising an Arts Tech strategy that includes a manpower plan, but no concrete plans have been announced up till today.

**We recommend** the Government, via the new bureau, the Arts Tech Task Force or otherwise, formulate a long-term manpower roadmap to galvanise the sector and expedite training. This farsighted Human Resources Strategy for CCI development shall draw specific attention to skillsets required under an increasingly digital and immersive landscape.

## 總結

### Conclusion

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上述建議涵蓋新局架構及策略、內容創作及開發、數碼建設和人才培育等四大政策領域，構成香港未來文化政策所需的**八個優先執行要項**。這些建議不僅緊貼時代發展、對香港的未來攸關重要，更是對實現「十四五」規劃中的願景具重要意義。

The recommendations set out above, spanning the new bureau, content creation and development, digital infrastructures, and talents make up **the first eight action items** needed in a Digital Culture Strategy for Hong Kong. They are not only relevant to the times, important to Hong Kong's future, but also strategic to the attainment of an important national goal for Hong Kong.

前言

Preface



掌握國家政策方針為首要關鍵。

Picking up national cues is the first and crucial step.

香港正處於一個前所未有的時刻，尤其是對文創產業而言。

2021年3月，國家《「十四五」規劃綱要》確立了香港在國家整體發展中的八項定位。當中，更是首次提出支持香港建設「區域知識產權貿易中心」，以及發展「中外文化藝術交流中心」（國家發展和改革委員會，2021）。

這兩個定位對香港文創產業的發展有直接影響，亦植根於我們得天獨厚的優勢。

## 文化交流與貿易 — 與生俱來的本領

促進「中西」文化交流與貿易一直是香港歷史的重要部分。作為一個融匯中外文化、擁有國際網絡的城市，早在上世紀五十年代，香港已是文化商品貿易的重要交易場所。

這包括例如是在回購中國早期書畫珍品方面。如學者指出，這是有賴於香港的自由市場，讓本地以及海外商人匯聚。現時不少收藏在故宮博物院、被視為「國寶」的中國書畫經典作品，都是通過香港市場尋獲及購回。借用藝術史學者兼策展人黃煒均的話，「香港在建立現今中國古物收藏方面有重要的貢獻」（Wong, 2022）。<sup>3</sup>

3 唐（618年–907年）韓滉《五牛圖》是在香港被發現並回購的中國書畫經典作品之一。此畫是現存最早的紙本繪畫之一，曾被宋徽宗（1101–1125年在位）等皇帝收藏，並於1752年作為壽禮進獻給清朝乾隆皇帝。乾隆將其收藏在紫禁城豐澤園的春耦齋，廣邀群臣鑒賞題跋，以勸勉重農為務，此畫因而為傳統治國思想的體現。此畫現時被評定為一級文物，作為「國寶」收藏於故宮博物院中。  
One of the most canonic works rediscovered and retrieved in Hong Kong included *Five Oxen*, which is regarded as one of the earliest extant paintings on paper from the Tang dynasty (618–907). It had been collected by Emperors of the Song dynasty, presented as birthday gift to Qianlong Emperor in 1752, who stored it separately in a specially designated building and added colophons and seals to it to establish its importance as a vehicle of state ideology. Currently the painting is held a first-class "national treasure" of the Palace Museum Collection.

Hong Kong is at a unique and unprecedented juncture in time, especially for our CCI.

In March 2021, the 14th Five-Year Plan set out eight positionings for Hong Kong in relation to the overall development of the country. Of those, it promulgated for the first time the support for Hong Kong to enhance its status as a **regional IP trading centre**, and to develop into a **hub for arts and cultural exchanges** between China and the rest of the world (National Development and Reform Commission, 2021).

These two positionings present direct implications to Hong Kong's CCI and are grounded in our longstanding unique competitive advantages.

## Cultural Exchange and Trading—in our “DNA”

Facilitating cultural exchange and trading between “East” and “West” has always been intricately entwined into Hong Kong's history. Historically a melting pot of Chinese and “western” cultures, and a place with extensive international connections, Hong Kong was already lending itself to a key strategic site for cultural trade in the 1950s.

For instance, this included playing a most crucial role in the (acquisition and) return of some of the most important early paintings and calligraphy to China. Scholars note this was only possible because Hong Kong's market economy allowed people to trade freely between themselves and with overseas buyers. In fact, many of the works rediscovered and retrieved in Hong Kong at that time are now canonic



除了藝術與文物，香港電影亦造就過一代輝煌。電影史學家指出，香港電影的黃金時期（一般指上世紀80至90年代中期，這段時期的香港電影出口量遠超世界上任何一個國家，除了美國），很大程度上歸功於當年大量湧入電影產業的新血，他們許多都是回流香港的海外留學生，將西方的電影製作技術和標準帶回香港。如電影製片人兼導演王晶所言，正是這「西方外表下的東方精神」讓我們的電影得以在當時不僅廣受喜愛，還能呈現出「豐富多彩且不落俗套的藝術氣息」（Bordwell，2011）。在這個黃金時代，香港作為「超級連繫者」，將亞洲與美國的电影工作者聯繫到一起，展現香港能夠推動跨地域、全球性的文化對話實力，亦透過此促進文化與經濟效益。<sup>4</sup>

representations of “Chinese masterpieces” and national treasures of the Palace Museum, reifying how Hong Kong’s unique advantages on cultural exchange and trading had allowed for—in the words of art historian-curator Raphael Wong—the “building of China’s national collection of antiquities” (Wong, 2022).<sup>3</sup>

Aside from art and antiquities, our advantages in film are also most evident. Film historians opine that Hong Kong cinema’s golden age (generally accepted as mid-80s to mid-90s which saw the city exporting more films than every other country in the world except the United States) owed much of its success to the new blood that entered the film industry during the period—many of whom studied abroad and brought back with them an appreciation of “western” standards of filmmaking. Its result, as encapsulated by local film producer-director Wong Jing “an Eastern spirit in a Western package”, was what made our films so crowd-pleasing but also “richly and delightfully artful” during that time (Bordwell, 2011). In the run up to this golden era, Hong Kong played the role of “**super connector**” in bridging Asian and American filmmakers, again reifying our inherent traits in forging global conversations about the cultural and economic benefits of cross-cultural collaboration.<sup>4</sup>

4 荷里活製片人雷·斯塔克於1958年在香港拍攝其改編的電影《蘇絲黃的世界》，標誌着荷里活首次進入亞洲。該電影與香港電影攝影師兼企業家汪長智合作拍攝，他所擁有的沙龍電影公司則為該電影劇組配備器材。在隨後的幾年裡，沙龍電影公司為美國和亞洲電影製作人的合作奠定了基礎。隨着雷·斯塔克成為業界翹楚，沙龍電影公司也成為了荷里活電影在香港、東南亞、南亞以及中國大陸等亞洲地區的首選合作夥伴。

Hollywood studios were first brought to Asia when legendary producer Ray Stark shot his adaptation of *The World of Suzie Wong* (1958) on location in Hong Kong, and partnered with TC Wang—a Hong Kong-based cinematographer and businessman who owned a pioneering company called Salon Films—to outfit the crew. In the years that followed, Salon Films laid the groundwork for co-productions between American and Asian filmmakers, as Stark rose to the ranks of moguldom and Wang’s Salon Films became the go-to destination for Hollywood productions shot in Hong Kong, Southeast Asia, South Asia, and then China (F. Wang, personal communication, February 17, 2022).



季豐軒畫廊策劃之《金墨無界——李華弋近作展》，大館F Hall 展廳 (2021)

Exhibition *Infinities Between Ink and Gold—Recent Works of Li Huayi* organised by Kwai Fung Hin Art Gallery at F Hall Tai Kwun (2021)

**時至今日，香港依然把握這些優勢**，例如體現在：低稅率及簡單稅制，不設進出口稅、藝術品不加收增值稅和遺產稅、言論自由、穩健的知識產權保護制度，以及能夠為收藏家提供完善的私人財富管理服務等 (Lam, 2021)。自然而然，香港於2020年躋身成為全球第二大藝術品貿易中心，僅次於紐約。<sup>5</sup>

**Today, Hong Kong remains firmly grounded in these competitive edges**—further complemented by its low and simple tax regime with no customs duty, value-added taxes or estate duty on artworks, the freedom of expression enjoyed by people including artists, a robust IP protection regime, and comprehensive private wealth management services available to collectors (Lam, 2021). Naturally, in 2020 we became the second largest art trading centre in the world, after only New York.<sup>5</sup>

<sup>5</sup> 根據藝術市場分析公司ArtTactic的報告，2020年香港的全球藝術市場份額從2019年的17.5%上升到23.2%，首次超越倫敦。  
According to a report from art market analysis firm, ArtTactic, Hong Kong's global art market share rose from 17.5% in 2019 to 23.2% in 2020, overtaking London for the first time.

為進一步鞏固和發展此地位，政府承諾推動四大方面的工作，包括(i)建立文化設施和多元文化空間，(ii)致力與海外文化機構建立緊密關係，(iii)持續推動香港與內地的文化交流，以及(iv)善用科技和培養人才。<sup>6</sup>

具體採取的一系列措施可概括為：(i)促進文化基礎建設以鞏固香港在中外文化交流中領頭地位，如西九文化區中新開幕的M+博物館和即將開幕的香港故宮文化博物館；(ii)支持舉辦國際文化藝術活動，如巴塞爾藝術展，香港藝術節和香港國際影視展等；<sup>7</sup>(iii)委派專門部門負責香港文化藝術團體於內地巡演等事宜；<sup>8</sup>(iv)促進藝術科技的有機結合，以「提升香港在國際藝壇的地位，促進文化交流，鞏固香港國際文化大都會的地位」(民政事務局，2022)。

## 掌握國家政策方向

與此同時，香港也來到政府架構重組的關鍵節點，即將成立文化體育及旅遊局(文體旅局)。事實上，政府以往也曾商議過設立專門負責文創產業的決策局，惟計劃一直未曾落實。因此，文體旅局的成立必備受矚目，標誌着一個歷史性時刻。從國家層面來看，它也預示着在不久的將來，香港的文創產業將迎來巨大機遇。

To uphold and further develop this status, the Government has pledged continued support in the main aspects of (i) infrastructure, (ii) collaboration with overseas partners, (iii) collaboration with the Mainland, and (iv) Arts Tech and talents-training.<sup>6</sup>

Specifically these include: (i) facilitating cultural infrastructures such as West Kowloon Cultural District (WKCD)'s newly-opened M+ Museum and the soon-to-open Hong Kong Palace Museum to strengthen themselves as champions of international cultural exchanges; (ii) supporting the organisation of world-class and international arts and cultural events such as Art Basel Hong Kong, Hong Kong Arts Festival, Hong Kong International Film & TV Market (FILMART), among others;<sup>7</sup> (iii) assigning dedicated offices to coordinate arts touring to the Mainland;<sup>8</sup> (iv) and promoting impactful convergences between the arts and technology sectors to “enhance Hong Kong’s standing in the international arts arena, facilitate cultural exchange and strengthen [its] role as an international cultural metropolis” (HAB, 2022).

## Picking up national cues

Concomitantly, Hong Kong is also faced with an unprecedented government restructure that will likely culminate into a new Culture, Sports and Tourism Bureau (CSTB). The setting up of a dedicated bureau responsible for the CCI was deliberated before, but never actualised. Thus, it bespeaks the monumental wealth of opportunities at hand for the CCI going forward, with specific regard to contributing to national visions.

6 這四點是由行政長官林鄭月娥於2021年7月出席「融通中外·文明互鑒」香港發展中外文化藝術交流中心高峰論壇致辭時提出的。

These four points were pinpointed in Chief Executive Carrie Lam Cheng Yuet-ngor's speech from a dedicated forum organised by the China Federation of Literary and Art Circles Hong Kong Member Association in July 2021, themed “Harmonising China and the Rest of the World, Mutual Learning Between Nations”: A forum on developing Hong Kong into a hub of cultural exchanges between China and the rest of the world.

7 為推動文創產業發展，政府向「創意智優計劃」及「電影發展基金」分別注資30億元和15.4億元，以舉辦國際大型活動、培育人才、開拓市場等。具有近50年歷史的香港藝術節在國際享負盛名，巴塞爾藝術展香港展會於2013年首次在香港舉行，每年吸引逾200家來自全球的頂尖藝廊參與。全球逾100家當代藝廊，亦會每年在Art Central展出新晉藝術家的作品。(香港特區政府，2021)。

The Government promotes development in the CCI by injecting HKD 3 billion and HKD 1.54 billion into the CreateSmart Initiative and Film Development Fund respectively to sponsor international flagship events, nurture talents, open markets, etc.; the Hong Kong Arts Festival, the city's major international arts festival celebrates its 50th Anniversary in 2022; Art Basel Hong Kong, since its 2013 debut in Hong Kong, has featured over 200 prominent galleries from around the world every year; Art Central also showcases avant-garde works by emerging artists from more than 100 contemporary art galleries every year (HKSAR Government, 2021).

8 自2017年起，香港與內地機構簽署了14份文化合作協議，資助逾670個香港藝團和藝術家在香港以外的地區演出，並與內地及海外文博機構分別合辦了23及14個大型展覽(香港特區政府，2021)。

Since 2017, Hong Kong has signed 14 agreements on cultural cooperation with Mainland authorities, subsidised over 670 performances of local arts groups or artists to perform overseas, and co-organised 23 and 14 mega exhibitions with museums in the Mainland and overseas respectively (HKSAR Government, 2021).

為了能夠更好地把握這一歷史機遇，我們首先要理解並配合國家文化政策的重點工作和任務。決策者需要理解國家文化政策的主要目標及特點，才能有效地配合國家步調，為香港制訂切實可行的發展策略。

為了給新文化政策制訂提供最適時的參考，我們將從國家文化和旅遊部（文旅部）發布的兩份政策文件中提取重點。相信當中內容有助下屆政府明白國家文化政策的發展方針，為制訂一系列與時代合拍、與實際相符、與國家願景一致的文化策略奠定基礎。

To seize this unprecedented opportunity, we must first understand and align with national cultural policies and priorities. It is crucial that policymakers understand the key goals and features from national cultural policies to strategise effectively for Hong Kong, seeing as they work to align with national goals.

We draw out key themes from two cultural policy papers issued by mainland China's Ministry of Culture and Tourism (MCT) that we perceive as most timely references to our cultural policymaking. Laying these out shall set the scene for why Hong Kong's next Administration must start picking up national cues to devise a cultural strategy that is relevant to the times, fit for the era, and in alignment with national visions.

## 「數字化」和「產業化」：國家文化政策中的兩大重點

### “Digitalisation” & “Industry-building”: recurring themes in national cultural strategies

2021年4月，文旅部發布《「十四五」文化和旅遊發展規劃》。此文件繼《「十四五」規劃綱要》出台，明確指出十個重點政策領域。<sup>9</sup>

在撰寫本文時（2022年3月），我們找到七份針對這些政策領域的規劃。按照發布日期的順序，這些規劃分別為：

In April 2021, the MCT published an overarching blueprint for culture and tourism development following the 14th Five-Year Plan. Entitled *14th Five-Year Plan for Development of Culture and Tourism*, it signalled ten specific policy focus areas to be further developed.<sup>9</sup>

At the time of writing (March 2022), we were able to locate seven policy plans that targeted these policy focus areas. These plans, by the order of release dates, are as follows:

<sup>9</sup> 此規劃概述了七個體系和三個文旅融合方向。七個體系為：新時代藝術創作體系、文化遺產保護傳承利用體系、現代公共文化服務體系、現代文化產業體系、現代旅遊業體系、現代文化和旅遊市場體系、以及對外和對港澳台文化交流和旅遊推廣體系。三個文旅融合方向為：推進文化和旅遊融合發展、提升文化和旅遊發展的科技支撐水準，以及優化文化和旅遊發展布局。  
The Plan outlined seven key ecosystems and three directions for integrating culture and tourism. The seven ecosystems are: artistic creation system in the new era; system to protect, promote and carry forward cultural heritages; system of modern public cultural services; system of tourism industry; system of modern cultural industry; system of modern cultural and tourism markets; and system for cultural exchange and tourism promotion with foreign countries, Hong Kong, Macau, and Taiwan. The three directions are to: facilitate the integrated development of culture and tourism, enhance tech support for cultural and tourism development, and optimise the layout for cultural and tourism development.



1. 《「十四五」文化和旅遊科技創新規劃》(2021年4月)  
14th Five-Year Plan for Tech Innovation in Culture and Tourism (April 2021)
2. 《「十四五」文化產業發展規劃》(2021年5月)  
14th Five-Year Plan for Development of the Cultural Industry (May 2021)
3. 《「十四五」文化和旅遊市場發展規劃》(2021年5月)  
14th Five-Year Plan for Development of Cultural and Tourism Markets (May 2021)
4. 《「十四五」非物質文化遺產保護規劃》(2021年5月)  
14th Five-Year Plan for Preservation of Intangible Cultural Heritage (May 2021)
5. 《「十四五」公共文化服務體系建設規劃》(2021年6月)  
14th Five-Year Plan for Construction of Public Cultural Service System (June 2021)
6. 《「十四五」藝術創作規劃》(2021年6月)  
14th Five-Year Plan for Artistic Creation (June 2021)
7. 《「十四五」旅遊業發展規劃》(2022年1月)  
14th Five-Year Plan for Development of the Tourism Industry (January 2022)

考慮到我們的新文化定位、決策時的相關性及適用性，本報告將詳細分析第1、2和第6項規劃，即《「十四五」文化和旅遊科技創新規劃》、《「十四五」文化產業發展規劃》及《「十四五」藝術創作規劃》。本章將概述第1、2項，而第6項則將在第二章中詳述。<sup>10</sup>

Of those, Papers 1, 2, and 6 will be covered in this report. They have been selected based on their scope, relevance, and applicability to our cultural policymaking, particularly with our new cultural positionings in mind. These three papers are: *14th Five-Year Plan for Tech Innovation in Culture and Tourism*; *14th Five-Year Plan for Development of the Cultural Industry*; and *14th Five-Year Plan for Artistic Creation*. Papers 1 and 2 are outlined in this chapter, and Paper 6 will be covered separately in more detail in Chapter 2.<sup>10</sup>

<sup>10</sup> 文旅部共發表了七份後續藍圖，文中提及的三份藍圖與我們的研究範圍最相關。其餘四份為《「十四五」文化和旅遊市場發展規劃》、《「十四五」旅遊業發展規劃》、《「十四五」非物質文化遺產保護規劃》及《「十四五」公共文化服務體系建設規劃》。前兩份藍圖以旅遊為重點，後兩份以圖書館等公共文化服務、基礎建設和美術工藝等非物質文化基礎設施為重點，不屬於本報告研究範圍，因此沒有涵蓋在內。 These three papers, out of a total of seven, are selected to be covered in this report as they are most relevant to our scope and to Hong Kong. The remaining four are *14th Five-Year Plans for Development of Cultural and Tourism Markets, Development of the Tourism Industry, Preservation of Intangible Cultural Heritage, and Construction of Public Cultural Service System*. The former two are tourism-focused and the latter two regard infrastructures for public cultural services such as libraries, and infrastructures for intangible cultures such as fine art and craft, which fall out of this report's study scope and are thus precluded.

表 1  
Table

《「十四五」文化產業發展規劃》中的發展方向、主要領域和重點項目

14th Five-Year Plan for Development of the Cultural Industry: strategic focus, key areas and policy highlights

發展方向 Strategic Focus	主要領域 Key Areas	重點舉措及工作項目 Policy Highlights
<p><b>1. 推進文化產業創新發展</b> Promote innovation in the cultural industry</p>	<ul style="list-style-type: none"> <li>• 加快發展新型文化業態 Develop new emerging forms in the cultural industry</li> <li>• 改造提升傳統文化業態 Transform and upgrade traditional forms in the cultural industry</li> <li>• 加強文化科技創新和應用 Strengthen tech innovation and application in the cultural industry</li> <li>• 構建創新發展生態體系 Build an ecosystem for innovative development</li> </ul>	<ul style="list-style-type: none"> <li>• 培育100+線上演播節目、開發100+沉浸式體驗項目、培育100+數字藝術體驗場景 Develop 100+ online productions, 100+ immersive projects and 100+ digital art exhibitions ↳ 內容創作和開發 CONTENT CREATION &amp; DEVELOPMENT</li> <li>• 設立文化產業領域的重點實驗室和技術創新中心 Set up key laboratories and tech innovation centres for the cultural industry ↳ 文創產業研發機構 CCI R&amp;D CENTRE</li> <li>• 加強文化產業資料中心、雲平台等通用基礎設施建設 Strengthen cultural industry data centres and cloud platforms ↳ 文化數據建設 CULTURAL DATA INFRASTRUCTURE</li> <li>• 推動虛擬實境、交互娛樂標準研究制定，形成文化產業標準體系，加強數位藝術顯示國際標準應用推廣 Study and formulate standards for VR and interactive entertainment systems, develop the system of standards for the cultural industry, and adopt and popularise international standards for digital art displays</li> </ul>
<p><b>2. 促進供需兩端結構優化升級</b> Optimise and upgrade the supply and demand</p>	<ul style="list-style-type: none"> <li>• 擴大優質文化產品供給 Increase the supply of high-quality cultural products</li> <li>• 暢通文化產品傳播流通 Optimise the environment for consumption of cultural products</li> </ul>	<ul style="list-style-type: none"> <li>• 搭建統一開放的區域性文化產品展示交易平台 Build unified and open regional exhibition and trading platforms for cultural products ↳ 文化IP交易 CULTURAL IP TRADING</li> <li>• 鼓勵各地因地制宜舉辦文化消費季、消費月、消費周，完善常態化消費促進機制 Encourage all regions to organise local cultural weeks/months/seasons, and improve the system for promotion of regular consumption of cultural products</li> </ul>

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資料來源：文化和旅遊部 (2021)

Source: Ministry of Culture and Tourism (2021) (The English texts are translated by the authors. Please refer to the Chinese version for official Mainland terminologies)

表 1  
Table

《「十四五」文化產業發展規劃》中的發展方向、主要領域和重點項目 (續)

14th Five-Year Plan for Development of the Cultural Industry: strategic focus, key areas and policy highlights (continued)

發展方向 Strategic Focus	主要領域 Key Areas	重點舉措及工作項目 Policy Highlights
<p><b>3. 優化文化產業空間布局</b> Optimise spatial distribution of the cultural industry</p>	<ul style="list-style-type: none"> <li>推動區域文化產業協調發展 Promote coordinated development of regional cultural industries</li> </ul>	<ul style="list-style-type: none"> <li><b>粵港澳大灣區文化產業群</b>：發揮粵港澳大灣區文化創意、科技創新、對外交往等優勢，重點推動數位文化、創意設計等產業發展，建設文化產業開放發展機制，打造具有全球影響力的現代文化產業城市群。加強內地與港澳文化產業交流與合作。 <b>The Guangdong-Hong Kong-Macao Greater Bay Area cultural industry cluster</b>: give full play to the advantages of the Greater Bay Area in cultural creation, tech innovation and external exchanges, prioritise the development of digital culture and creative design, build a system for the development of the cultural industry, build a city cluster of modern cultural industries with global influence, and strengthen cooperation and exchanges between the Mainland, Hong Kong and Macao ↳ <b>跨境文創產業機構 CROSS-BORDER CCI-SPECIFIC INSTITUTIONS</b></li> </ul>
<p><b>4. 推動文化產業融合發展</b> Promote the integrated development of the cultural industry</p>	<ul style="list-style-type: none"> <li>發展文化和旅遊融合重點業態 Develop key forms of business for culture-tourism integration</li> </ul>	<ul style="list-style-type: none"> <li>推動文化與商業深度融合，鼓勵打造一批匯聚藝術表演、閱讀分享、觀影體驗等消費業態的文化商業綜合體 Promote the integration of culture and business, and foster a batch of cultural businesses that integrate such forms of cultural activities as art performances, shared reading, film-viewing experience, etc. ↳ <b>內容開發 CONTENT DEVELOPMENT</b></li> <li>旅遊演藝提質升級計劃：促進旅遊演藝高品質發展，編制發布旅遊演藝精品名錄和品牌排行榜，培育推廣30個左右精品旅遊演藝項目 Upgrade Plan for tourism-performing arts: enhance the high-quality development of tourism-performing arts, create a catalogue of quality tourism-performing arts and a ranking list of tourism-performing arts brands, and cultivate around 30 tourism-performing arts projects.</li> </ul>

發展方向 Strategic Focus	主要領域 Key Areas	重點舉措及工作項目 Policy Highlights
<p><b>5. 激發文化市場主體發展活力</b>  <b>Invigorate the vitality of the cultural market players</b></p>	<ul style="list-style-type: none"> <li>發展壯大各類文化市場主體                      Develop and grow various cultural market players</li> </ul>	<ul style="list-style-type: none"> <li>培育骨幹文化企業，鼓勵大型文化企業通過資源整合、並購重組等方式做優做強，形成一批具有核心競爭力與國際影響力的文化產業集團                      Cultivate flagship cultural enterprises, encourage large cultural enterprises to expand through resource integration, merger and acquisition, and eventually develop a batch of cultural conglomerates with core competitiveness and international influence                      ↘ <b>人才培育 TALENT CULTIVATION</b></li> <li>建立各級政府部門文化企業公共服務資訊資源協同共用機制                      Establish a collaborative mechanism for the sharing of public resources and information among government departments and cultural enterprises</li> </ul>
<p><b>6. 培育文化產業國際合作競爭新優勢</b>  <b>Develop new advantages in international cooperation and competition in the cultural industry</b></p>	<ul style="list-style-type: none"> <li>推進文化貿易服務平台建設                      Build service platforms for cultural trade</li> </ul>	<ul style="list-style-type: none"> <li>支持有條件的地區建設國家對外文化貿易基地；達到十家左右                      Support regions with preferred conditions to build national bases for foreign cultural trade, and build around ten of such bases                      ↘ <b>文化 IP 交易 CULTURAL IP TRADING</b></li> <li>數位文化產業標準國際化：發揮產學研聯動作用，深入推進數位文化產業標準群建設                      Internationalise the standards of digital cultural industry: tap the synergy among industries, universities and research institutes to promote standards of the digital cultural industry</li> <li>培育數位文化產業國際競爭優勢，鼓勵優秀數位文化產品和服務走向國際市場                      Cultivate the international competitiveness of the digital cultural industry, and encourage outstanding digital cultural products and services to go global</li> </ul>

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表1展示了文旅部於2021年5月發布的《「十四五」文化產業發展規劃》的部分內容，並摘錄了六個重點發展方向，包括：(1) 推進文化產業創新發展；(2) 促進供需兩端結構優化升級；(3) 優化文化產業空間布局；(4) 推動文化產業融合發展；(5) 激發文化市場主體發展活力；以及(6) 培育文化產業國際合作競爭新優勢。

經過分析，我們總結出兩個關鍵且一再出現的主題——**數字化**和**產業化**——下述內容將對此進行詳細闡釋。

## 數字化

「數字化」首先在發展方向1中得到了明確闡述，該策略構想通過進一步的科技應用，發展新興內容產業和促進傳統文化領域的創新。簡單來說，即希望推動數字文化產業的經濟增長。相應的工作包括（但不限於）培育超過100個線上演播節目、沉浸式體驗項目與數字藝術體驗場景等未來式**內容創作和開發**；加強文化產業資料中心、雲平台等**數碼建設**；支持設立**文化產業領域的重點實驗室和技術創新中心**；建設粵港澳大灣區文化產業群並**聚焦數字文化**（發展方向3）；以及發揮**產學研**聯動作用，深入推進數字文化產業群建設，以此**培養下一代創意人才**（發展方向6）。

Table 1 shows the contents from the MCT's *14th Five-Year Plan for Development of the Cultural Industry* issued in May 2021. Six strategic foci have been extracted from the document, they include: 1) promoting innovation in the cultural industry; 2) optimising and upgrading the supply and demand; 3) optimising spatial distribution of the cultural industry; 4) promoting the integrated development of the cultural industry; 5) invigorating the vitality of the cultural market players; and 6) developing new advantages in international cooperation and competition in the cultural industry.

Having consolidated all contents, we have identified two key and recurring themes—**digitalisation** and **industry-building**—analyses are elaborated below.

## Digitalisation

Digitalisation, for instance, is explicitly spelt out in Strategic Focus 1, which envisions the growth of emerging content industries and the innovation of traditional cultural sectors through enhanced technology applications. Essentially, it hopes to drive economic growth of a Digital Cultural Industry. Corresponding policy action items include (but are not limited to) developing over 100 online performances, immersive projects, and digital art exhibitions for emerging and futuristic **content creation and development**; building **digital infrastructures** for the cultural industry's big data storage and analyses; building **CCI-related key laboratories and R&D centres** for culture-related technology application and transfer; designating the GBA cultural industry cluster and punctuating its focus on developing **digital culture** (Strategic Focus 3); as well as adopting rigorous **industry-university-research collaborations** to cement the standardisation of the digital cultural industry, and to this end, **groom next-generation creative workforce** (Strategic Focus 6).



## 產業化

「產業化」是另一項核心要素，亦可理解為文化內容的商業化。此處指以市場為主、植根於產業思維的政策。例如，發展方向4要求推動文化與商業深度融合，並特別提及要打造一批匯聚藝術表演、閱讀分享、觀影體驗等消費業態的文化商業體，促進企業**結合文化與科技，以創作新型內容**。具體而言，發展方向5中的行動綱要也指明要鼓勵**龍頭企業整合資源來提升影響力，繼而帶動產業，培育具備強競爭力的文化人才和新型文化企業**。

建設方面，發展方向2和6都強調了**文化交易平臺**的作用，以促進文化內容的交易及推廣國際文化交易。此舉措旨在發掘文化內容在區域和國際上的商業價值，並希望以此促進文化交流和貿易活動，這為我們的文化決策提供了有用的見解。

下文中，表2總結了文旅部於2021年4月發布的《「十四五」文化和旅遊科技創新規劃》的內容。此報告只抽取與文化相關的部分，規劃構想如何利用各種科技應用來促進文化及創意發展，因此十分值得參考。下文摘錄了四個具體政策領域，包括：(1) 設立文化和旅遊科技創專項項目；(2) 強化文化和旅遊科技研發和成果轉化；(3) 加強科技創新型人才培養；(4) 加強文化和旅遊理論研究和智庫研究。

同樣，我們能從中提取兩大主題：數字化和產業化。

## Industry-building

Industry-building, which can also be understood as the commercialisation of cultural content, is the other core theme identified. This refers to strategies that are market-driven, self-sustainable, and rooted in industry-based thinking. Strategic Focus 4, for instance, mandates the integration of culture and business, and specifically mentions the cultivation of a substantial batch of cultural enterprises which **integrate technology with culture in deriving new content forms** across immersive art performances, online reading, or streaming services. More concretely, action items from Strategic Focus 5 are about **leveraging the resources of core, leading cultural market players to upscale the industry and groom a batch of cultural conglomerates** that are competitive for the future.

In terms of infrastructure, the role of **cultural trading platforms** is emphasised in Strategic Focus 2 and 6, as ways to facilitate cultural content trading and to promote foreign cultural trade. This not only reifies the policy's anchorage towards exploiting the commercial value of cultural contents regionally and internationally, but is also a useful reference for policymaking on facilitating cultural exchange and trading activities.

Table 2 below summarises contents from *14th Five-Year Plan for Tech Innovation in Culture and Tourism* issued by the MCT in April 2021. Even though our report scope concerns the portion for culture only, this paper proves a most useful reference on how technology can be leveraged, anchored, and applied in different ways to boost cultural and creative development. Four selected policy areas are extracted below, namely: 1) setting up special tech programmes for culture and tourism; 2) strengthening R&D and commercialisation in culture and tourism; 3) cultivating talents for tech innovation; and 4) strengthening theory-based research and think tank studies on culture and tourism.

Again, we are able to derive two key motifs: digitalisation and industry-building.

## 1. 設立文化和旅遊科技專項項目：突破 30 項關鍵核心技術 Set up special tech programmes for culture and tourism: involving 30 core technologies

### 新時代藝術創作與呈現（以科技彰顯文化藝術，提升其創新能力）

#### Artistic creation and presentation in the new era (using technology to bolster culture and arts, and to improve its innovation capacity therein)

- 研發舞蹈、音樂、戲劇、美術、設計等領域的智慧化輔助創排工具及系統  
Develop smart tools and systems to support and assist art creations and rehearsals for dance, music, theatre, art and design
- 研究全息展演、可穿戴表演設備、表演機器人、智慧終端機、無人機等技術的綜合集成應用  
Research on the application and integration of technologies such as holographic displays, wearable devices, performing robots, smart terminals and drones
- 開展舞美、燈光、音響、機械、視覺特效、觀演互動等領域的設計製作技術、構造舞台表演的綜合設計模擬系統  
Develop the design and production technologies for stage art, lighting, music, mechanics and visual effect, and build simulation systems for stage performances

### 文化資源保護和傳承利用（以科技傳承傳統中華文化，包括文化遺產保育及文物活化，讓其「活起來」）

#### Protection, inheritance and utilisation of cultural resources (using technology to promote fine traditional Chinese culture, including the conservation of cultural heritages and efforts to “bring them to life”)

- 研究非物質文化遺產展示、體驗和傳播的數位化技術  
Conduct research on digital technologies to showcase, experience and promote intangible cultural heritages

### 現代文化產業（以科技創新提升文化生產和內容建設能力，提高文化產業數位化、網路化、智慧化發展）

#### Modern cultural industry (using technology to enhance the capacity in cultural production and content creation, and making use of digital technology, the internet and smart technology to promote the cultural industry)

- 開展雲展覽、雲娛樂、線上演播、數字藝術、沉浸式體驗等新興業態的內容生成關鍵技術研究  
Conduct research on key technologies for content creation of new forms of industries such as cloud exhibition, cloud entertainment, live streaming, digital art and immersive experience
- 研發新一代動漫、網路音樂、網路表演、數字藝術等創作生產、視覺化呈現、互動化傳播、沉浸式體驗等技術與專用系統工具  
Develop technologies and special systems for the creation, visualised representation, interactive communication and immersive experience of animation, online music, online performances and digital arts

資料來源：文化和旅遊部（2021）

Source: Ministry of Culture and Tourism (2021) (The English texts are translated by the authors. Please refer to the Chinese version for official Mainland terminologies)

## 2. 強化文化和旅遊科技研發和成果轉化：形成 50 項科技創新成果有效應用 Strengthen R&D and commercialisation in culture and tourism: applying 50 R&D results and innovations

- 構建以需求為導向的文化和旅遊科技成果市場化轉化平台和機制，例如開展一批文化資源數位化與內容挖掘集成技術的研究和應用專案

Build demand-based platforms and mechanisms for the commercialisation of tech innovations in culture and tourism, such as conducting a batch of special research and application programmes on the integrated digitalisation of cultural resources and content mining

## 3. 加強科技創新型人才培養 Cultivate talents for tech innovation

- 建設若干具有輻射引領作用的高水準專業化產教融合實訓基地（高等院校、職業學校與相關企業）

Build several impactful and high-standard training bases synergising industry and education institutes (universities, vocational schools and enterprises)

## 4. 加強文化和旅遊理論研究和智庫研究：培育 30 至 50 個文化旅遊智庫試點單位、每年開展 40 至 60 項研究成果 Strengthen theory-based research and think tank studies on culture and tourism: cultivating 30 to 50 think tanks for culture and tourism research, and making 40 to 60 research achievements a year

- 設立一批基礎理論和應用研究項目（例如：文化和旅遊資料資源產權、交易流通、安全保護、有序開放共用等相關技術；區塊鏈、數位孿生等技術在文化和旅遊行業應用的基礎性研究）

Initiate a batch of basic theoretical and application research projects (e.g., on technologies related to intellectual property, trading and safety measures in culture and tourism; basic research on the application of blockchain and digital twin in culture and tourism)

- 研究文化場所數位化智慧管理與利用技術，發展文化和旅遊資源平台數字化採集、智慧管理技術，推進優質館藏資源資料庫建設
- Conduct research on the management and use of digital and smart technology at cultural venues, develop technologies for digitalisation and smart management of cultural and tourism resource platforms, and construct high-quality databases of archival materials and collections of resources

- 促進全國文化和旅遊研究院跨地區、跨平台交流合作，建立文化和旅遊科研專家庫、20 個文化和旅遊部技術創新中心

Promote inter-regional and cross-platform exchanges and collaboration between culture and tourism research centres, set up database of cultural and tourism experts, as well as 20 tech innovation centres under the Ministry of Culture and Tourism

## 數字化

由於科技創新是本規劃的核心，因此與數字化有關的行動方案是具體而明確的。

例如，重點領域 1 希望到 2025 年，達成文化和旅遊國家重點研發計劃專項實現 30 項核心技術突破的目標。參照表 2 所示的三管齊下方法，其相應的措施也闡明了文旅部對科技和文化合作的構想。第一種方法是**利用科技提升新時代藝術創作**；第二種方法是**以科技傳承傳統中華文化**，包括文化遺產保育及文物活化，讓其「活起來」；第三種方法是**以科技創新提升現代文化生產和內容建設能力**，開發視覺化、互動化、沉浸式技術發展。

此外，重點領域 4 亦深入探討了如何開展區塊鏈、數字孿生等技術在文化和旅遊行業應用的基礎性研究，也會研發智能數據管理相應措施，並將其應用於文化產業。

## 產業化

「產業化」的概念也貫徹始終。例如，重點領域 2 希望到 2025 年，實現 50 項科技創新成果在文化和旅遊領域的有效應用。同時，重點領域 2 亦強調，**構建以需求為導向**的文化和旅遊科技成果市場轉化平台和機制非常重要。

## Digitalisation

With technology innovation at the crux of this policy paper, action items with respect to digitalisation are specific and articulate.

For instance, Key Policy Area 1 sets the goal of achieving 30 core technological breakthroughs in relation to culture and tourism related projects by 2025. Its corresponding action items also shed light on how the MCT envisions technology and culture to work together. Referring to the three-pronged approach shown in Table 2, the first is to **use technology to bolster artistic practices and creativity of the new era**; the second approach is to **use technology as a way of innovating and transforming traditional Chinese fine arts and culture**; and the third approach is to **use technology to enhance creative content production** by way of developing technologies and tools for more visual, interactive, and immersive experiences.

In addition, Key Policy Area 4 delves into how technologies such as blockchain and digital twin can be applied in the cultural and tourism industries, and a corresponding action item will also carry out R&D on intelligent data management applied in the cultural industry.

## Industry-building

Notions of industry-building are also embedded throughout. For instance, Key Policy Area 2 sets the goal of 50 projects that demonstrate effective application of new technology in the field of culture and tourism by 2025. Key Policy Area 2 also emphasises the significance of **developing technological innovations that are demand-based**.

同樣，重點領域3強調了在建設人才培訓機制時，制訂**符合行業需求的人才培訓策略**非常重要，其中一個具體的行動綱要旨在建設專業研發中心，將產業與大學、職業機構等教育機構聯繫起來，以**培養未來人才**。

綜上所述，這兩份國家政策規劃以「數字化」和「產業化」兩大主題為基礎，貫穿各個領域，包括內容創作和開發、數碼建設和人才培育等。事實上，「數字化」和「產業化」已成為推動現代文化經濟發展的關鍵 (Holroyd & Coates, 2015)，我們也意識到，它們早就是內地文化政策中不可或缺的元素。<sup>11</sup>

## 內地與香港在政策方向的差異

### Discrepancies in policy direction between the Mainland and Hong Kong

儘管「數字化」和「產業化」是內地文化產業發展的關鍵詞，但這些從來不是香港在過去25年中優先考慮的政策方向。下表提供了自2005年以來內地與香港部分文化政策的發展概況。相比之下，我們發現香港的文化策略與內地存在一定差異：

Following the same vein, Key Policy Area 3 punctuates the importance of devising **talent training strategies that meet industry demands** when cultivating a talent pipeline, with a specific action item to construct professional R&D centres that connect industry with education institutes such as universities and vocational institutions **to cultivate next-generation talents**.

From the above, our analyses have shown that these two policy plans from the Mainland are underpinned by the two main themes of “digitalisation” and “industry-building”, which permeate all areas of policy including content creation and development, digital infrastructure, and talent-grooming. Indeed, those themes have emerged on the global discourse as key features propelling modern cultural economies forward too (Holroyd & Coates, 2015). We realise these themes have long been integral to mainland China’s cultural strategy.<sup>11</sup>

While “digitalisation” and “industry-building” are the keywords in Mainland’s policies on CCI development, they are not—and have not been—the direction Hong Kong prioritised over the past 25 years. The table below offers a snapshot of selected policy developments pertaining to cultural development in mainland China, and Hong Kong, since 2005. When compared, we observe there is discrepancy between our cultural strategies and that of the Mainland’s:

<sup>11</sup> 自2017年以來，內地發布了多份推動文化產業數字化、加強原創內容生產，及培育新型市場的政策規劃。這在《關於推動數字文化產業創新發展的指導意見》(2017)，《關於促進文化和科技深度融合的指導意見》(2019) 和《關於推動數字文化產業高質量發展的意見》(2020) 中可見一斑。在地區層面，廣東省政府亦發布過《廣東省培育數字創意戰略性新興產業集群行動計劃》(2020)。Since 2017, mainland China has released policy plans dedicated to digitalising the cultural and creative industries, strengthening original content production, and cultivating emerging new media markets. This is evident in *Guiding Opinions on Promoting Innovative Development of Digital Cultural Industry* (2017), *Guiding Opinions on Expediting Deep Integration Between Culture and Technology* (2019) and *Opinions on Promoting High-quality Development of Digital Cultural Industry* (2020). Regionally, the Guangdong Provincial Government has also published the *Action Plan of Guangdong Province for Cultivating Clusters of Digital, Creative and Strategic Emerging Industries* (2020).



Table 3

中國內地與香港文化政策概覽與差異

Overview and differences of selected Cultural Policies in mainland China and Hong Kong

	文件 Document	政策要點 Policy Highlight	施政領域 Policy Area	年份 Year
Hong Kong 香港	施政報告 Policy Address (2005)	繼續將西九文化區打造成一流文娛藝術區 Continue plans to develop WKCD into district of culture, entertainment and art	<b>基礎建設</b> Physical Infrastructure	2005-2010 「十一五」 11th FYP
	施政報告 Policy Address (2009)	設立「創意香港」和「創意智優計劃」 Founding CreateHK and setting up CreateSmart Initiative	<b>首次提及</b> 「文化與創意產業」 First appearance of “Cultural & Creative Industries” in policy	
	施政報告 Policy Address (2011)	促進康樂及文化事務署（康文署）在展覽中運用科技和創新的展現形式 The Leisure and Cultural Services Department (LCSD) to use new technology and innovative presentation methods in new exhibitions	<b>一次性藝術科技博物館展覽</b> One-off arts tech museum exhibition	2011-2015 「十二五」 12th FYP
	「創意香港」的最新背景資料簡介 Background brief on the work of CreateHK (2013)	斥資二億港元投入「電影發展基金」的電影製作資助計劃 HKD 200 million injection into Film Development Fund for new Film Production Grant Scheme	<b>一次性電影撥款</b> One-off funding for film	
	施政報告 Policy Address (2016)	斥資三億港元投入藝術發展局的「配對資助試驗計劃」 HKD 300 million injection into the Hong Kong Arts Development Council's Art Development Matching Grants Pilot Scheme	<b>一次性傳統文化藝術撥款</b> One-off funding for traditional art forms and events	2016-2020 「十三五」 13th FYP
	施政報告 Policy Address (2017)	斥資3,600萬港元於六年間繼續投入藝術行政人才的培訓項目 Funding of HKD 36 million in the next six years to continue training scheme for arts administrators	<b>一次性培訓撥款</b> One-off funding for capacity building	
	「十四五」規劃下香港的定位與支持措施 Hong Kong's positioning and supporting measures under 14th Five-Year Plan (FYP) (2021)	交流表演、展覽、「香港週」和西九文化區為重點區域 Priority areas of exchange performances, exhibitions, “Hong Kong Week” and WKCD events	<b>以實體活動為主的交流</b> Physical event-based exchange	2021-2025 「十四五」 14th FYP

施政領域 Policy Area	政策要點 Policy Highlight	文件 Document
<p><b>基礎建設</b> <b>(文化 x 科技)</b> <b>Infrastructure</b> <b>(Culture x Technology)</b></p>	<p>完善群藝館、文化館、圖書館等必要設備和裝備的同時利用現代科技推動先進文化傳播 Improve necessary facilities and equipment at public art centres, cultural galleries and libraries, and utilise modern technologies to promote advanced cultural dissemination</p>	<p>關於進一步加強基層文化建設的指導意見 Guiding Opinions on Strengthening Construction of Grassroots Cultural Infrastructure (2005)</p>
<p><b>文化 x 科技</b> <b>Culture x Technology</b></p>	<p>促進科學技術在文化領域的廣泛應用，使科技創新更有效地為文化建設服務 Promote extensive application of science and technology in culture so that tech innovations can better serve cultural services</p>	<p>文化部科技創新項目管理辦法（暫行） Measures of the Ministry of Culture on Management of Tech Innovation Projects (Provisional) (2009)</p>
<p><b>數碼建設</b> <b>Digital Infrastructure</b></p>	<p>提高對公共數字文化建設重要性的認知、實施重點公共數字文化惠民工程 Improve awareness of the importance of public digital cultural infrastructure, and implement key digital cultural projects that can bring benefits to the public</p>	<p>關於進一步加強公共數字文化建設的指導意見 Guiding Opinions on Strengthening the Construction of Public Digital Culture Infrastructure (2011)</p>
<p><b>文化金融與產業</b> <b>Cultural Finance &amp; Industry</b></p>	<p>創新文化金融體制機制、創新符合文化產業發展需求特點的金融產品與服務 Innovate systems and mechanism for cultural finance, and create financial products and services that are suited to the needs for developing the cultural industry</p>	<p>關於深入推進文化金融合作的意見 Opinions on Deepening Cooperation Between Culture and Finance (2014)</p>
<p><b>數字文化與內容創作</b> <b>Digitalising Culture &amp; Content Creation</b></p>	<p>到2020年，形成技術先進、消費活躍的數字文化產業發展格局，在數字文化產業領域處於國際領先地位 Develop a paradigm of the digital cultural industry featured by advanced technology and popularity, and bring the digital cultural industry to a leading level in the world by 2020</p>	<p>關於推動數字文化產業創新發展的指導意見 Guiding Opinions on Promoting Innovative Development of Digital Cultural Industry (2017)</p>
<p><b>由產業主導的能力建設</b> <b>Industry-driven capacity building</b></p>	<p>發揮產業孵化平台和龍頭企業在模式創新和融合發展中起帶動中小企發展的作用 Tap the model role of incubators and leading enterprises in innovation and integrated development, and guide the development of small enterprises</p>	<p>關於推動數字文化產業高質量發展的意見 Opinions on Promoting High-quality Development of Digital Cultural Industry (2020)</p>
<p><b>以產業為主的交流</b> <b>Industry-based exchange</b></p>	<p>文化產業國際合作：國家對外文化貿易基地建設、文化和旅遊國際市場信息服務機制、產業國際合作聯盟 International cooperation in the cultural industry: construction of national bases for foreign cultural trading, information services for international culture and tourism market, and alliance for international industry cooperation</p>	<p>「十四五」文化產業發展規劃 14th Five-Year Plan for Development of the Cultural Industry (2021)</p>

CH. 1

第一章

CH. 2

第二章

CH. 3

第三章

CH. 4

第四章

CH. 5

第五章

從表3中不難看出，早在「十一五」規劃期間，內地就已提倡文化與科技的融合，實施以科技為重點的產業化策略。這與香港多年來的文化政策形成鮮明對比。相比之下，我們的文化政策以舉辦文化活動以及一次性資助政策為主。事實證明，這樣使文化政策工作分散且不具持續性，不利於長期發展。

值得一提的是，儘管內地在十多年前就以政策指導文化和科技發展，但香港政府卻是直到2020年才首次推出藝術科技政策。在此之前，團結香港基金曾發表香港首份藝術科技相關的政策建議報告，呼籲政府關注藝術與科技領域的融合，並提出藍圖制訂、撥款資助、基礎設施及人才培訓等四大方面的建議，這些建議隨後均被政府採納（OHKF，2020）。<sup>12</sup>

Table 3 shows that Mainland policies as early as the 11th Five-Year Plan have already started calling-to-action, the convergence and integration between culture and technology, which are substantiated by consistent tech-focused, and industry-building strategies. This contrasts with Hong Kong's cultural policy commitments over the years. We are seen to have prioritised physical cultural events and one-off funding practices in this time, which have proved to be detrimental to long-term cultural development, as it leaves efforts scattered and often discontinued.

It is also worth mentioning that while the Mainland's policy commitments toward culture and technology began more than a decade ago, our Administration only just rolled out the city's first policies on Arts Tech in 2020. This was after Our Hong Kong Foundation published Hong Kong's first ever report earlier that year which specifically called attention to the convergence between arts and technology sectors, with recommendations regarding blueprint, funding, infrastructure, and capacity building that were all subsequently adopted by the Government (OHKF, 2020).<sup>12</sup>

12 2020年6月，團結香港基金發布了香港首份「藝術科技」(Arts Tech) 報告，題為《共塑藝術科技締造創新思維》，並提出設立(i)藝術科技藍圖，(ii)撥款資助，(iii)基礎設施，以及(iv)人才培訓及能力建設等建議。在數月後推出的《2020年施政報告》中，行政長官便宣布藝術科技成為文創產業的新發展方針之一。其政策包括(i)成立一個跨局的專責小組，制訂藝術科技藍圖；(ii)在四個現有的基金中撥出一億港元，支持藝術科技的應用；(iii)將東九文化中心作為專業的藝術科技測試平台；以及(v)創造更多特定行業的工作機會，培養藝術科技的人才。值得注意的是，政府已經採納了我們所有的關鍵建議，並將他們的政策願景與我們的政策願景並行一致。

In June 2020, Our Hong Kong Foundation launched Hong Kong's first report on Arts Tech development, titled *Innovating Creative Cultures—Arts Tech*, with recommendations on establishing (i) an Arts Tech blueprint, with (ii) dedicated funding, (iii) infrastructural support, and (iv) measures on capacity building. A few months later in *Policy Address 2020*, the Chief Executive announced Arts Tech as a new key direction for the CCI. Her new policies included (i) setting up an inter-bureau task force to formulate an Arts Tech blueprint; (ii) setting aside HKD 100 million under four existing funds to support Arts Tech applications; (iii) marking East Kowloon Cultural Centre (EKCC) as a dedicated Art Tech Testbed; and (iv) creating more sector-specific job opportunities to nurture talents in Arts Tech. Noticeably, the Government has adopted all our key recommendations, and aligned their policy visions to ours.

我們希望上表所顯示的差異能讓我們意識到，香港的文創產業政策至今仍未立足於「數字化」和「產業化」這兩項國家文化發展的核心要素。若想實現國家願景，當務之急是要推行決策調整。

呼應本章開首，我們必須重申香港正處於文創產業轉型的重要關頭。本報告在剖析國家政策的同時，亦緊貼本地的發展進程和時勢。綜合桌面研究以及與持份者訪談，我們將提出下屆政府需要考慮的一些首要行動方案。

這些行動方案將在之後的四個章節中被詳細論述。第一章將討論新局的組成架構和擬議的政策方向，涉及的關鍵政策領域，包括內容創作和開發、文化數據和文化IP數碼建設，以及人才培養，將逐一在第二章至第四章中作進一步探討。

我們在此提出的建議並非詳盡無遺，但它們將有助制訂未來文化發展藍圖，同時確保與國家願景保持一致。

We hope the stark discrepancy shown in the table above can be a clear wake-up call to show that Hong Kong's CCI has yet to anchor itself in “digitalisation” and “industry-building”—two features central to national cultural development. There is therefore a dire need for a major recalibration at the top-level if we are to fulfil national visions.

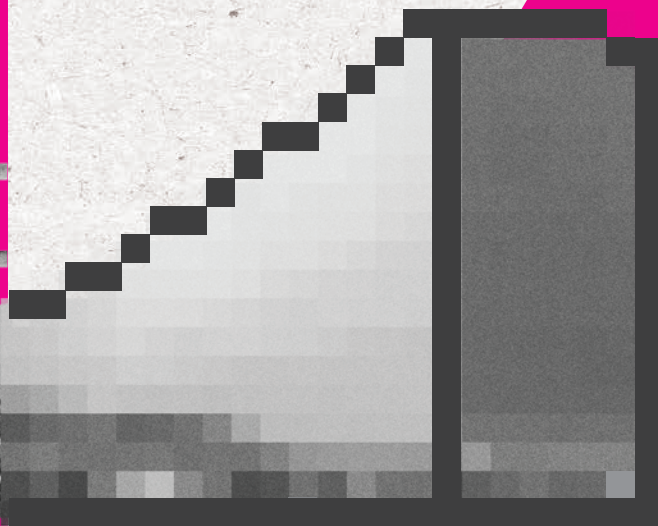
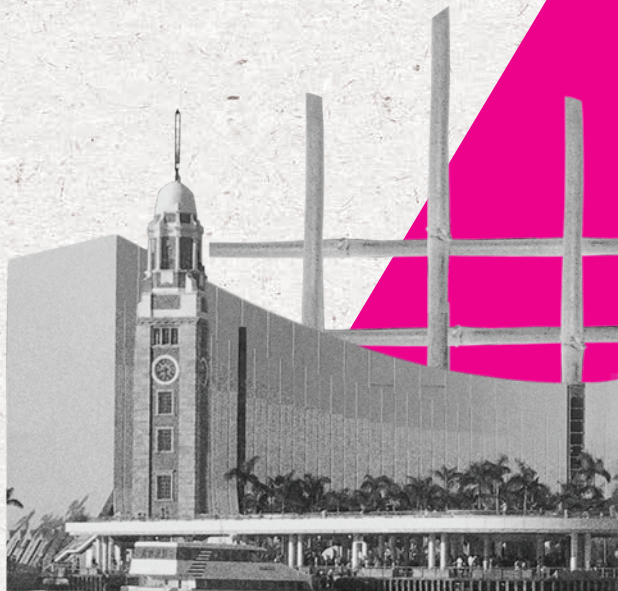
Echoing the start of this chapter, it must be reiterated that we *really* are at a momentous juncture. Our report realises the time-sensitivity of the opportunities at hand, taking into consideration the national call-to-action, while keeping abreast of local developments and sensitivities. Consolidating extensive desktop research and rounds of stakeholder interviews, we offer what we deem to be some of the first action items necessary for the next Administration to consider.

These action items are further elaborated in the next four chapters. Chapter 1 discusses the new bureau's structural makeup with proposed strategic directions. These directions are further explored in detail from chapters 2 to 4, covering key policy arenas including content creation and development, digital infrastructures for cultural data and IP trading, and last but not least, next-generation talents grooming.

Our propositions here are by no means exhaustive, but they are instrumental to a farsighted cultural blueprint that also strategically aligns with national visions.

# 新局架構及政策方向

## New Bureau's Set Up & Policy Direction





第一章將探討政府擬成立的文化體育及旅遊局之架構和策略。本報告僅聚焦與「文化」相關的政策範疇。透過分析全球不同經濟體系的管治架構和撥款策略，我們期望對現行決策局及部門的改革有所啟發，並推動政府為香港文創產業制訂全面藍圖和發展目標。本章分為兩節：第1A節「新局的結構」，以及第1B節「新局的策略與藍圖」。

Chapter 1 explores the restructuring and strategy of the Government's newly announced Culture, Sports and Tourism Bureau. Our scope focuses only on the policy portfolio with respect to "Culture". We analyse the governing structures, and funding strategy of different economies around the world in attempt to enlighten the revamp of existing bureaux and departments, as well as to pressurise the formulation of a comprehensive and long-overdue blueprint with timely goals on Hong Kong's CCI development going forward. This chapter is parsed into two sub-sections: Section 1A expands on the New Bureau's Structure, followed by its Strategy and Blueprint in Section 1B.

## 第1A節：新局的結構

### Section 1A: New Bureau's Structure

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在結構方面，我們分析了各國文化決策局的管治架構，並以南韓的文化體育觀光部（文觀部）、英國的數碼文化傳媒及體育部、中國內地的文旅部，以及台灣的文化部作為重點研究對象。

綜合分析，並考慮到政府架構重組工作的迫切性，我們認為新局需要將以下四個主要部分納入其管轄範疇，包括：

- 1) 傳統文化與藝術（傳統內容）：**包括與「受資助藝術」掛勾，或屬「純藝術」範疇的藝術形式，如視覺及表演藝術、博物館和文化遺產。這些藝術界別被泛稱為「文化」界，目前由民政局管理，亦是本次架構重組的重要部門。
- 2) 創意及內容產業（流行文化內容）：**包括被界定為「創意產業」的界別，例如電影、電視、設計和音樂，這些行業以生產及銷售創意商品和服務為主。目前香港對於創意產業的政策支援由商經局負責執行。<sup>13</sup>

On structural make-up, our research began by analysing the governing structures of cultural ministries around the world, looking more closely at South Korea's Ministry of Culture, Sports and Tourism (MCST), the UK's Department for Digital, Culture, Media & Sport (DCMS), mainland China's MCT, and Taiwan's Ministry of Culture (MOC).

Drawing from our analyses, and taking into consideration the timeliness of Hong Kong's government reorganisation exercise, there are four key components that we perceive to be essential to the new bureau's cultural portfolio. They are:

- 1) Traditional arts and culture (traditional content):** This includes visual and performing arts, museums or cultural heritage that are commonly associated with “subsidised arts” or “fine arts”. Often referred to as the “cultural” sector that is currently under the purview of HAB, a key bureau at stake amidst the government's reorganisation exercise.
- 2) Creative and content industries (popular content):** This includes sectors in what is referred to as the “creative industries”, such as film, television, design, and music. These industries are commonly associated with the commercial production and distribution of creative goods and services. Policy support for the creative industries is currently administered by CEDB.<sup>13</sup>

<sup>13</sup> 商經局負責支援廣告、建築、設計、數碼娛樂、電影、電視、音樂、以及印刷與出版等八個創意產業。  
CEDB is responsible for supporting eight creative industries, including advertising, architecture, design, digital entertainment, film, television, music, and printing and publishing.

- 3) 傳媒及廣播（數字化、傳播及出口）：**包括廣播及傳媒相關行業，例如牌照授權、監管並確保廣播服務行業的公平競爭。公營廣播及監管機構，包括香港電台（港台）和通訊事務管理局（通訊局）目前均隸屬於商經局。
- 4) 版權（商業化、數字化及出口）：**包括與版權相關的事項，如版權作品的保護及使用。版權是文創產業商業活動的基礎，與文創產品的保護、生產和分銷息息相關（Towse, 2019）。版權以及其他類別的知識產權，包括商標、專利和外觀設計，都是文創產業貿易的載體，目前以上均由商經局轄下的知識產權署負責。（本報告亦採用「文化IP」一詞，意指廣義上的版權業務。）<sup>14</sup>

- 3) Media and broadcasting (digitalisation, distribution & “going out”):** This includes matters related to broadcasting and the overall media industry, such as licensing, regulating, and ensuring fair competition in broadcasting services. Public broadcaster and regulator including Radio Television Hong Kong (RTHK) and the Office of the Communications Authority (OFCA) are both under CEDB.
- 4) Copyright (commercialisation, digitalisation & “going out”):** This includes matters related to copyright, such as the protection and exploitation of copyright. Copyright is deeply tied to the protection, production and distribution of cultural and creative goods, and constitutes the basis for most economic activities in the CCI—thus, is central to CCI developments (Towse, 2019). Copyright currently falls under the purview of IPD under CEDB, along with other IP rights—trademark, patent, and design, all vehicles of trade for creativity. (The term “cultural IP” is also adopted in this report to refer to copyright in a broader sense.)<sup>14</sup>

<sup>14</sup> 「文化IP」常在內地許多文獻中出現，通常指各類受版權和其他類別的知識產權保護的文化及創意產品，例如出版物、電影、短片、音樂、漫畫、角色設計等。  
“Cultural IP” appears in many Mainland cultural documents as 「文化IP」, commonly used to include a wide-ranging intangible cultural and creative goods that could be protected under copyright and other forms of IP law, such as publications, films, videos, music, comics, and character designs, etc.

下表列出了南韓、英國、中國內地和台灣的文化決策局結構：

The table below maps out the structural components of cultural ministries in South Korea, the UK, mainland China, and Taiwan:

表 4  
Table

南韓、英國、中國內地和台灣文化決策局的結構

Structural components of cultural ministries in South Korea, the UK, mainland China, and Taiwan

	南韓 South Korea	英國 United Kingdom	中國內地 Mainland China	台灣 Taiwan
決策局 Governing body	文化體育觀光部 Ministry of Culture, Sports and Tourism (MCST)	數碼文化傳媒及體育部 Department for Digital, Culture, Media & Sport (DCMS)	文化和旅遊部 Ministry of Culture and Tourism (MCT)	文化部 Ministry of Culture (MOC)
文化及藝術 Arts & Culture	✓	✓	✓	✓
創意及內容產業 Creative & Content Industries	✓	✓	✓	✓
傳媒及廣播 Media & Broadcasting	✓	✓		
版權 Copyright	✓			

我們注意到，南韓文觀部涵蓋的範圍最為全面，不僅四個範圍皆包括在內，亦是唯一一個將版權納入其中的經濟體。南韓作為國際公認的21世紀文化強國，其出產的文化內容佔全球市場的2.8% (UNCTD, 2017)，這有賴政府積極推動此領域發展 (Holroyd, 2019)，因此我們認為南韓文觀部值得進一步分析。

Notably, the cultural portfolio of South Korea's MCST appears most comprehensive, as it has all four key components covered. South Korea is also the only economy that has incorporated copyright matters into their cultural ministry. With South Korea being internationally-recognised and unanimously-hailed as a global cultural powerhouse of the 21st century—accounting for 2.8% of the global cultural content market (UNCTD, 2017) and fuelled by highly proactive and substantial efforts from the administration to drive this domain (Holroyd, 2019)— we believe this interesting finding makes South Korea's MCST worth our further deliberation and benchmarking.

Figure 5

南韓：文觀部與文化相關的業務組織

South Korea: the structural set-up of MCST's cultural portfolio





如圖5所示，文觀部分為幾個重點部門，主要為文化與藝術政策局、內容政策局、媒體政策局和版權政策局。每個政策局與上述的四個範疇相對應。

以下為四個重點政策局的主要工作，我們亦以括號標示與香港現況的比較。

**1) 文化與藝術政策局**負責整體文化界別，包括表演藝術、傳統文化遺產、韓國語言及文學、地區文化及其他相關領域。此政策局主要的合作夥伴和機構包括韓國文化藝術委員會、藝術管理支援中心和負責文化交流的韓國文化院。

(這與民政局的文化科<sup>15</sup>和西九工程策劃組<sup>16</sup>的工作最為相似。)

**2) 內容政策局**負責創意內容產業，包括電影、音樂、動畫、卡通、遊戲、時裝和文化科技。基本上，此政策局致力輸出並推廣韓流，其主要的兩個合作機構為韓國文化產業振興院（振興院）和韓國電影振興委員會。

(這與商經局的創意香港最為相似，負責管理創意智優計劃及電影發展基金。)<sup>17</sup>

Referring to Figure 5, MCST's cultural portfolio houses several core bureaux, namely the Culture and Arts Policy Bureau, Content Policy Bureau, Media Policy Bureau, and Copyright Policy Bureau. Each core bureau corresponds to one of the four key components highlighted in the section above.

Details regarding the four core bureaux are entailed below. We have included, in parentheses, comparisons with Hong Kong.

**1) Culture and Arts Policy Bureau** is responsible for the overarching cultural sector. This includes performing arts, traditional cultural heritage, Korean language and literature, regional culture, and other related areas. Some of the bureau's key collaborators and agencies include Arts Council Korea, Korea Arts Management Service, and Korean Cultural Centres for cultural exchange.

(This is most comparable to portfolios of HAB's Culture Branch<sup>15</sup> and West Kowloon Project Management Team<sup>16</sup>.)

**2) Content Policy Bureau** is responsible for the creative content industries. This includes film, music, animation, cartoons, games, fashion, and cultural technologies—essentially, this is the bureau dedicated to spreading *Hallyu* (Korean wave). Two key-affiliated agencies are the Korea Creative Content Agency (KOCCA) and Korean Film Council.

(This is most comparable to CEDB's CreateHK office, which covers the CreateSmart Initiative [CSI] and Film Development Fund [FDF].)<sup>17</sup>

15 民政局轄下的文化科負責監督香港所有藝術和文化事務，當中包括但不限於管理主要撥款資助，例如：藝術及體育發展基金（藝術部分）和九大主要演藝團體的資助；對非物質文化遺產、粵劇、公共圖書館和博物館的政策支援；管理主要文化機構的內務，包括香港藝術發展局及香港演藝學院等；以及促進香港與內地、澳門、台灣和世界各地的文化交流。  
HAB's Culture divisions oversees all arts and cultural affairs in Hong Kong. This includes, but is not limited to, the administration of major fundings such as the Arts and Sport Development Fund (Arts Portion) and subvention for the nine major performing arts groups (9MPAGs); policy support for intangible cultural heritage (ICH), Cantonese opera, public libraries and museums; management of major cultural institutions such as the Hong Kong Arts Development Council and the Hong Kong Academy for Performing Arts; and facilitation of cultural exchange between Hong Kong, the Mainland, Macao, Taiwan, and worldwide.

16 民政局轄下的西九文化區部門負責監督與西九文化區相關事務，該項目是本屆政府的旗艦文化基礎設施。部門的工作包括：監察西九文化區管理局的工作進度、與西九文化區管理局建立博物館及表演場所的管理系統、監督西九文化區管理局的員工及薪酬事宜等。  
HAB's WKCD division oversees affairs related to the WKCD project—a flagship cultural infrastructure of the current administration. For example, it monitors the progress and performance of the West Kowloon Cultural District Authority (WKCD); work with WKCD to establish governance mechanism for museums and performing arts venues; and supervises manpower and remuneration matters of WKCD.

3) **媒體政策局**負責傳媒行業，包括廣播、廣告、出版、新聞和其他期刊。主要合作伙伴包括韓國出版產業振興院和公營廣播機構等。

(香港目前沒有相近的行政機關專責媒體事務，但商經局轄下的港台〔公營廣播機構〕和通訊局〔電信和廣播〕擁有相似元素。廣告和出版等則被劃為創意產業領域，由商經局負責管理。)

4) **版權政策局**負責所有版權相關事務，包括版權保護制度、公共教育和技術研發。隸屬文觀部的韓國著作權委員會便是專門負責版權的政府機構。

(香港目前沒有行政機關專責版權相關事務。商經局的知識產權署負責處理所有類別的知識產權，<sup>18</sup>而非單獨處理版權事務。)

圖6顯示了目前負責文創產業的兩個主要決策局——民政局和商經局——的大致結構。**如圖中所示，香港與文化相關的事務並非集中於一個局管理，而是分散於兩個局。**

3) **Media Policy Bureau** is responsible for the media industry. This includes broadcasting, advertising, publishing, press, and other periodicals. Key collaborators are agencies like the Publication Industry Promotion Agency of Korea, and public broadcasters.

(No comparable entity on media affairs is identified in Hong Kong, but elements from CEDB's RTHK [public broadcaster] and OFCA [telecommunications and broadcasting] are related portfolios. Areas such as advertising and publishing are considered part of the creative industries and are overseen by CEDB.)

4) **Copyright Bureau** is responsible for all copyright-related matters. This ranges from the copyright protection regime, public education on copyright, to copyright technology R&D. The Korea Copyright Commission is the dedicated agency for copyright.

(No comparable entity dedicated only to copyright matters in Hong Kong. CEDB's IPD deals with all forms of IP,<sup>18</sup> and does not handle copyright separately.)

Now as comparison, Figure 6 shows the rough structures of the two key policy bureaux that currently oversee the cultural and creative sectors—namely HAB and CEDB. **Instead of having all components under one governing body, they are scattered across the two bureaux.**

17 創意香港專門推動創意經濟發展，同時管理創意智優計劃和電影發展基金。創意智優計劃分為設計與非設計項目，支援所有除電影之外的創意產業項目，例如音樂、時裝和數碼娛樂。電影發展基金則專為有利於電影業長期發展的项目提供支援，例如電影製作資助或參加海外電影節的補貼。

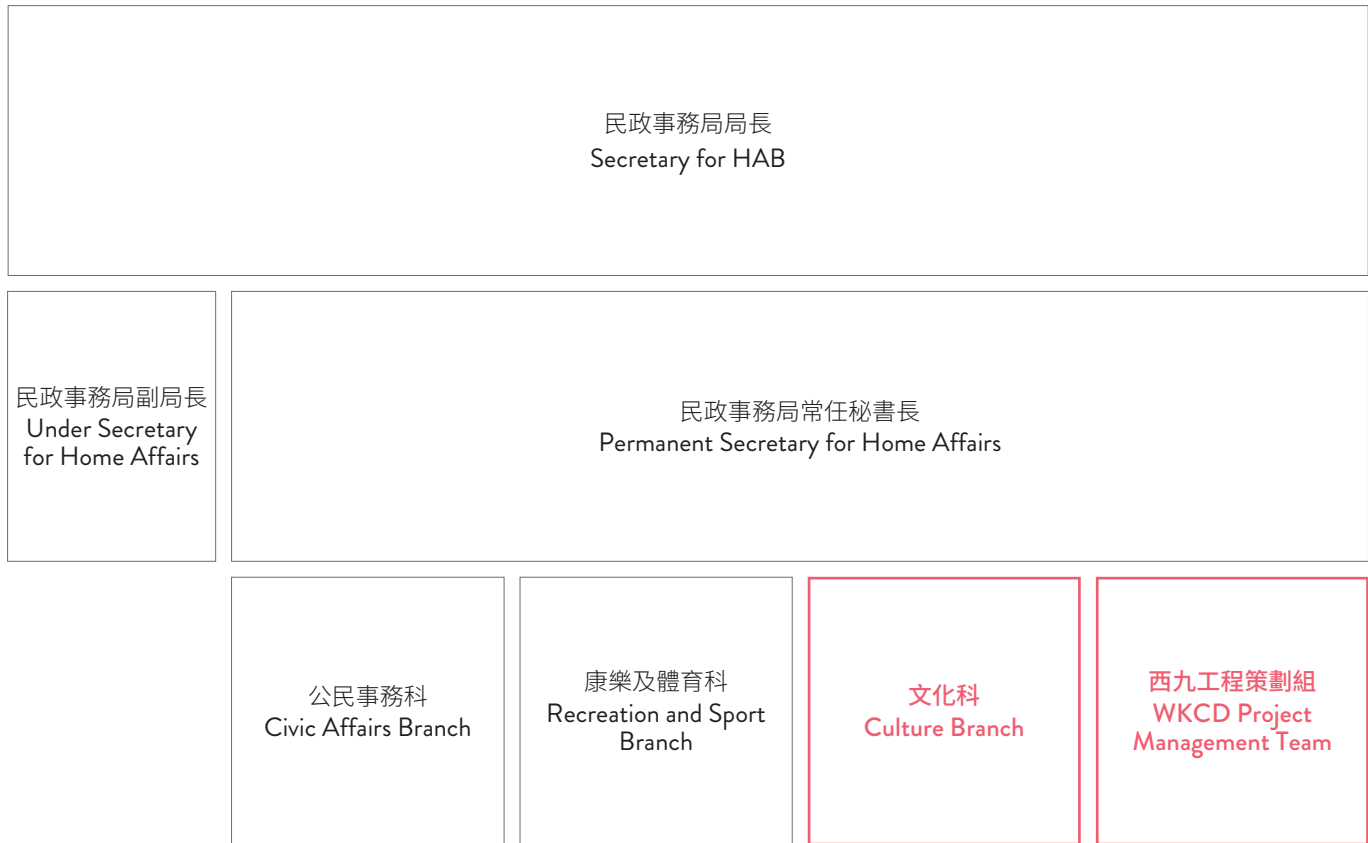
CreateHK is a dedicated agency that champions and drives the development of Hong Kong's creative economy. It administers CSI and FDF. CSI is split into design and non-design streams, and provides financial support to all creative industry projects apart from film, such as those in music, fashion, and digital entertainment. FDF provides supports to projects deemed conducive to the long-term development of the film industry, such as production grants or subsidies to attend overseas film festivals.

18 所有類別的知識產權包括商標、專利、版權和外觀設計。  
All forms of IP include trademark, patent, copyright, and designs.

Figure 6

## 香港與南韓的文化相關部門比較

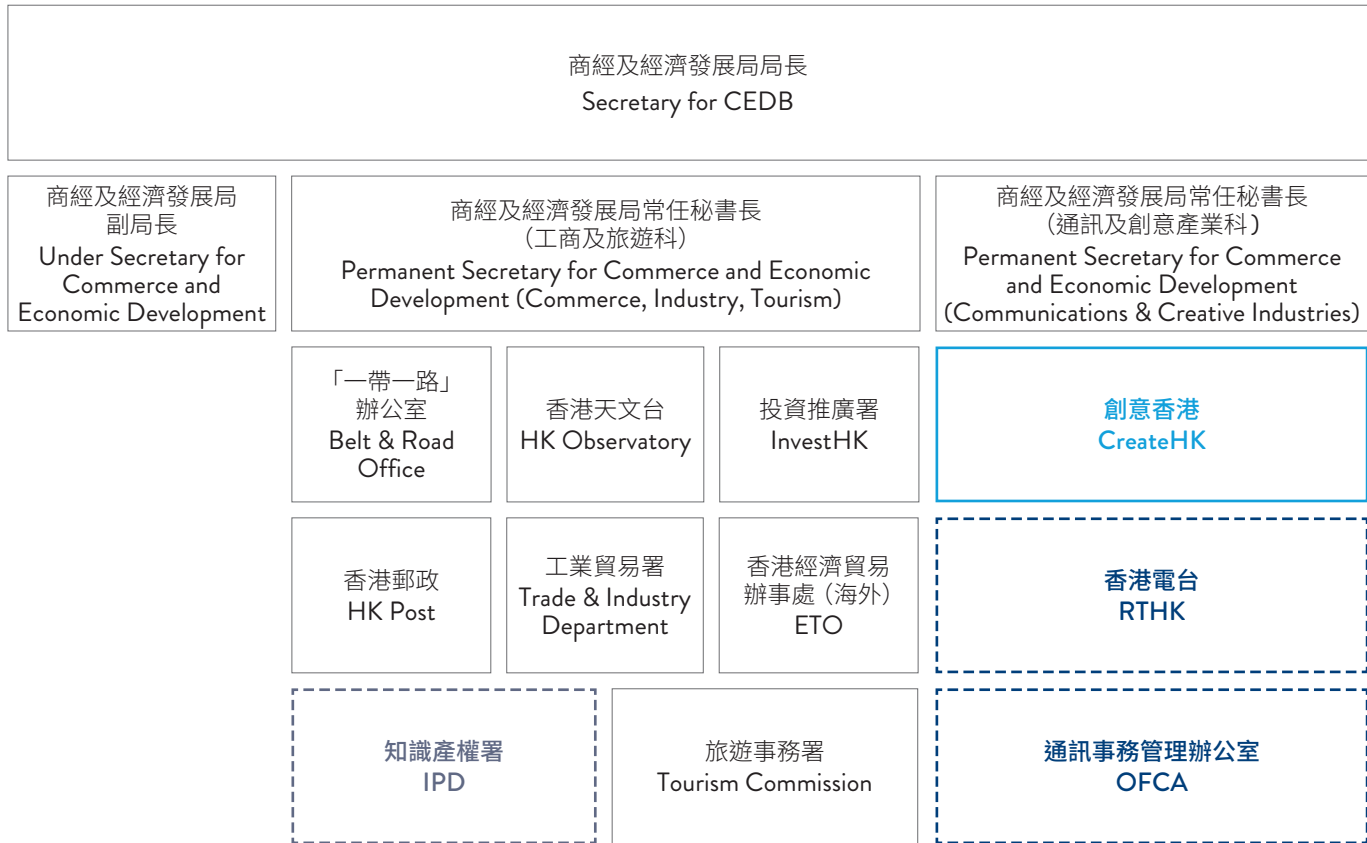
Structural comparison of components of Hong Kong and South Korea's culture-related departments



### 圖列

南韓文化政策中的四個核心部門已在先前用紅色、淺藍、深藍和灰色標示，而香港現時最具可比性的部門亦用相同顏色標示。虛綫方框表示本質相近但不完全相同的部門。

資料來源：文化體育觀光部 (n.d.)、民政事務局 (2021)、商務及經濟發展局 (2021)、創意香港 (2022)，以及知識產權署 (2021)  
Sources: Ministry of Culture, Sports and Tourism (n.d.), Home Affairs Bureau (2021), Commerce and Economic Development Bureau (2021), CreateHK (2022), and Intellectual Property Department (2021)



**Figure Legend**

The four core bureaux from South Korea's cultural portfolio have previously been indicated in Red, Light Blue, Dark Blue, and Grey. The most directly comparable departments in Hong Kong's existing bureaux are also highlighted using the same colour scheme.

Dotted boxes indicate departments which are relevant, but not directly comparable.

綜合對南韓文化架構的分析，我們對擬成立的新局之結構組成提出建議。

Drawing inspiration from South Korea's cultural portfolio and our analyses above, we offer some recommendations regarding the structural set-up of the new bureau, as well as some direct suggestions about which departments are most appropriate to be moved into a new home.

建議 1.1  
RECOMMENDATION 1.1

## 新局的结构需包含四个核心部分 New bureau's structural makeup to comprise four components

首先，考慮到設立新文化局的時機及影響力，**我們建議**其結構最好能夠包含上述四個核心部分：

First of all, taking into consideration the timeliness and implications surrounding the establishment of Hong Kong's new dedicated bureau for culture, **we recommend** it is most opportune for the new bureau's structural makeup to encompass the aforementioned four core components:



- i) **文化與藝術**：涵蓋傳統文化領域，包括視覺及表演藝術、博物館、公共圖書館、非物質文化遺產和其他形式的「受資助藝術」。這個部分主要指目前民政局轄下的文化業務。
  - ii) **創意與內容發展 (創意產業)**：涵蓋創意產業，至少包括廣告、建築、設計、數碼娛樂、電影、電視、出版印刷以及音樂，即是目前由商經局支持的八個創意領域。
  - iii) **傳媒**：包括與文創產業密切相關的媒體和廣播相關事項，例如港台和通訊局的業務。
  - iv) **版權**：包括所有與文創產業相關的版權事務，加強文化IP的記錄、保護和利用。這個部分目前由知識產權署負責監管，但亦需要更完善的政策才能建設創新且配合科技發展的版權制度（詳見第三章）。
- i) **Arts and Culture**: To encompass the traditional cultural sector, which includes visual and performing arts, museums, public libraries, ICH, and other forms of subsidised arts. This portion largely refers to the cultural divisions that are currently under the purview of HAB.
  - ii) **Creative and Content Development (Creative Industries)**: To encompass the creative industries, which covers at least the advertising, architecture, design, digital entertainment, film, television, printing and publishing, and music sectors. This refers to the eight creative sectors that are currently supported by CEDB.
  - iii) **Media**: To include broadcasting and relevant matters that fall into the overall category of media, which is closely tied to the CCI. This potentially includes RTHK and elements of OFCA.
  - iv) **Copyright**: To consider all copyright activities related to the CCI, for a better facilitation of the documentation, protection, and commercialisation/exploitation of cultural IPs. This refers to copyright matters that IPD currently oversee but also portends to further policy development to build more innovative, technology-neutral mechanisms for copyright (see Chapter 3).

沿着這個脈絡，我們提出以下幾點建議：

Following from that vein, we offer more concrete recommendations:

建議  
RECOMMENDATION 1.1.1

## 將民政局轄下的文化科和西九工程策劃組，以及商經局下的創意香港遷至新局 Move HAB's Culture and WKCD Divisions, and CEDB's CreateHK office into the new bureau

文化科  
Culture Branch

西九工程策劃組  
WKCD Project  
Management Team

創意香港  
CreateHK

民政局轄下的文化科、西九工程策劃組，與商經局的創意香港均是推動文化藝術及創意產業發展的重點部門，它們理應在新局中佔一席之地，因此**我們建議是次架構重組可以直接將以上部門遷至新局。**

The Culture Branch and the WKCD Project Management Team from HAB are the key departments driving arts and cultural developments, which naturally deserve seats in the new bureau. The same can be said for the CreateHK office from CEDB, which champions creative industry developments. These are the more straightforward regroupings that **we recommend being moved to the new bureau.**

**建議**  
**RECOMMENDATION 1.1.2****將知識產權署、香港電台和經濟貿易辦事處中的部分元素納入新局**  
**Consider including elements from IPD, RTHK and ETOs in the new bureau**

在全球文化政策趨勢推動之下，新局可考慮將傳媒和版權元素納入其管轄範圍內，以全面提高文創產業的未來競爭力。上述方框中的知識產權署、香港電台和經濟貿易辦事處（經貿辦）徘徊於商經局與新局之間，政府需慎重考慮以上部分是否與商經局分拆。

**知識產權署：**

知識產權署隸屬於商經局，負責處理所有知識產權，並不會單獨處理文化 IP 或版權事務。反觀南韓的文觀部則設有版權政策局和韓國著作權委員會，專門負責制訂和實施版權政策。

Propelled by recent global cultural policy trends, and in accord with the present-day rhetoric, the new bureau will do well to consider media and copyright elements under its purview, to provide a more competitive future for the CCI's development going forward. The boxes for IPD, RTHK, and Economic and Trade Offices (ETOs) above represent portfolios that sit on the fence between their existing bureau (CEDB), and the new one—thus, require a bit more deliberation.

**On IPD:**

IPD, under the ambit of CEDB, is currently responsible for all IP matters, meaning it does not handle cultural IP or copyright matters separately. Quite the opposite, South Korea's MCST has a dedicated copyright bureau as well as a Korea Copyright Commission mandated to devise

香港在版權方面尚未能與南韓相比，現時的版權制度未能為文創產業提供創新和前瞻性的方向。

版權是文化及創意產品和服務生產與分銷的關鍵，若能充分利用，便有機會能如同南韓一般為文創產業及其他行業帶來巨大的經濟效益、拓展軟實力。**因此，我們建議政府在架構重組時考慮將版權部分遷至新局中，並為這個專門部門設立目標和關鍵績效指標。**

(第三章將詳細討論版權和文化IP，以及其在文創產業發揮的作用。)

### 香港電台：

香港電台是本港唯一一家公營廣播機構，與文化事務息息相關。**港台可以發揮重要作用，幫助文創產業及相關行業集中發展。**

建議1.1.3會進一步討論港台的潛在發展機會，我們建議政府對港台的定位作慎重考慮。

and implement copyright-related policies. Hong Kong has no match on this, only to show our copyright regime has not hitherto been able to set an innovative, forward-looking foundation for the sector.

With copyright at the crux of the production and distribution of cultural and creative goods and services, it can—when properly leveraged, and as South Korea has proven—drive immense economic and softpower opportunities for the CCI and beyond. **Thus, we recommend the Government, in its reorganisation exercise, to consider extracting the copyright portion into the new bureau, and set separate goals and key performance indicators (KPIs) for this dedicated unit.**

(Refer to Chapter 3 which is dedicated to copyright and cultural IP for more on the role they play as part of the CCI.)

### On RTHK:

RTHK is Hong Kong's sole public service broadcaster, which ties quite intimately to cultural affairs. **RTHK can play important and complementary roles towards a more focused, aligned, and strategic line-up for CCI development.**

Recommendation 1.1.3 further discusses RTHK's potential development opportunities, and we recommend the Government deliberate the placement of this unit with care.

建議  
RECOMMENDATION 1.1.2**經濟貿易辦事處：**

考慮到香港的文化新定位，**新局可考慮與經貿辦建立更緊密的合作關係**，甚至考慮將相關元素納入其中。經貿辦能夠促進文化交流甚至文化外交，對新局來說相當重要。

**On ETOs:**

Bearing Hong Kong's new cultural positioning in mind, **the new bureau could consider working more closely with ETOs**, even considering moving relevant elements into it. ETOs are important and first port-of-calls in cultural exchange and diplomacy—functions that are vital to the new bureau.

除了提出架構重組相關的建議之外，我們亦對文化架構的重新定位作出一些建議，以進一步加強新局的工作。

除了核心的文化決策局，南韓和台灣還相繼成立了振興院和台灣文化內容策進院（文策院），皆為支持創意產業和數碼內容的半官方組織，<sup>19</sup> 充分發掘藝術科技所帶來的可能性。下表列出它們的一些主要職責：

Apart from recommendations dealing with reshuffling and regrouping, we also propose some ideas on revamping and repositioning that further fortify the new bureau's cultural portfolio.

Besides a central cultural ministry, South Korea and Taiwan have also subsequently established quasi-governmental agencies—KOCCA and the Taiwan Creative Content Agency (TAICCA) respectively, that champion the creative industries and digital content,<sup>19</sup> and fully embrace the possibilities of Arts Tech. Some of their key, selected features are tabled below:

<sup>19</sup> 內容類型主要包括電影、音樂、動畫、卡通、遊戲、出版、廣播、時裝和文化科技。這些機構亦負責與這些內容相關的營銷和海外推廣等工作。

Types of content primarily include films, music, animation, cartoons, gaming, publishing, broadcasting, fashion, and cultural technologies. The agencies are also responsible for functions such as marketing and overseas promotion related to these contents.

表 7  
Table

## 韓國文化產業振興院和台灣文化內容策進院的特點

### Key features of KOCCA and TAICCA

	隸屬部門 Parent Bureau	成立歷史 Establishment History	願景使命 Vision & Mission
韓國文化產業振興院 KOCCA	文觀部 MCST	<p>成立於2009年，將五個原有機構合併： Reorganising five existing organisations into one:</p> <ol style="list-style-type: none"> <li>1. 韓國廣播院 Korean Broadcasting Institute</li> <li>2. 韓國文化和內容振興院 Korea Culture and Content Agency</li> <li>3. 韓國遊戲開發振興院 Korea Game Development and Promotion Institute</li> <li>4. 文化和內容中心 Culture and Contents Centre, and</li> <li>5. 韓國軟件產業振興院數字內容事業群 Digital Contents Business Group of the Korea SW Industry, Promotion Agency</li> </ol>	<ul style="list-style-type: none"> <li>• 將南韓打造成為世界五大文化內容生產國 Develop South Korea into the world's top five content powerhouses</li> <li>• 通過推動創意內容產業的發展，創造就業機會並提高人民生活質素 Create jobs and improve quality of life through advancing the creative contents industry</li> </ul>
台灣文化內容策進院 TAICCA	文化部 MOC	<p>成立於2019年，仿效韓國文化產業振興院的做法 Newly established in 2019, modelled after KOCCA</p>	<ul style="list-style-type: none"> <li>• 整合化：作為專業中介機構，推動台灣內容產業發展 Integration: act as a professional intermediary organisation that promotes the development of Taiwan's content industries</li> <li>• 產業化：開發原創內容 (IP)，孵化文化技術，促進創業； Industrialisation: develop original contents (IP) incubate cultural technologies and facilitate startups</li> <li>• 國際化：將台灣文化品牌推向世界 Internationalisation: promote Taiwan's cultural brand to the world</li> </ul>

資料來源：UNCTAD (2017)、Holroyd (2019)、TAICCA (2022)

Sources: UNCTAD (2017), Holroyd (2019), TAICCA (2022)

20 文創韓國實驗室是韓國文化產業振興院的主要項目之一，旨在為創作者和初創企業提供共享工作空間及各種設備，以激勵他們使用設備和設施來創建內容。所有設施皆對公眾開放。

Content Korea Lab is one of KOCCA's main initiatives, which supports prospective creators and start-ups by allowing people to use equipment and facilities to create content, and by providing shared working and creative spaces. All spaces are open to the public.

21 內容開發專案計畫中設子計畫，包括有出版與影視媒合計畫、前期開發支持計畫和未來內容原型開發支持計畫（詳見第2章）。

CCDP consists of sub-programmes, including Book-to-Screen Adaptation, Development Fund, and Future Contents Development Programme (see details in Chapter 2).



### 產業主導舉措 Industry-driven initiatives

- 文創韓國實驗室<sup>20</sup>  
Content Korea Lab<sup>20</sup>
- 內容投融資支持  
Content investment and financing support
- 內容政策研究和行業分析  
Content policy research and industry analysis

### 科技主導舉措 Technology-driven initiatives

- 使用 VR、AR 和其他沉浸式技術為未來內容提供製作支持  
Production support for future-oriented content using VR, AR and other immersive technologies
- 提供文化科技 (CT) 的研發資金，包括與廣播、遊戲、音樂和表演等各種形式的內容規劃、製作和供應相關的技術  
R&D funding for Culture Technology (CT), including technologies related to the planning, production, and supply of various forms of content like broadcast, games, music, and performance

- 內容開發專案計畫：<sup>21</sup> 出版與影視媒合新制、前期開發支持計畫  
Creative Content Development Programme (CCDP):<sup>21</sup>  
Book-to-Screen Adaptation, Development Fund
- 內容政策研究和行業分析  
Content policy research and industry analysis

- 內容開發專案計畫：未來內容原型開發計畫  
CCDP: Future Contents Development Programme
- 沉浸式內容國際合資合製補助計畫  
Immersive Content Grant for International Co-funding or Co-productions

上表7顯示，韓國振興院及台灣文策院在執行和實施創意內容政策上扮演著重要角色。相比其他國家，南韓非常早便意識到藝術科技和數字創意內容能夠帶來就業機會、經濟效益及韓國文化的全球影響力 (Holroyd, 2019)，並在2009年進行政府架構重組後成立振興院。十年後，台灣明顯也趕上這股趨勢，參考南韓的振興院成立文策院。

時至今日，兩者都屬藝術科技的倡導者，我們看到他們的許多政策也支持先前所提及的「數字化」和「產業化」概念。

反觀香港，自2020年推出藝術科技政策和藝術科技專責小組以來，至今尚未制訂任何藍圖或發展路向。雖然政府意識到發展此領域的迫切性，但仍需更積極且具體的策略才能推動更大的效益和創新。

Table 7 above shows that both KOCCA and TAICCA are playing significant roles in the execution and implementation of creative content policies in their respective regions. To a degree not seen in many other nations, the South Korean government understood from an early stage that Arts Tech and digital creative content could bring about jobs, revenue, and the global presence of Korean culture (Holroyd, 2019), which motivated a departmental reorganisation that led to the establishment of KOCCA in 2009. Ten years later, Taiwan is catching up. It is seen to have modelled its newly established TAICCA after KOCCA.

Today, both are crowned key champions of Arts Tech, and we see that many of their policy initiatives also underpin the notions of “digitalisation” and “industry-building”, as discussed earlier.

Returning to Hong Kong—since the rollout of Arts Tech policy and the Arts Tech Task Force in 2020, no blueprint nor roadmap has been devised. While the Government recognises the urgency to develop this area, it also needs to proactively enable greater gains and innovations through concrete strategies to take this further.

## 設立專門（藝術科技）機構以支持和推進香港未來的文創產業政策 Establish a dedicated (arts tech) agency that champions and implements Hong Kong's future CCI policies

我們認為現正是個好機會讓香港設立一個專屬機構去監督和實施未來與文化創意內容相關的政策。我們可從上述機構的成立過程得到啟發。

**我們建議**政府參考台灣文化內容策進院，**新設一個以藝術科技為主導的專門機構**，負責監督、協調和落實文化創意內容相關事務。

此外，**我們亦建議**政府亦可參考韓國文化產業振興院，**將合適的部門和機構重新定位或合併**，例如藝術科技專責小組、創意香港或香港電台，從而更有效地制訂策略和分配資源。

We see this an opportune time for Hong Kong to establish its own dedicated agency that will champion and implement future policies on cultural and creative contents of all kind. The establishment histories from the above examples provide useful insight.

Referencing TAICCA, **we recommend** the Government consider **setting up a new dedicated Arts Tech anchored agency** that oversees, coordinates, and implements cultural creative contents.

Alternatively, referencing KOCCA, **we recommend** the Government consider **repositioning or amalgamating existing departments and agencies with potential**, such as the Arts Tech Task Force, CreateHK or RTHK to combine efforts and more effectively strategise and allocate resources.

## 第1B節：新局的藍圖和策略

### Section 1B: New Bureau's Strategy and Blueprint

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上文以南韓的案例為基礎，分析了現有的文化管理架構以及其重組方式。我們接下來將會繼續討論如何配合架構重組來制訂藍圖和策略。

藍圖的勾勒有助闡明政策願景。因此，我們首先奠定文化藍圖的重要性，然後再透過觀察政府近期對文創產業的撥款情況了解其文化策略。

下圖8簡單概括了內地和英國制訂重點文化藍圖的過程。

**由此可見，這兩個經濟體的重點藍圖皆是由最頂層的文化決策者（文旅部、數碼文化傳媒及體育部）訂立整體方向和概念。然後，通過由上而下的方法，分配國家資源並實踐藍圖當中的願景。**

The previous section analysed structural compositions of the existing cultural administration and how it can potentially regroup, based on learnings from the South Korean case study. We now move on to discuss blueprints and strategies, which should accompany governance restructure.

We first establish the importance of top-level cultural blueprints, then turn to Hong Kong's recent funding situation for the CCI as a glimpse into the Government's cultural strategy—or the lack thereof. Afterall, it is blueprints that help elucidate policy visions.

Figure 8 on the next page encapsulates a simplified representation of the flow of key cultural blueprints in the Mainland and the UK.

**What can be derived here, is that major blueprints in both economies begin at the highest cultural policymaking level (MCT and DCMS), which map out general directions and concepts. Then, through a top-down approach, organise national resources and implement visions laid down in those blueprints.**

## 中國內地和英國文化藍圖的主要發布流程 Key flow of cultural blueprints in mainland China and the UK

### 中國內地 Mainland China

03/2021  
國家發展和改革委員會  
National Development and Reform Commission  
《中華人民共和國國民經濟和社會發展第十四個五年規劃  
和 2035 年遠景目標綱要》  
*Outline of the 14th Five-Year Plan for the National Economic  
and Social Development and the Long-Range Objectives  
Through the Year 2035*



04/2021  
文旅部 Ministry of Culture & Tourism  
《「十四五」文化和旅遊發展規劃》  
*14th Five-Year Plan for Development in Culture and Tourism*



七份重點政策規劃		Seven policy papers released:	
04/2021	《「十四五」文化和旅遊科技創新規劃》	14th FYP for Tech Innovation in Culture and Tourism	
05/2021	《「十四五」文化產業發展規劃》	14th FYP for Development of the Cultural Industry	
	《「十四五」文化和旅遊市場發展規劃》	14th FYP for Development of Cultural and Tourism Markets	
	《「十四五」非物質文化遺產保護規劃》	14th FYP for Preservation of Intangible Cultural Heritage	
06/2021	《「十四五」公共文化服務體系建設規劃》	14th FYP for Construction of Public Cultural Service System	
	《「十四五」藝術創作規劃》	14th FYP for Artistic Creation	
01/2022	《「十四五」旅遊業發展規劃》	14th FYP for Development of the Tourism Industry	

### 英國 United Kingdom

2016  
數碼文化傳媒及體育部  
Department for Digital, Culture, Media & Sport  
《文化白皮書》  
*Culture White Paper*



2018  
數碼文化傳媒及體育部  
Department for Digital, Culture, Media & Sport  
《數碼文化藍圖》  
*Culture is Digital*

由英國藝術委員會、國家遺產紀念基金、英國國家科技藝術基金會等非政府部門公共機構出謀獻策

Involvement from non-departmental public bodies like Arts Council England, The National Lottery Heritage Fund, and Nesta

以內地為例，文旅部先於2021年4月發布《「十四五」文化和旅遊發展規劃》，列舉了一系列重點發展領域，其後亦針對這些領域發布了更多藍圖，例如2021年5月的《「十四五」文化產業發展規劃》，以及2021年6月的《「十四五」藝術創作規劃》等。擬訂藍圖的過程中都涉及了大量研究和業界人士的參與。<sup>22</sup>

而在英國，數碼文化傳媒及體育部於2016年發布《文化白皮書》，隨後邀請英國藝術委員會、國家遺產紀念基金，以及英國國家科技藝術基金會等非政府部門公共機構出謀獻策。之後於2018年發布的《數碼文化藍圖》除了提供整體方向外，還列出了這些主要文化機構的工作任務。

The case of the Mainland, for instance, began with the MCT's *14th Five-Year Plan for Development of Culture and Tourism* published in April 2021, which announced a series of specific key development areas. Shortly afterwards, more blueprints were released to target those development areas, such as *14th Five-Year Plan for Development of the Cultural Industry* in May 2021, and *14th Five-Year Plan for Artistic Creation* in June 2021, among others. For any one of these blueprints, extensive research and industry engagement were heavily involved in the drafting process.<sup>22</sup>

In the UK, the DCMS first released the *Culture White Paper* in 2016, then invited strategies from non-departmental public bodies like Arts Council England, The National Lottery Heritage Fund and Nesta. This was demonstrated further in 2018, when the DCMS released a subsequent blueprint—*Culture is Digital*—which, on top of providing general directions, also listed out commitments from key cultural organisations.

<sup>22</sup> 以《「十四五」藝術創作規劃》為例，從前期研究、專題研究到起草諮詢歷時將近兩年。

*14th Five-Year Plan for Artistic Creation*, for example, took nearly two years in the making from pre-study and thematic research to drafting and consultation.



儘管內地和英國各有着不同管治模式，兩者均在不同的決策階段都有制訂藍圖，並且定會有行業人士參與。這體現了藍圖的重要性，它們能夠整合資源和反映業界聲音，進而推動行業發展。

然而，香港政府仍未就文化發展制訂任何實際藍圖，亦沒有鼓勵公營文化機構制訂相應的策略。

為了進一步理解這一點，我們將對目前文創產業的資源分配加以說明，以證明政府在策略制訂上的不足。

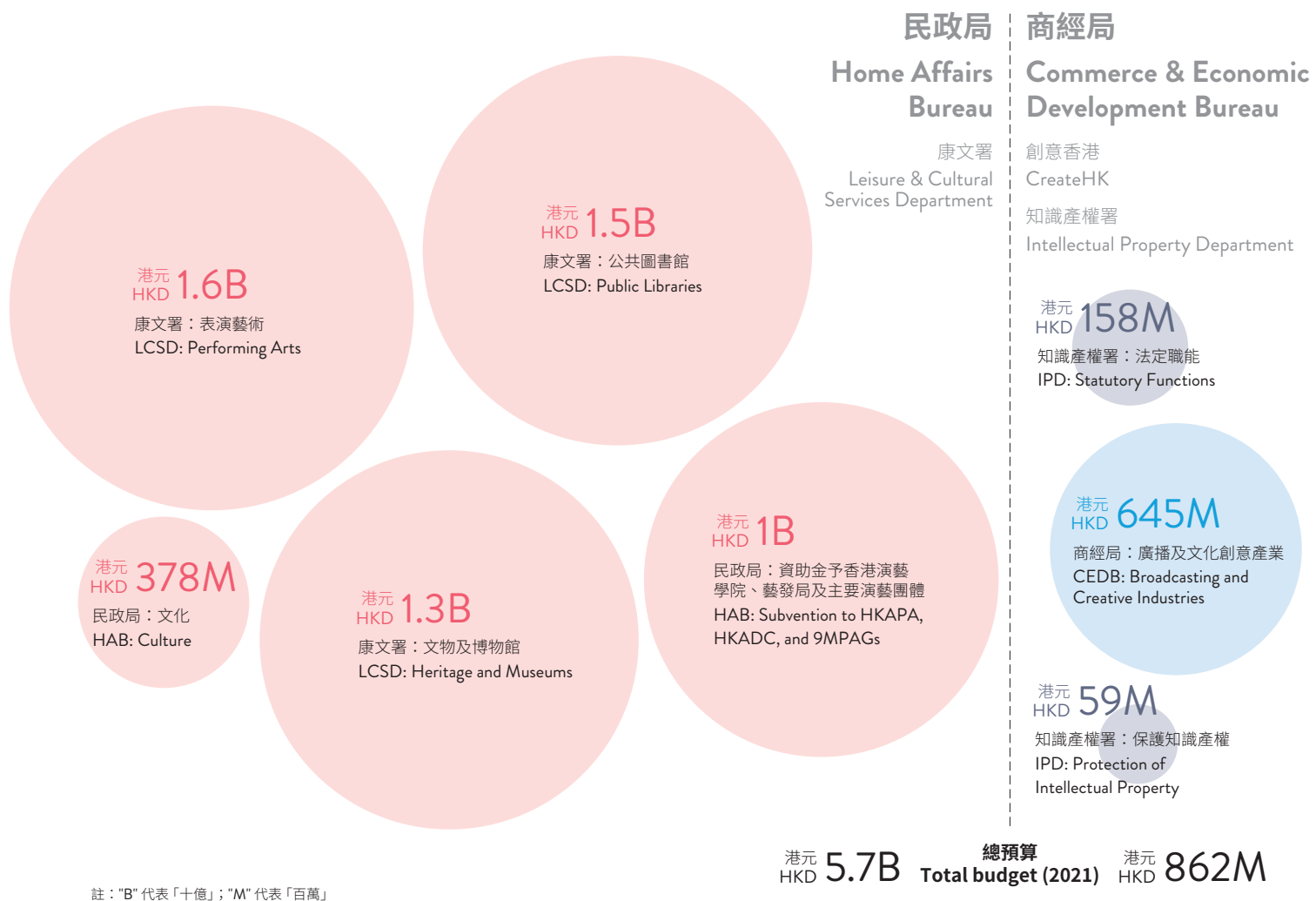
However different the Mainland and UK governance models may be, both economies are seen to have multi-level blueprints involving industry at different stages of policymaking. **The importance of high-level blueprints is thus confirmed, for their ability to consolidate resources and industry voices, and pushing the sector forward.**

**Yet, the Hong Kong Government has yet to be seen formulating any cultural blueprint of the sort, nor encourage public cultural organisations to set strategies in response.**

To reify this, we turn to a snapshot of current CCI funding distribution as a lens into the Government's (lack of) strategy.

Figure 9

2021-22年香港予文化藝術、創意產業、傳媒及知識產權的撥款概況  
 Snapshot of Hong Kong's funding distribution to arts & culture, creative industries, media and IP in 2021-22



註：“B”代表「十億」；“M”代表「百萬」  
 Note: “B” represents “billion”; “M” represents “million”

資料來源：2021-22年度財政預算案（2021）  
 Source: The 2021-22 Budget Estimates (2021)

**觀察 Observations:**

- 文化界與創意產業之間的撥款有明顯差距  
Obvious funding discrepancy between the “cultural” and the “creative” industries
- 缺乏撥款策略，撥款流於一次性、較為零碎  
No allocation strategy, fundings are one-off and piecemeal

圖9顯示了2021至2022年香港給予文化藝術、創意產業、傳媒及知識產權的撥款分布。我們立即便能發現：「文化界」（圖9左側屬民政局轄下）和「創意產業」（圖9右側屬商經局轄下）的資助額存在明顯差異。

如圖所示，2021至2022年間，民政局在文化和藝術方面的主要資助項目總計約57億港元。<sup>23</sup> 相比之下，商經局（藍色）為廣播及創意產業，以及知識產權屬（灰色）提供的資金相形見绌，合計僅達8.62億港元，<sup>24</sup> 不及民政局所分配的六分之一。

從資助上的差別可以得出，政府**缺乏具針對性或深思熟慮的分配策略**，我們透過與南韓政策比較亦得出上述論點，透過圖10能得出三個觀察。

Figure 9 shows a snapshot of Hong Kong’s funding distribution towards arts and culture, creative industries, media and IP in the year 2021–2022. One immediate observation is made: there is an obvious funding discrepancy between funding for the “cultural industries” (under HAB to the left of Figure 9), and funding for the “creative industries” (under CEDB to the right of Figure 9).

As the figure suggests, the major funding items for arts and culture between 2021–2022 for HAB add up to about HKD 5.7 billion.<sup>23</sup> Comparatively, funding from CEDB (in blue) for broadcasting, the creative industries, and IPD (in grey) pale in comparison, aggregating up to HKD 862 million,<sup>24</sup> which is less than one sixth of what HAB distributes.

This funding discrepancy also signifies **the lack of robust or deliberated allocation strategy at all**. We need only a quick cross-benchmarking with South Korea to validate this, and as per Figure 10 on the next page, we offer three observations.

<sup>23</sup> 該數字包括2021–2022年預算案的以下預算項目：民政局（總目53）的綱領（5）文化和（6）資助：香港演藝學院、香港藝術發展局和主要表演藝術團體。康文署（總目95）的綱領（3）文物及博物館、（4）表演藝術和（5）公共圖書館。

This figure includes the following budget items from the 2021–2022 Budget Estimates: From HAB (Head 53) are Programmes (5) Culture, and (6) Subvention: Hong Kong Academy for Performing Arts, Hong Kong Arts Development Council and Major Performing Arts Groups. From LCSD (Head 95) are Programme (3) Heritage and Museums, (4) Performing Arts, and (5) Public Libraries.

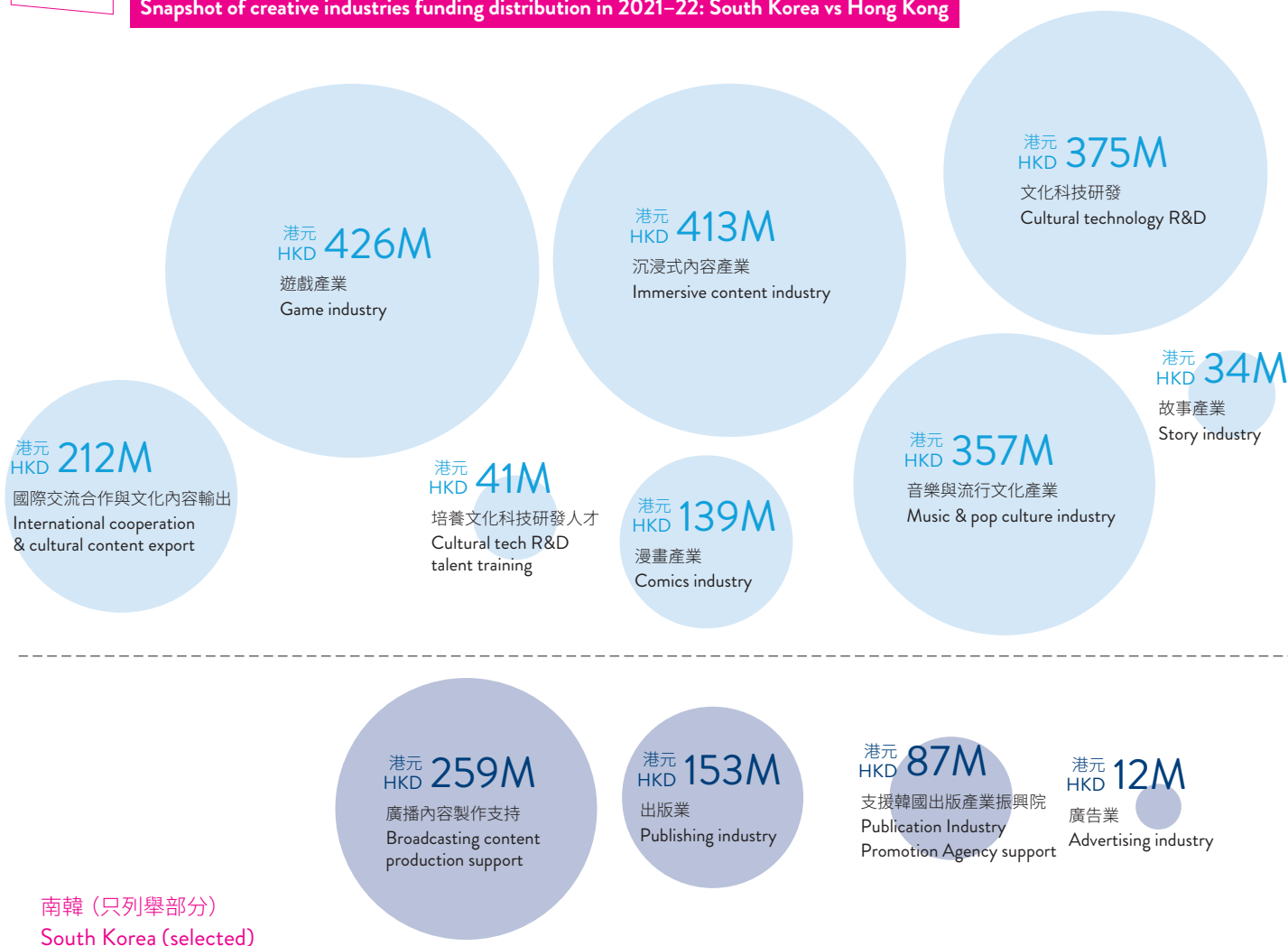
<sup>24</sup> 該數字包括同一預算案中的以下項目：商經局通訊及創意產業科（總目55）的綱領（1）廣播及創意產業。知識產權署（總目78）的綱領（1）法定職能和（2）保護知識產權。

This figure includes the following budget items from the same Budget Estimates: From CEDB’s Communications and Creative Industries Branch (Head 55) is Programme (1) Broadcasting and Creative Industries. From IPD (Head 78) are Programmes (1) Statutory Functions, and (2) Protection of Intellectual Property, which is exhaustive.

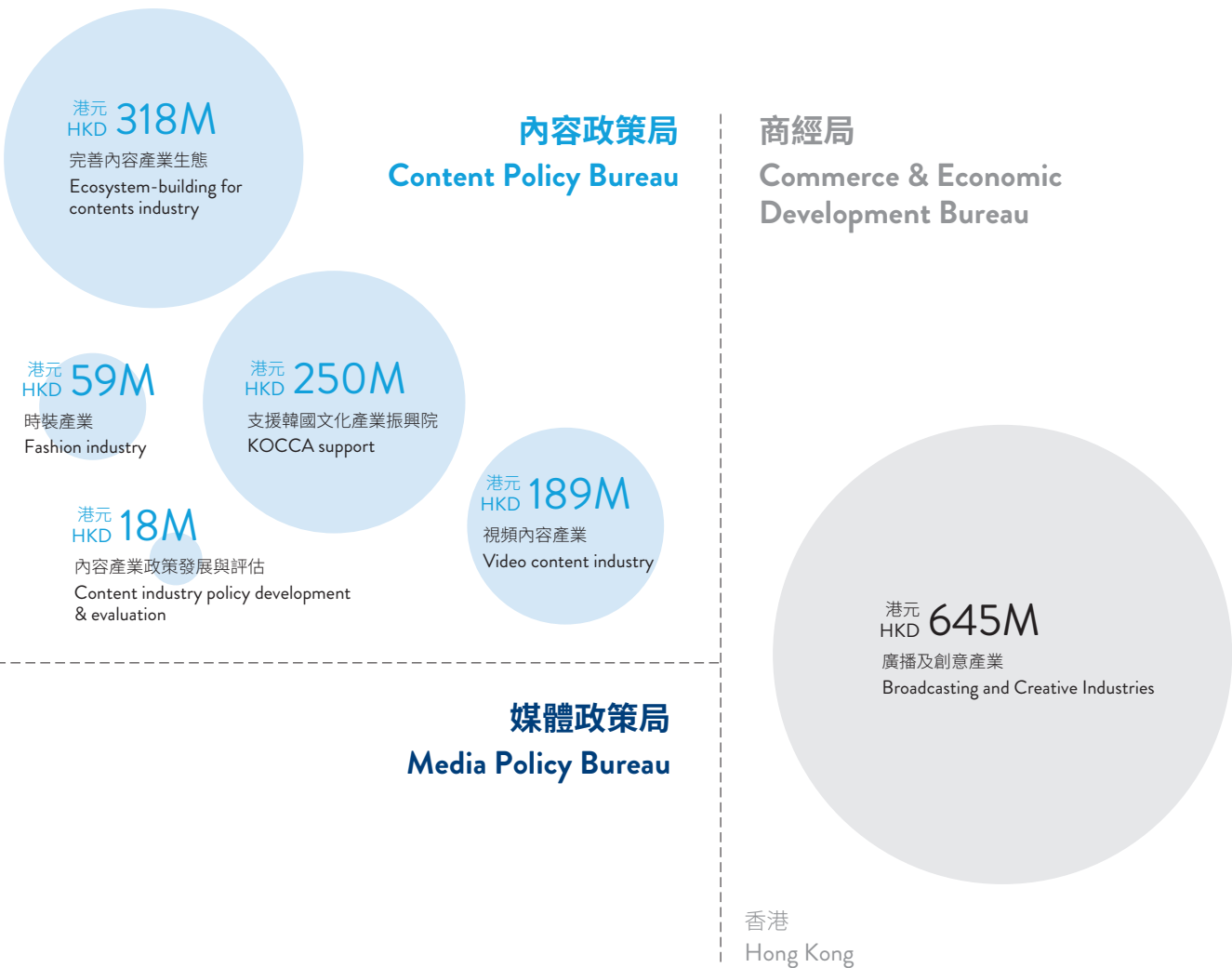
Figure 10

## 2021-22年創意產業的撥款概況：南韓 vs 香港

Snapshot of creative industries funding distribution in 2021-22: South Korea vs Hong Kong



資料來源：文化體育觀光部 (2021)、2021-22年度財政預算案 (2021)  
Sources: Ministry of Culture, Sports and Tourism (2021), the 2021-22 Budget Estimates (2021)



香港  
Hong Kong

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港元 HKD 4.41B 總預算 Total budget (2021) 港元 HKD 645M

從圖10可見，2021年南韓文觀部內容政策局和媒體政策局的資助分配多管齊下，相反，香港對整個廣播及創意產業卻沒有列明策略細節，僅一個總資助額。

**其一，在撥款規模上，南韓投放在創意產業的總預算遠高於香港**——至少44.1億港元，<sup>25</sup> 對比之下香港則為6.45億港元——而且必須強調，南韓每年都會向這些行業注入資金，而不是像香港隔數年撥款。由此可見，政府並沒有優先發展或銳意支持的領域，導致撥款零散，而這亦是長久以來其中一個阻礙文創產業發展的原因。

**其二，南韓的資助分配具策略性及針對性。**我們可以留意到南韓的撥款分配十分仔細，相比之下，香港只將所有行業歸納成一個資助群體。譬如說，我們很容易看出南韓於遊戲產業投入最多資源，總計約4.26億港元，金額將近香港分配給整個廣播及創意產業的資源，而緊隨其後為沉浸式內容產業，當中涉及藝術科技。政府撥款分配可以反映策略，表明政府重視哪些領域。從資助分配，我們可以推斷出南韓政府將遊戲和未來內容視為發展方向。**我們可以由此再次得出香港缺乏藍圖或策略。**

**其三，版權是南韓文化政策下另一個核心領域，但也是香港暫時忽略了的領域（詳見圖11）。**

Figure 10 here is a snapshot that gives a glimpse of the multi-pronged allocation of funding seen in the Content, and Media Policy Bureaux of South Korea's MCST in 2021, versus Hong Kong's single lump sum funding for the entire Broadcasting and Creative Industries.

**First, on funding size, South Korea's total budget for the creative industries is way larger than that of Hong Kong's**—at least HKD 4.41 billion<sup>25</sup> compared to Hong Kong's HKD 645 million—and it must be emphasised that funding is injected into these sectors annually rather than periodically like Hong Kong, which is usually a few years between each injection. The Government's lack of priority may explain its piecemeal funding practice, and this is one of many longstanding pain points hindering CCI development.

**Second, South Korea's funding allocation is strategic and specific.** Noticeably, South Korea outlines funding distribution in much more detail compared to Hong Kong, who groups all industries into one category. For instance, we can easily tell that South Korea has allocated the most resource to the game industry, totalling approximately HKD 426 million—only slightly below what Hong Kong allocates to all broadcasting and creative industry matters. Second to the game industry is the immersive content industry, in which Arts Tech plays a part in. Funding allocation reflects strategy and denotes which areas the Government places value on. From funding allocations, we can deduce that South Korea places value on gaming and future contents as a way forward. **In this connection, Hong Kong's lack of blueprint or strategy is once again validated.**

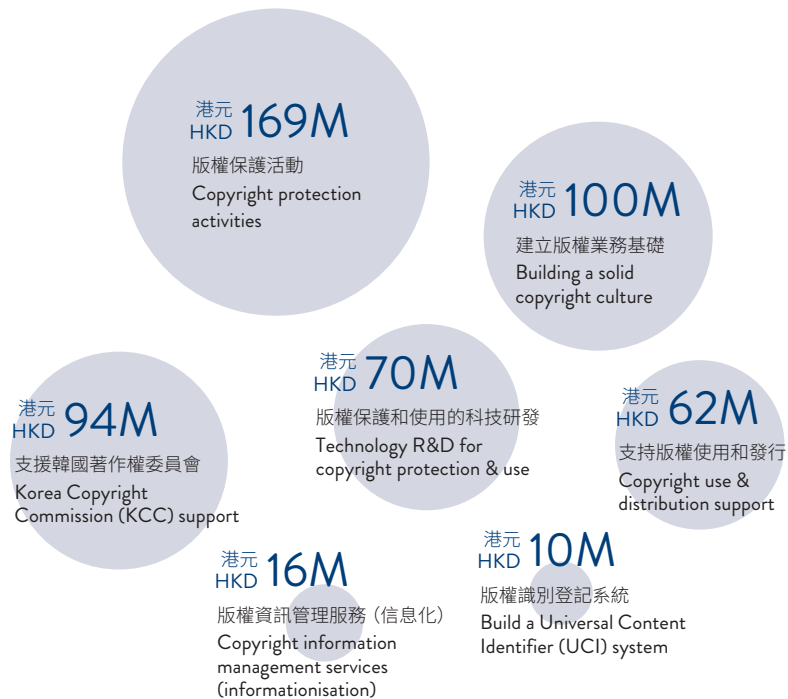
**Third, copyright is another core arena of focus under South Korea's cultural strategy, an area Hong Kong has perhaps overlooked (see Figure 11).**

<sup>25</sup> 南韓的數字是通過將文觀部2021年度預算中，內容政策局預算裏最具可比性的項目相加得出的。具體撥款項目和金額請參考圖10。

The South Korean figure was reached by adding up the most comparable, selected items from the Content Policy Bureau's budget from the MCST's Annual 2021 Budget. Refer to Figure 10 for specific items and respective amounts.

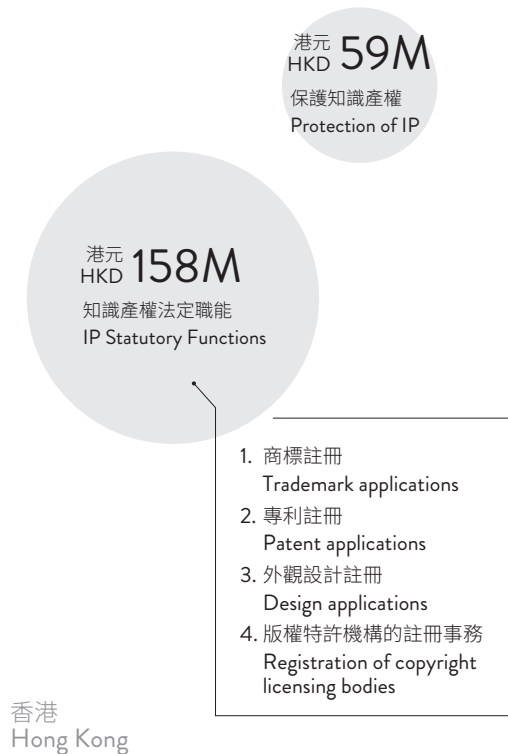


## 版權政策局\*——僅版權業務 Copyright Bureau\*—copyright only



南韓  
South Korea

## 知識產權署——所有知識產權業務 Intellectual Property Department— all IP matters



香港  
Hong Kong

港幣 539M 總預算 Total budget (2021) 港幣 217M

註：\*選取與此研究最有關聯的款項

Note: \*Selected funding areas most relevant to this research

資料來源：文化體育觀光部 (2021)、2021-22年度財政預算案 (2021)

Sources: Ministry of Culture, Sports and Tourism (2021), The 2021-22 Budget Estimates (2021)

首先，圖 11 中以深藍色標示的為南韓的版權預算，而淺灰色則指香港所有與知識產權相關事務的預算。正如本章稍前提到，南韓在架構上將版權作獨立處理，而香港的知識產權署則負責所有知識產權事務，因此不會特別為版權單獨撥出預算。**這種結構使我們在制訂策略時難以用產業化的思維促進行業和原創內容發展。**

以圖 11 作參考，南韓投放於版權的總預算已超過香港整個知識產權產業的預算。誠然，我們在版權的發展仍處於起步階段，而且資源有限。知識產權署的版權職能似乎亦只是 1) 為版權特許機構進行再註冊<sup>26</sup>（根據知識產權法定職能），以及 2) 提高版權的公共意識（根據知識產權保護）。

To begin, it must be noted that the areas coloured in dark blue above is South Korea's budget for copyright, and the light grey refers to Hong Kong's budget for all IP-related matters. As mentioned earlier in this chapter, it is because South Korea has structurally separated copyright from other IPs. With Hong Kong's IPD overseeing all IP matters, it is impossible to single out a budget only for copyright. **Strategically speaking, this structural disadvantage has prevented us from devising plans that promote industry-based thinking and IP development.**

Referring to Figure 11 above, South Korea's total budget for copyright alone is enough to surpass Hong Kong's budget for the entire IP industry. Admittedly, our development of copyright is still at a rudimentary stage, with barely any resources. It appears that the only copyright functions IPD conducts are merely 1) the registration of copyright licensing bodies<sup>26</sup> (under IP Statutory Functions), and 2) some public education programmes to raise copyright awareness (under Protection of IP).

<sup>26</sup> 目前合共有六間版權特許機構，包括：香港作曲家及作家協會有限公司、香港唱片業聯盟有限公司、Motion Picture Licensing Company (Hong Kong) Limited、香港音像版權有限公司、香港複印授權協會、香港書刊版權授權協會有限公司。

There are six copyright licensing body registries, they are: Composers and Authors Society of Hong Kong Limited, Hong Kong Recording Industry Alliance Limited, Motion Picture Licensing Company (Hong Kong) Limited, Phonographic Performance (South East Asia) Limited, The Hong Kong Copyright Licensing Association Limited, The Hong Kong Reprographic Rights Licensing Society Limited.

從文創產業角度來看，這些職能與南韓的相比根本微不足道，南韓最近的版權資助策略之一是為使用和發行版權作品建立穩固的市場環境（文觀部，2021年）。如上圖 11 所示，此策略在版權使用和發行（6,200 萬港元）和版權信息管理服務（1,600 萬港元）的資助金額中體現。以上種種得以表明**香港目前在文創產業開發版權商機上仍然有所不足。**

通過與南韓在相應範疇的撥款自主進行分析和比較，我們可以得出**香港目前缺乏對文創產業的資助規模和整體策略。**而最明顯的資助差異出現在「內容」（對創意產業的投資）和「版權」（發掘和發展與創意產業相關的版權經濟潛力）領域，亦是我們認為結構上可以進行更大重組的領域。

綜合上述這些資助缺口，加上其一次性及缺乏連續性的弊端，可顯示出政府缺乏整體戰略。有見及此，我們建議：

From the CCI's perspective, these functions are insignificant compared to what South Korea does, when one of its latest funding strategies for copyright is to build a strong environment for the use and distribution of copyrighted works (MCST, 2021). As reflected in Figure 11 above, this specific strategy manifests through the funding for copyright use and distribution (HKD 62 million), and copyright information management services (HKD 16 million). All these accentuate **Hong Kong's current weakness in exploiting copyright opportunities for the industry.**

Through drawing cross-bureau analyses and benchmarks with corresponding funding in South Korea, we have concluded that **we lack both funding size, and overarching strategy for the CCI.** The most obvious funding discrepancies are found in areas of “Content” (investment into the creative industries) and “Copyright” (developing and excavating the economic potentials of copyright in relation to the creative industries), which align with our perceived structural disadvantages.

These funding gaps, combined with one-off, often discontinuous funding practice, signal the lack of an overall strategy. We respond to this limitation directly:

## 制訂與時並進的藍圖和目標，強調內容發展及產業化的策略性資助分配

### Devise a blueprint with timely goals, and strategic allocations of funding that emphasise on content development and being industry-based

我們在此總結一下，政府急需及時制訂策略，以支持香港文化發展。

首先從基本著手，**我們建議政府需要於藍圖中優先資助早前提及過、對於香港文化事務尤其重要的四個範疇，並列出資金明細**，包括：1) 文化和藝術、2) 創意產業、3) 廣播及傳媒，以及4) 版權。我們首先要填補當前的資助缺口與制訂策略性計劃，才能解決零碎的資助方式，並展現長遠和堅實的願景。

更具體地說，我們列出了幾個需要列入政府未來文化藍圖的行動項目，以配合「十四五」規劃中的機遇。我們會在隨後章節詳述：

To recap, it is clear that we desperately need timely strategies that set out how the Government plans to bolster the development of our cultural portfolio.

Starting with basics, **we recommend the blueprint first delineate funding priorities and funding streams for all four elements we deem important to the culture portfolio:** 1) Arts and Culture, 2) Creative Industries, 3) Broadcasting and Media, and 4) Copyright. Filling current funding gaps and laying strategic “gameplans” are first steps towards dissolving piecemeal funding practices, and demonstrating vision that is long-term and robust.

To be more specific, we have identified some of the first action items most imminently needed in the Government’s next cultural blueprint. They also acknowledge the opportunities at hand as per the 14th Five-Year Plan, and are covered in detail in the next few chapters:

## 促進內容創作和開發的政策 (第二章)

- 以藝術科技為手段，通過革新傳統文化內容，**迎來創新的內容創作**。(建議 2.1)
- **促進原創文化內容的開發過程**，能夠用不同的媒介呈現，以強調產業化發展。(建議 2.2)

## 加強文化數據和文化 IP 數碼建設，以支援文化「走出去」的政策 (第三章)

- **建立數碼建設**，用以收集、分析和發行文化和創意內容，以文化數據和版權交易為主，皆有助於我們實現國家遠景，成為連接中國與世界各地的文化藝術交流中心和區域知識產權貿易中心。(建議 3.1和 3.2)

## 培育未來文化及創意產業人才的政策 (第四章)

- **培育未來的人才和技能**，為文創產業培養大量專業人士，並訂立具體的進程表和具關鍵績效指標的人力規劃。(建議 4.1和 4.2)

以上內容或未如詳盡，但從我們的研究中指出，上述乃是目前對香港的文創產業最具有價值的政策領域。我們將會在後續章節進一步闡述。

## Policies to invigorate content creation and development (Chapter 2)

- **Usher new content creation** through developing and innovating traditional culture and contents, with a focus on Arts Tech as a means. (Recommendation 2.1)
- **Facilitate the IP development process** of creative contents into different mediums and manifestations as a way of emphasising industry-based development. (Recommendation 2.2)

## Policies to strengthen cultural data, and IP infrastructures for culture “going out” (Chapter 3)

- **Build digital infrastructures** instrumental to the collection, analysis, and distribution of cultural and creative contents, centring on cultural data and copyright trading. These contribute towards our pledge on becoming a hub for arts and cultural exchanges between China and the rest of the world, and a regional IP trading centre as per national visions. (Recommendations 3.1 & 3.2)

## Policies to cultivate next-generation CCI talents (Chapter 4)

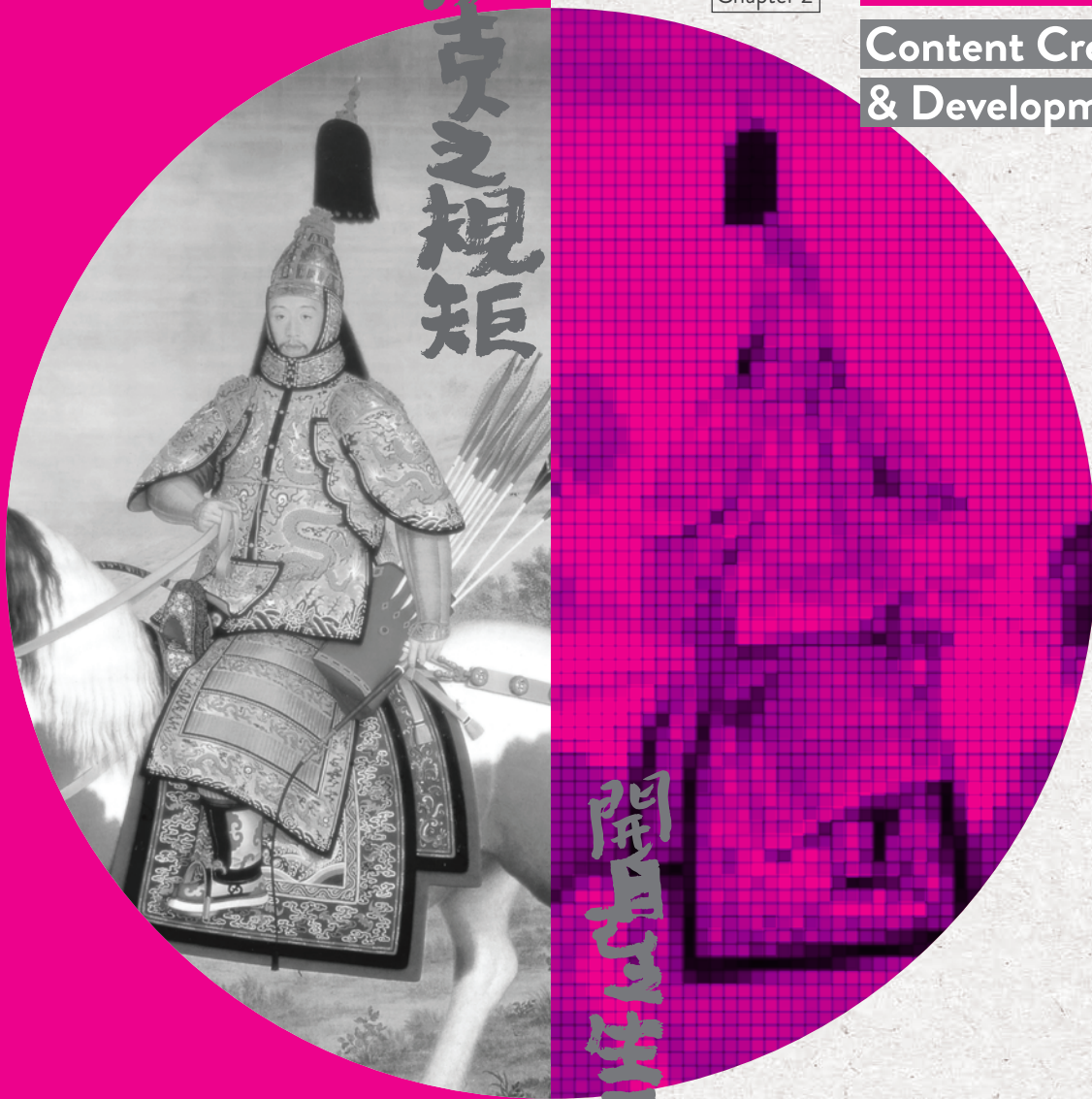
- **Groom next-generation talents and skillsets** to cultivate substantial expertise for the CCI, and to project such manpower planning with concrete timeline and measurable KPIs. (Recommendations 4.1 & 4.2)

The above is by no means exhaustive, but our research has shown them to be the key policy arenas that are most imminently worthwhile to Hong Kong’s CCI presently, which will be elaborated in the ensuing chapters.

第二章  
Chapter 2

內容創作及開發

Content Creation  
& Development



以克之規矩

開目之生面



新局需要將**內容創作及開發**納入文創產業藍圖中的首要行動項目之一。本章視傳統藝術形態和現代創意表達為「內容」，並將知識產權（IP）開發的概念應用於討論當中。

**Promoting content creation and its development** has to be one of the first action items in the new bureau's imminent blueprint for the CCI. This chapter considers both traditional art forms and modern creative expressions as **content**, and applies the notion of IP creation and development to the discussion.

本章分為兩節。第2A節將探討傳統內容（如粵劇等非物質文化遺產）如何以**內容創作**的形式得以煥發活力。第2B節將討論當代文化內容如何以**內容開發**的形式，從一種創意媒介改編或轉化至另一種媒介（即是將原創作品，如書籍改編成電影或其他形式的創作過程）。

我們能從相關政策文件中找到與這些概念相對應的部分。2A部分將以內地的《「十四五」藝術創作規劃》（文旅部，2021）作起點，此規劃指明要**從傳統藝術形態當中發掘與創作新內容**。而在2B部分，我們將深入了解台灣的內容開發專案計畫（文策院，2020），當中包含以**促進創意作品的內容和IP發展**為主的一系列資助計劃。

This chapter is split into two sections. Section 2A explores how traditional contents (such as ICH, like Cantonese Opera) can be reinvigorated as a form of **content creation**. Section 2B discusses how modern creative contents can be further developed and adapted from one creative medium to the next as a form of **content development** (e.g., the process whereby an original work such as a book is adapted into a film or other various formats).

We are able to find relevant policy documents that corresponded with either of these notions. In Section 2A we begin with the Mainland's *14th Five-Year Plan for Artistic Creation* (MCT, 2021), which stipulated a clear mandate of **creating new content from traditional artforms**. In Section 2B, we delve into details of Taiwan's Creative Content Development Programme (TAICCA, 2020), which is a series of funding initiatives dedicated to **facilitating the content and IP development processes of creative works**.

## 第2A節：透過科技從傳統藝術形態中創作新的文化內容

### Section 2A: Creating new artistic content from traditional art forms through technology

文旅部於2021年6月發布《「十四五」藝術創作規劃》，為《「十四五」文化和旅遊發展規劃》的後續文件之一。規劃作為國家藝術創作的藍圖，體現出中國內地要成為文化強國的決心。圖12列出該規劃的部分主要內容。

The *14th Five-Year Plan for Artistic Creation*, published by the MCT in June 2021, is one of the follow-up papers of *14th Five-Year Plan for Development of Culture and Tourism*. Its status as the national blueprint and mission statement for artistic creation grants it to be a true manifestation of mainland China's ambition to be the next cultural superpower. Figure 12 below captures some of the blueprint's key contents.

圖 12  
Figure 12

#### 《「十四五」藝術創作規劃》的政策重點

#### Policy highlights from 14th Five-Year Plan for Artistic Creation

發展方向  
Development  
Direction

#### 推進中華優秀藝術傳承傳播

#### Promote and carry forward fine traditional Chinese culture

主要領域  
Main Areas

- 推動戲曲、民族音樂、民族舞蹈、美術等中華優秀藝術的創造性轉化創新性發展  
Promote innovative and creative developments of various types of fine traditional Chinese arts such as xiqu, folk music, folk dance, and visual art
- 深化文藝院團與數字文化企業合作  
Deepen the cooperation between art groups and digital cultural enterprises
- 推動線上演播與線下演出融合發展  
Promote the integration of online and offline performances

重點舉措及  
工作項目  
Key Measures  
and Tasks

戲曲傳承振興：

Reinvigorate and carry xiqu forward:

- 培育有利於戲曲活起來、傳下去、出精品、出名家的良好環境  
Cultivate an environment that can help bring traditional xiqu to life, create masterpieces, and cultivate top artists and masters
- 引導全國各級文化和旅遊行政部門擔負起傳承振興戲曲的責任，調動各方積極性  
Guide relevant cultural and tourism departments to proactively shoulder the responsibility of promoting and carrying forward traditional xiqu, and encourage all parties to work towards this end

資料來源：文化和旅遊部（2021）

Source: Ministry of Culture and Tourism (2021) (The English texts are translated by the authors. Please refer to the Chinese for official Mainland terminologies)

# 1. 推動藝術與科技融合，加大數位技術應用力度 Promote integration of arts and technology, enhance application of digital technology

- 推進新時代藝術精品創作  
Promote the creation of masterpieces in the new era
- 加強藝術創作規劃和資源統籌：用好國家藝術基金和其他基金資金  
Strengthen the planning and resource allocation for artistic creations: make good use of the China National Arts Fund and other funding

# 2. 推進新時代 文藝領軍人才 Cultivate leading talents in arts and culture in the new era

- 培養文藝領軍人才，包括創作人才、表演人才、管理人才、評論人才
- Foster leading talents in arts and culture, including creators, performers, arts administrators and art critics

# 3. 加強文藝團體建設 Strengthen the establishment of arts and cultural troupes

- 推動全國重點文藝院團建設
- Promote the establishment of key national arts troupes and academies

## 藝術精品創作重大工程項目引領示範 Guiding principles for the creation of masterpieces

### 圍繞創作主題： By theme:

- 國家重大題材創作引導工程  
Projects to guide the creations of major national themes
- 現實題材創作扶持工程  
Projects in support of creations of realistic themes
- 新編歷史題材創作扶持工程  
Projects in support of creations of historical themes

### 根據藝術門類： By art form:

- 中國民族歌劇傳承發展工程  
Promotion and development of Chinese folk operas
- 中國雜技藝術創新工程  
Artistic innovation in Chinese acrobatics
- 新時代美術創作扶持工程  
Support for artistic creation in fine art in the new era

- 表演人才：師帶徒、進修培訓，設立標準，以劇育人、以演出人
- Performing artists: tutoring apprentices, offering training, setting standards, fostering talents through productions, and nurturing talents through performances

- 文藝院團建設：完善文藝院團評價機制  
Arts troupes and academies: improve the evaluation mechanism of arts troupes and academies
- 優秀劇碼復排提升：文化和旅遊部推薦優秀劇碼、建立優秀劇碼輪流演出機制  
Rerun and upgrading of outstanding theatrical performances: the MCT shall recommend theatrical performances, and establish performance rotation schedule of the outstanding ones

如圖12所示，**促進中國傳統文化藝術形態的創新是其中一個關鍵發展目標**，例如地方戲曲、民族音樂及舞蹈。具體而言，中國戲曲的傳承振興是重點舉措之一，通過出精品、出名家等工作項目來實現。為此，相應的主要計劃明確提出深化國家文藝院團與數字文化企業之間的合作，以融合線下與線上表演，以及激發傳統藝術和內容的創新。這也呼應前言中提到的「數字化」，是內地近期文化政策中的兩個主要特徵之一。

為實現上述重點目標，《規劃》提出了相應方向。第一是利用藝術科技融合，鼓勵應用數位技術，以創新傳統文化。第二是培養新時代領軍文化藝術人才。第三是加強國家文藝團體的建設，協助上述提出的工作。**這些計劃的要旨，是以傳統文化和表達方式，去激發新藝術內容的創造。**

內地文藝界近年也響應這些政策趨勢。以下正有一例，體現藝術科技如何振興傳統文化藝術，從而創造出新的內容。

《對話·寓言2047》(2017)是名導張藝謀構思及執導的舞台劇，此劇的構想最能體現國家政策方針。張藝謀稱此系列作品為「概念舞台」，並將京劇、泉州皮影戲、蒙古呼麥等中國傳統藝術和地方遺產與現代技術結合，例如使用3D全息影像、機械臂和無人機等。這系列作品通過創新的方式傳承和保育傳統文化，向傳統致敬的同時，又善用現代發明，促進了過去、現在與未來之間的對話。

As illustrated in Figure 12 above, our consolidation shows that **a key developmental goal is to promote the innovative and creative development of traditional Chinese cultural art forms**, such as regional xiqu, folk music, and folk dance. Specifically, the reinvigoration of xiqu are among the key measures and tasks, and this is to be done through cultivating an environment which allows innovation through new works and leading artists. To support this, a corresponding focus area has explicitly stated to deepen collaboration between arts troupes and digital cultural enterprises, so as to integrate offline and online performance, and to inspire innovative embodiments of traditional cultural forms and contents. This also echoes the feature of “digitalisation” mentioned earlier in Preface—one of two main features identified in recent cultural policies of the Mainland.

In achieving the aforementioned key goal, the Plan offers corresponding propositions. The first involves tapping into Arts Tech, which encourages using digitalisation as a means to innovate traditional culture. The second involves cultivating a new generation of exemplary and versatile talents in arts and literature for the new era. The third involves strengthening and standardising the quality of state arts troupes and cultural organisations to reinforce the above. **The focus of these propositions is centred around the generation of new artistic creations that are inspired by traditional culture and expressions.**

Recent industry movements within the Mainland’s arts circles echo these policy trends. The following example is one that champions Arts Tech as a means of reinvigorating and retelling traditional arts and culture, thereby generating new content.

*Apologue 2047* (2017)—a stage production originally conceived and directed by renowned film director Zhang Yimou—best encapsulates the national direction. In a series of what he calls a “conceptual

其實在所有的表演上，  
我認為未來是要走[的]這條  
路，就是一定要融匯科技。

As it happens, I believe the  
way forward for us and for all  
performance types, would be  
to integrate technology.

張藝謀 Zhang Yimou  
2018

《對話·寓言2047》自2017年在北京首映以來，直至2020年共進行了三季全國巡演，每次都展示了不同形式的藝術與技術結合。某程度上，這體現了內地藝術創作政策的成果，透過鼓勵藝術家應用創新科技，將傳統、非物質的藝術形式視作內容創新的靈感來源。這種藝術創作展示了如何透過應用科技，從傳統文化形式和表達方式中推動內容創新。

此外，加強科技與藝術創作的融合有助跨越傳統文化與創新之間的鴻溝。從張藝謀導演上述的作品可以看出，創新甚至可說是與傳統文化的發展密不可分。

performance”, Zhang combined traditional Chinese art forms and regional heritage, such as Peking opera, Quanzhou shadow puppetry, and khoomei (Mongolian throat singing), with modern technologies like 3D holograms, robotic arms, and drones. The production embodies a form of cultural inheritance and preservation via innovation. It harks back to traditions and embraces modern inventions, facilitating a dialogue between the past, present and future.

Since its premiere in Beijing in 2017, *Apologue 2047* went on to tour nationally for three seasons up until 2020, each time revealing different combinations of art forms and technologies. To a certain degree, this demonstrates that the Mainland’s direction on artistic creation is effective—in the way it manages to incentivise artists, through innovative ways of adapting technology, to treat traditional and intangible art forms as valuable sources of inspiration. **Artistic creations like these demonstrate the possibility to leverage technology as a means to create new content from traditional cultural forms and expressions.**

Further, the emphasis placed on the integration of technology and artistic creation even helps transcend the perceived division between traditional culture and innovation. From Zhang’s production discussed above, innovation is even seen as inseparable to the development of traditional cultures.

誰說我們不能用當下的  
這些科技，包括這些藝術  
形式，讓過去的古老的  
靈魂，獲得一種昇華？

Who says we cannot use  
modern technologies in  
artistic practices to sublimate  
the souls of ancient past?

裘繼戎 Qiu Jirong  
2018

## 相比之下，香港在這方面的文化政策如何？

國家政策強調將新科技應用於藝術內容創作。實際上，此策略普遍出現在近年內地的文化政策藍圖中，尤其是將科技創新融入文化和旅遊產業發展（參考《「十四五」文化產業發展規劃》和《「十四五」文化和旅遊科技創新規劃》）。有見及此，我們藉此機會審視了本地聚焦數碼文化或促進藝術科技融合的文化政策。

## How do Hong Kong's cultural policies compare?

Novel applications of technology are emphasised in national policies regarding the creation of artistic contents. In fact, national blueprints offering didactic strategies specific to integrating technological innovations within the cultural and touristic industries are commonly found across the Mainland's cultural policy discourse in recent years (refer to *14th Five-Year Plans for Development of the Cultural Industry, and Tech Innovation in Culture and Tourism*). In this connection, we took the opportunity to see if any of our own cultural policies focused on digital culture, or promoted convergences between arts and technology practices.



東九文化中心設置試驗場，為本地藝團提供空間、專業設備和技術專才的支援，讓他們進行研究與發展，體驗不同科技的應用，透過嘗試和檢討以展現更好的作品

By setting up a test lab, the East Kowloon Cultural Centre offered local arts groups with space, technical equipment and professional support, allowing them to conduct research and development projects for application of various technologies, so as to excel their works through trials and evaluations



政府的確在2020年公布與藝術科技相關的新政策，希望同時為這兩個領域帶來效益增長。新政策包括：(i) 成立跨部門專責工作小組以制訂藝術科技的發展藍圖；<sup>27</sup> (ii) 於不同基金預留一億港元支持藝術科技應用；<sup>28</sup> (iii) 將東九文化中心打造成為藝術科技而設的專用試驗場地；(iv) 為指定行業創造更多就業機會以培養藝術科技人才。<sup>29</sup>

值得一提的是，政府對藝術科技的採納，是繼團結香港基金於同年發布香港首份「藝術科技」研究報告後開始的，其建議概述了(i) 制訂具針對性的藝術科技藍圖，(ii) 成立資助計劃，(iii) 建立基礎建設，以及(iv) 提升業界能力。自此，「藝術科技」便成為香港文創產業的主要方向之一。

The Government has indeed announced new policies on Arts Tech in 2020, hoping that the organic integration of arts and technology can multiply benefits for both fields. These new policies included: (i) setting up an inter-departmental task force to formulate an Arts Tech blueprint;<sup>27</sup> (ii) setting aside HKD 100 million under various existing funds to support Arts Tech applications;<sup>28</sup> (iii) marking East Kowloon Cultural Centre (EKCC) as a dedicated Arts Tech testbed; and (iv) creating more sector-specific job opportunities to nurture talents in Arts Tech.<sup>29</sup>

It is worth mentioning that the Government's uptake of Arts Tech followed Our Hong Kong Foundation's first-of-the-kind report that coined and advocated "Arts Tech" development earlier that year, with recommendations that outlined exactly: (i) a targeted Arts Tech blueprint with (ii) dedicated funding, (iii) infrastructural support, and (iv) measures on capacity building. Since then, "Arts Tech" has been promulgated as new key direction for Hong Kong's CCI.

27 由民政局長牽頭的跨部門藝術科技專責小組（專責小組）包含來自民政局、商經局、創新及科技局、教育局、創新科技署和康文署的代表。專責小組負責制訂發展和推廣藝術科技的策略和措施。

The Secretary for Home Affairs chairs the inter-departmental Task Force on Arts Technology (Task Force) comprising representatives of HAB, CEDB, the Innovation and Technology Bureau, the Education Bureau, the Innovation and Technology Commission, and the Leisure and Cultural Services Department. The Task Force is responsible for formulating strategies and measures for the development and promotion of arts tech.

28 不同基金包括由民政局管理的藝術及體育發展基金（藝術部分）下的藝能發展資助計劃；由商經局管理的電影發展基金和創意智優計劃；以及由創科局管理的創新及科技基金下的科技券計劃和一般支援計劃。The various existing funds include the Arts Capacity Development Funding Scheme (ACDFS) under the Arts and Sport Development Fund (Arts Portion) administered by HAB; PDI, and CSI administered by CEDB; the Technology Voucher Programme (TVP) under the Innovation and Technology Fund (ITF), and the General Support Programme (GSP) under ITF administered by ITB respectively.

29 2022-23年度財政預算案加大了对藝術科技的支援，包括i) 撥款3,000萬專門為九大主要演藝團體推出新的「藝術科技資助先導計劃」、ii) 為支持中小型藝團的科技應用於「藝能發展資助計劃」額外注資1,000萬、iii) 為東九文化中心每年預留8,500萬，以及iv) 為康文署預留7,000萬提升場地科技設備。The Budget 2022-23 saw an increased strategic support for Arts Technology, which includes the i) HKD 30 million for the new Arts Technology Funding Pilot Scheme targetting the nine major performing arts groups, ii) HKD 10 million additional injection into ACDFS to support technology innovation in small and medium-sized arts groups, iii) HKD 85 million earmarked annually for the East Kowloon Cultural Centre, and iv) HKD 70 million earmarked for LCSD to upgrade tech equipment and facilities.

我們概述了香港主要的藝術科技政策。其中最相關的是，2020年民政局在其藝能發展資助計劃下加入新的「藝術科技」資助類別。藝能發展資助計劃是一項核心的資助計劃，旨在加強文化軟件及提升香港文化藝術界的能力。資助計劃除了於2021至22年度提供每年約四千萬港元的撥款外，還額外分配了六百萬港元，用以支援「藝術科技」類別下的成功申請。<sup>30</sup>

根據藝能發展資助計劃的資助方針，新的「藝術科技」資助任務為「迎合這股新的發展趨勢，並協助藝術界突破界限」，資助旨在支持那些促進藝術與科技融合的文化藝術計劃，為「作品呈現、內容策展和觀眾體驗帶來突破」(民政局，2021)。

We overviewed key cultural policies in Hong Kong that corresponded most to the context of generating new artistic contents through technology. One that is most relevant, is the new “Arts Technology” funding category introduced in 2020 under HAB’s Arts Capacity Development Funding Scheme (ACDFS). The ACDFS is a core funding with the purpose of strengthening the cultural software and building the capacity of the arts sector in Hong Kong. For the ACDFS funding round in year 2021 to 2022, an additional HKD 6 million on top of the provision of approximately HKD 40 million that is annually disbursed was assigned to support successful applications under the new “Arts Tech” category.<sup>30</sup>

According to ACDFS’s funding guidelines, the mission statement of the new “Arts Tech” funding is to “embrace the new trend of arts development and enable the arts sector to push its limits”, with a view of supporting proposals aimed at promoting the convergence of arts and technology in “the creation of novel presentation, curation and audience experiences” (HAB, 2021).

30 藝能發展資助計劃2021至2022年度的一輪資助中，共有17份申請，涉及視覺/媒體藝術、舞蹈/多元藝術、音樂、戲劇/藝術行政、藝術教育、欣賞和推廣/社區藝術，以及藝術科技，獲批的資助上限為4,540萬港元，其中988萬港元授予藝術科技類別。在三個成功獲批的藝術科技項目中，一項涉及傳統文化元素，旨在將武術與新媒體技術結合。另外兩個獲資助項目主要聚焦科技於現代藝術的應用，較少涉及傳統文化。

From the round of ACDFS funding in year 2021–2022, a total of 17 applications across the panels of Visual/Media Arts, Dance/Multi Arts, Music, Theatre/Arts Administration, Arts Education, Appreciation and Promotion/Community Arts, and Arts Tech were approved with a funding ceiling amount of HKD 45.4 million, of which HKD 9.88 million was granted to the Arts Tech category. Out of the three successful arts tech projects, one involves elements of traditional culture, which hopes to crossover martial arts with new media technology. The other two awarded projects primarily focused on new technologies in modern arts, with little to no focus on traditional culture.

但與內地相比，這些資助方向顯得**缺乏策略和遠見**，而且傾向於以**活動為基礎、一次性、關注度有限**的項目。這再次證明了一個事實，即我們的資助政策並不完全支援產業化，亦難以激發出藝術科技的影響力或遠大目標。

事實上，**藝術科技已是全球大勢所趨，並且影響力巨大，成為創造新文化內容的一種手段，亦是振興傳統文化藝術形態的有效方法**。香港有許多獨特的傳統和文化資產，都有待藝術科技政策去發掘。

But compared to the Mainland, these funding directions **lack strategy and vision**, and are generally inclined towards projects that are **events-based, one-off, and with limited traction**. Ultimately, this once again reifies the fact that our funding policies do not champion industry-building, nor inspire any impact or “endgame” for Arts Tech.

When in truth, **Arts Tech has already shown to be the imminent trend on the global cultural discourse and capable of generating immense impact as a means of creating new artistic content across the board for the CCI**. Specifically, it also lends itself most useful to cultural visions that seek to reinvigorate traditional art forms and culture in newer and relevant ways. There is a wealth of unique traditions and cultural assets in Hong Kong for our Arts Tech policies to uncover.



《成為功夫大師！》是以遊戲形式呈現的姿勢匹配裝置，觀眾嘗試擺出與功夫表演者一致的姿勢

*Become a Kung Fu Master!* is a pose matching installation in the form of a video game, where viewers could position their own body to match the poses provided by a kung fu performer

## 粵劇：香港獨特的文化遺產

舉例來說，粵劇可說是其中一個最值得香港進一步發展的傳統藝術形式。它是唯一同時被列入香港非物質文化遺產代表作名錄和聯合國教科文組織人類非物質文化遺產代表作名錄的非物質文化遺產（非物質文化遺產辦事處，2022）。而香港演藝學院亦是全球唯一提供正規粵劇專上及學位級培訓的機構。

**儘管粵劇擁有這些特點，但我們似乎還未能真正發掘粵劇的潛力，以開拓新的文化內容。**最大的阻礙因素也許是香港沒有政府認可的機構或團體帶頭，致力為粵劇從業者發展他們的專業，不似為專業音樂家而設的香港管弦樂團和香港中樂團、為專業戲劇工作者而設的香港話劇團、為專業芭蕾舞者而設的香港芭蕾舞團，或者其他獲政府資助的主要表演藝術團體一般。<sup>31</sup>

目前，政府已推出針對粵劇發展的措施，如粵劇發展基金和粵劇發展諮詢委員會，負責監督粵劇的推廣、傳承、研究和發展。<sup>32</sup> 但根據與持份者的訪談，大家普遍認為，雖然現有的措施能讓粵劇大眾化，但卻未能幫助粵劇有目標地、高質量地從事創新。

## Cantonese Opera: a unique cultural heritage to Hong Kong

As an example, Cantonese Opera is arguably one of the most obvious traditional artforms that warrant further content development in Hong Kong. It is the only ICH that has been inscribed onto both the Representative List of Intangible Cultural Heritage of Hong Kong, and the internationally recognised UNESCO's Representative List of the Intangible Cultural Heritage of Humanity (Intangible Cultural Heritage Office, 2022). The Hong Kong Academy for Performing Arts is also the world's sole provider of formal post-secondary, degree-level training in Cantonese Opera.

**Despite these features, it appears we are far from being able to truly cultivate potentials in the art form to carve out new content.** The largest hindering factor is possibly because there is no government-endorsed flagship entity dedicated to the professional development of Cantonese Opera practitioners in Hong Kong, unlike the Hong Kong Philharmonic Orchestra and the Hong Kong Chinese Orchestra for professional musicians, the Hong Kong Repertory Theatre for professional theatrical practitioners, or the Hong Kong Ballet for professional ballet dancers, among other government-subsented major performing arts groups.<sup>31</sup>

At present, the Government has rolled out dedicated initiatives for Cantonese Opera, such as the Cantonese Opera Development Fund and the Cantonese Opera Advisory Committee which supervises the promotion, preservation, study, and development of the art form.<sup>32</sup> But based on stakeholder interviews, it is commonly acknowledged that while existing initiatives were able to make Cantonese Opera more accessible to the general public, they have largely failed to help it innovate with purpose and quality.

<sup>31</sup> 目前，九大主要演藝團體包括香港管弦樂團、香港中樂團、香港小交響樂團、香港舞蹈團、香港芭蕾舞團、城市當代舞蹈團、香港話劇團、中英劇團和進念·二十面體由民政局直接資助。九大演藝團體是政府在香港推廣文化藝術的主要合作夥伴，他們通過開發優質節目、加強觀眾建設、培養藝術和行政人才，以及文化交流活動向國際社會推廣香港的文化與藝術。At present, the nine MPAGs, including the Hong Kong Philharmonic Orchestra, the Hong Kong Chinese Orchestra, the Hong Kong Sinfonietta, the Hong Kong Dance Company, the Hong Kong Ballet, the City Contemporary Dance Company, the Hong Kong Repertory Theatre, the Chung Ying Theatre Company and the Zuni Icosahedron, are directly subvented by HAB. The MPAGs are among the key partners of the Government in promoting arts and culture in Hong Kong through developing quality programmes, strengthening audience building, cultivating artistic and arts administrative talents as well as promoting Hong Kong's arts and culture to the international community through cultural exchange activities.

<sup>32</sup> 2022-23年度財政預算案再次向「粵劇發展基金」注資一億港元，加強支持從業員的專業提升和持續培訓。The 2022-23 Budget further injected HKD 100 million into the Cantonese Opera Development Fund to further support Cantonese opera practitioners in enhancing their professional standards and continuous training.



近年來，我們可以看見香港表演業界在粵劇表演中作出不少實驗性嘗試。<sup>33</sup> 雖然實驗還處於初期，但業界活化傳統藝術的決心，卻是值得充分肯定。政府不應只靠業界努力，而是應該勾勒具策略性的願景，讓整個文創產業都能配合和貢獻所長。

值得注意的是，《「十四五」藝術創作規劃》也將「戲曲」列為重點發展領域，當中亦包括粵劇，可見發展粵劇亦符合國家願景。基於上述分析，我們將就此方面提出一些針對藝術科技策略的建議，如果我們能為科技應用定下明確的目標，並將其應用得宜，相信能為香港創造更多嶄新的藝術內容。

In recent years we have observed efforts within the city's performing arts sector advocating experimental expressions to the Cantonese Opera art form.<sup>33</sup> Though they remain few and far between, the will to carve out new artistic content based on traditional forms should be encouraged. Instead of relying solely on individual efforts, the Government needs to have a set of strategic visions that the wider CCI industry can align and contribute to.

Notably, *14th Five-Year Plan for Artistic Creation* has also listed “Xiqu”—the broad term for Chinese operas, which includes Cantonese opera—as a key development area. As such, developing Cantonese opera aligns with national visions too. Based on the above analyses, we pinpoint some recommendations that are aimed at our Arts Tech strategy, because technology, when harnessed properly and given a clear purpose, can create much new and artistic content for Hong Kong.

33 西九文化區的戲曲中心提供了一個例子。自2017年起舉辦的「小劇場戲曲展演」，在2021年易名為「小劇場戲曲節」，乃一年一度的盛會，展示地區的獲獎當代作品，其核心使命是保育和創新戲曲。  
The Xiqu Centre at the WKCD offers an institutional example. It presented the “Experimental Chinese Opera Series” since 2017, later known as the “Black Box Chinese Opera Festival” since 2021, which are annual events that showcase award-winning contemporary productions of rare and well-known regional genres, with the core mission of preserving and innovating xiqu.

小劇場粵劇《霸王別姬》(新編) 是小劇場戲曲節2021的劇目之一，於戲曲中心上演。此劇糅合傳統粵劇表演技巧與當代劇場舞台設計。舞台空間由傳統而簡樸的一桌兩椅形成，並且加入當代音樂設計、燈光效果及特別設計的形體動作等現代劇場元素

Experimental Cantonese Opera *Farewell My Concubine* (New Adaptation) is part of Xiqu Centre's Black Box Chinese Opera Festival 2021. The performance blends traditional Cantonese opera techniques with contemporary stage and lighting design



## 進一步闡明藝術科技政策的目標，並就如何運用藝術科技改造提升傳統文化藝術提供指引

**Increase the impact of Hong Kong's Arts Tech strategy by defining key policy outcomes, one example being to leverage technology as a means of creating new artistic content from traditional cultural forms and expressions**

隨着香港推出首份藝術科技政策，政府漸漸將藝術科技視為文創產業未來發展的關鍵領域。我們認為政府的藝術科技發展策略需要有效益指標，並進一步明確訂立政策目標和成果。明確的策略目標可以促進更廣泛的業界合作，更好地形成「產業化」思維。**我們建議當前的藝術科技專責小組可在該方面發揮更多作用。**

最新的藝術科技資助指引希望「為作品呈現、內容策展和觀眾體驗帶來突破」，在此基礎上，**我們建議政府進一步將新興藝術內容創作視為一個明確的政策目標，並就如何通過藝術科技創造具意義和影響力的內容提供指引。**

With the introduction of Hong Kong's first policies on Arts Tech, and since the Government is seen to promulgate Arts Tech as a key area of development for the CCI going forward, we believe there is a need for the Government to devise an Arts Tech strategy that is more impact-driven, by defining clearer policy goals and outcomes. With an articulate set of strategic goals, the wider industry can better align and contribute—which is a way of forging “industry-based” thinking. **We recommend the extant Arts Tech Task Force has a role in this.**

Going beyond our current scope of Arts Tech that describes “novel presentation, curation and audience experiences” as per latest Arts Tech funding guidelines, **we recommend the Government emphasise the creation of new artistic content as a clear policy goal, and offer directions on how to create content through Arts Tech with purpose and impact.**

- 例如，**我們建議政府具體闡明藝術科技的目標。**它可以 i) 支持新興的藝術形式/類型/產業；ii) 改造傳統藝術，如非物質文化遺產；iii) 深化文化相關的技術研發，為文創產業和其他行業提供更完整的支持。
- 為實現這些目標，**我們建議政府為現有支持藝術科技發展的不同資助計劃設立定位和目標。**例如，藝能發展資助計劃（藝術科技）可以主要支持藝術技術的「創作」；創意智優計劃可支持電視、遊戲、數碼娛樂等影視媒體行業的培訓與能力提升；電影發展基金則可主要支持與虛擬製作相關的計劃等。整合不同部門的資助計劃將有助促進藝術科技在文創產業的發展，並構建一個更完整的文創產業生態。

有鑑於此，再加上從內地藝術創作規劃得到的啟發，**我們建議政府適時為藝術科技確立目標，其一就是運用藝術科技改造提升傳統文化藝術。**

- For instance, **we recommend the Government to be more specific about the objectives of Arts Tech**—that it can i) support new emerging artforms/genres/industries; ii) transform traditional industries such as intangible cultural heritages; iii) deepen R&D into more seamless integration of cultural technologies for the CCI and other industries.
- In achieving these set out objectives, **we recommend the Government set strategic roles and targets for the different funding schemes that currently support Arts Tech proposals.** For instance, the ACDFS (Arts Tech) funding scheme can be mandated to support “productions” of arts tech; CSI to support training and capacity building across the screened media industries such as TV, video games, digital entertainment; FDF to support virtual production-related proposals. This level of strategic planning across relevant bureaux and different funding schemes would help align the literacy of Arts Tech across the CCI, and also cultivate a more coherent ecosystem.

In connection with the above, and drawing inspiration from the Mainland’s national plan on artistic content creation, we are inclined to go one step further and **recommend it is timely for the Government, in its Arts Tech strategy, to put forward a clear goal, that is to use Arts Tech to transform traditional industries and art forms.**

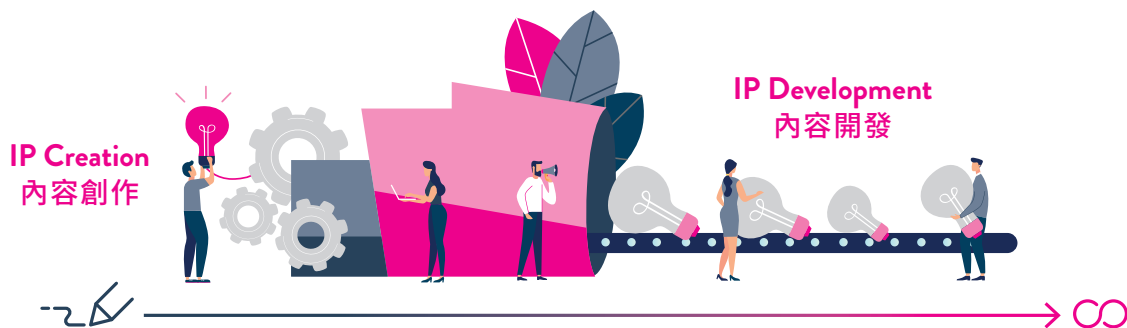


本章以粵劇為例，探討了其作為香港獨特的傳統藝術，有着無數潛力及有待開發原創內容。有見及此，**我們建議政府首要將粵劇視為香港主要的非物質文化遺產之一，日後加大開發更具意義和影響力的內容。**無論是通過藝術科技或其他方式，都應將發展傳統文化藝術新內容作為文化政策的重要目標。

與此同時，現在也是思考應否建立一個專注於粵劇人才培養藝團的好時機。始終，一個能夠倡導和秉持某些價值的專業旗艦藝團，能大大影響業內其他團體或生態。該藝團亦參考自2006年以來每年獲得民政局固定資助的九大藝團。這項舉措也能體現出，政府在傳承香港獨特文化的同時亦與時並進。

This chapter has captured Cantonese Opera as an art form so unique to Hong Kong that also offers a wealth of untapped and original content. Using the same example, **we recommend the Government prioritise Cantonese Opera as one of the key ICHs in Hong Kong to warrant purposeful, and impactful content development.** Whether this is done through Arts Tech, or otherwise, carving out new artistic content through traditional arts and culture should be made an important goal for cultural policy.

This is an opportune time to consider whether a flagship entity dedicated to the grooming of professional and versatile Cantonese opera talents should be established. In the end, flagship entities that champion and uphold certain values can substantially influence the rest of the industry. This proposed entity may consider modelling after the nine MPAGs that had received recurrent annual funding from HAB since 2006. This would also demonstrate the Government's coherent efforts in staying relevant to the times while acknowledging our cultural uniqueness.



## 第2B節：促進現代文化內容的開發過程

### Section 2B: Facilitating the development process of modern creative contents

在第2A節中，我們著重探討了如何通過藝術科技提升內容創作，尤其是從傳統文化藝術形態中創造新的藝術內容。來到本章的第2B節，我們把討論重點從內容創作轉移至**內容的開發過程**。就如一個原創作品（例如一本書）被改編成各種媒介，如電影、遊戲、戲劇和動畫等。要打造「產業化」，最重要的是將鼓勵和促進原創內容的開發利用過程納入政策當中。

#### 「IP開發」的基本定義

**IP開發指對原創作品進行跨媒介的改編與創造。**這反映了創意產業之間跨界的互動性，而此特徵可以帶來巨大的經濟收益和文化影響力（Wang, 2020）。

「IP」一詞最初用於可改編為電影和電視劇等其他創作媒介的原創網絡小說（受版權保護的作品）的術語。雖然並不是什麼新的手法，但以中國內地為例，這個概念尤為普遍，不少改編自網絡小說的電視劇大幅促進了中國電視節目在國外的發行與流通。亦有學者們認為，網絡小說的日益流行和改編，推動了國家提高對內容創作發展方面的投資。<sup>34</sup>

In Section 2A, we discussed content creation through Arts Tech, specifically creating new artistic content from traditional art forms and culture. Moving to Section 2B of this chapter, we shift our focus from content creation, to the **content development** process of creative works, ideas, and IP. Imagine an original work (e.g., a book) being adapted into various other formats such as film, or video games, or theatrical production, or animation. To forge “industry-building”, it is most important to build mechanisms into policy, to encourage and facilitate the IP development process of original contents.

#### Quick Definition of “IP development”

**IP development is the act of cultivating a single, original work across different creative mediums.** It suggests dimensions of intermediality and interactivity between the creative industries which could bring about immense economic gain and cultural influence (Wang, 2020).

The term “IP” is initially used as a substitute term for original web novels (copyrighted works) that can be adapted for other creative mediums such as film and TV. Though not entirely a novel practice, this concept is particularly prevalent in mainland China, for instance: the adaptation of online fiction for television has contributed majorly to the transnational circulation of Chinese TV programmes, and scholars have contended that the nation’s increasing investment in content creation is correlated to the rising popularity and adaptation of web novels.<sup>34</sup>

<sup>34</sup> 在2016年，中國電視劇的出口總值約為6.24億港元（8,000萬美元），預計到2022年，中國將在電視節目方面投資超過2,750億港元（2,240億元人民幣）。  
Exports of Chinese TV dramas were valued at roughly HKD 624 million (USD 80 million) in 2016, and it is estimated that China will invest over HKD 275 billion (RMB 224 billion) in TV programming by 2022.

因此「IP」意味着原創作品可以透過授權被改編，或透過其他盈利方式發揮潛力，這實質上就是版權的商業化。如今該術語已擴大範圍，涵蓋從動畫到設計等創意內容類別。

譬如，近年來我們可以看到韓國 IP 開發所獲得的突破性成功，許多 webtoon（網絡漫畫）被改編成熱門電影和電視，例如《與神同行》（2017）、《甜蜜家園》（2020）和《地獄公使》（2021）。網絡漫畫作者為影視界提供無數內容，影視界亦通過吸引國際觀眾來幫助網絡漫畫獲得更大關注。

同樣在台灣，近年許多影視作品都是跨媒介改編而成，例如《返校》（2019）、《誰是被害者》（2020）和《天橋上的魔術師》（2021），這三部作品就是由遊戲和小說改編而成。

**以一個作品去衍生更多新的 IP，能讓內容製作的輸出一直保持豐富和旺盛，同時也是打造一個具商業前景行業的關鍵。**

台灣政府在開發 IP 方面已抓緊機會。以下的個案研究分析了文化內容策進院於 2020 年推出的內容開發專案計畫，旨在促進台灣文創產業的 IP 內容開發。

**“IP” thus connotes potentials for an original work to be adapted into various formats through licensing or other monetisation methods**, which essentially means commercialising or exploiting copyright. Nowadays, the term has expanded to describe an overarching category of creative content that ranges from animation to design.

In recent years, for example, we have seen an explosive success of IP developments from South Korea, where many webtoon contents (digital comics) have been adapted into smash-hit films and TV shows, such as *Along with the Gods* (2017), *Sweet Home* (2020), and *Hellbound* (2021). As webtoon artists supply countless contents to the screen sector, the screen sector also helps webtoons gain traction by appealing to a larger, and oftentimes international, audience.

Similarly, in Taiwan, many recent film and TV hits were cross-medium adaptations, such as *Detention* (2019), *The Victim's Game* (2020), and *The Magician on the Skywalk* (2021), which were adapted from a video game and novels respectively.

**Leveraging a single work to birth multiple new IPs has ensured that the production pipeline is rich with content. It is also a crucial step to forge a coherent and lucrative industry.**

The Taiwanese government has tapped into the wealth of opportunities in developing IP. The case study below illustrates schemes under the pilot Creative Content Development Programme (CCDP) rolled out by TAICCA in 2020, designed to promote and champion IP development across Taiwan's CCI.

## 台灣文策院的內容開發專案計畫 Taiwan's Creative Content Development Programme

### 整體目標 Overall aims:

- 促進本土內容製作  
To boost local content production
- 解決創作端缺乏內容開發資金的問題  
To fill the current missing gap of funding for content development
- 促進創作與市場資金的有效媒合及接軌國際市場需求  
To bridge content creators with domestic and international markets

內容開發專案計畫旨在通過三個子計劃實現對IP內容開發的支持

The CCDP manifests through three sub-programmes designed to champion IP development:

### 1. 出版與影視媒合計畫 Book-to-Screen Adaptation

計畫宗旨 Purpose of scheme:

支持**文本改編成影視作品**，加速出版業與影視業的跨界合作。  
Facilitate **book-to-screen adaptations**, and accelerate cross-sector collaboration between the publishing and screen industries.

計畫目標 Objectives of scheme:

- 擴大台灣原創文本IP利用  
To further develop and commercialise the IP in Taiwan's literary works
- 提高故事與作品產量  
To increase the production volume of the screen sector
- 加強出版方、影視方和編劇方合作  
To facilitate synergy between publishers (IP owners), screen producers, and scriptwriters

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## 文策院計畫流程 TAICCA's workflow:

- 第一步：進行調研，以了解影視市場等需求  
Step 1: Survey screen sectors' needs
- 第二步：根據影視方的內容需求，公開向出版/版權方募集文本作品  
Step 2: Openly call for local publishers to submit original literary works that match screen sectors' needs
- 第三步：邀請影視方挑選文本，幫助他們快速找到符合需求的作品  
Step 3: Invite screen producers to assess and select a work that matches their needs
- 第四步：協助出版/版權方與影視方媒合，自由交流及討論合作意向，並簽訂合約  
Step 4: Facilitate open discussion and signing of contract between production houses and selected publisher/IP owner of the selected literary work
- 第五步：展開內容開發流程。銜接第五步，文策院同步建立編劇人才庫，幫助影視方挖掘優秀編劇人才，提升故事與作品產量與質量  
Step 5: Content development process begins. In connection with Step 5, TAICCA has additionally established a scriptwriting talent bank which enables production houses to scout for suitable scriptwriters to help with the content development process, should they need one

出版與影視媒合計畫是一個由政府主導，鼓勵出版和影視方之間共同開發IP內容的例子。計畫注重業界需求，並致力促進文本的版權擁有者與影視方之間的協同作用。

**The Book-to-Screen Adaptation is an example of a government-led initiative that encourages IP development between the publishing and screen industries. It is intently industry-focused, and anchors at facilitating synergies between IP owners of literary works and the screen industries.**

## 2.

### 前期開發支持計畫 Development Fund

#### 計畫宗旨 Purpose of scheme:

加強台灣文創產業內容開發的質量和能力，特別是**將原創作品改編成電影長片及影集、紀錄片和動畫等影視內容。**

Strengthen the quality and capacity for content development within Taiwan's CCI, specifically in **adapting original works into contents for the screen** such as feature film, documentaries, and animation.

## 計畫目標 Objectives of scheme:

- 鞏固文策院合作機構在促進當地 IP 內容開發方面的工作  
To consolidate efforts among TAICCA's partnered organisations in promoting local IP development
- 意識並釋放改編以及原創 IP 作品的巨大潛力  
To recognise and unleash the immense potentials of adapted IP works as well as original
- 提升編劇在影視行業的地位和角色，特別是在將現有 IP 作品改編影視內容時  
To elevate the status and role of scriptwriters within the screen industries, particularly when adapting existing IP works into contents for the screen
- 涵蓋多元的影視內容，不只電影長片，還包括電視劇、紀錄片、動畫等  
To acknowledge the all-encompassing notion of screen contents to not only include feature film, but also TV series, documentaries, animation, etc.

## 申請資格 Applicant eligibility:

只有與文策院合作的機構才能夠申請這項資助<sup>35</sup>

Only TAICCA's partnered organisations are eligible to apply for this funding<sup>35</sup>

## 計畫範圍 Project scope:

原創或改編劇本可開發成三種影視形式其中一種：i) 電影長片與影集，ii) 紀錄片，以及 iii) 動畫<sup>36</sup>

To develop original, or adapted scripts, into any of three categories of screen content: i) feature film and series, ii) documentaries, and iii) animation<sup>36</sup>

## 計畫開發期程 Project duration:

大約三年

Approximately three years

**前期開發支持計畫是一個政府主導，為台灣本地文創產業提供更多 IP 內容開發機會的例子，尤其是將原創和改編作品變成影視內容。**

**The Development Fund is an example of a government-led initiative that calls attention to enabling more IP development opportunities across Taiwan's own CCI, specifically on the adaptations of original and adapted works into contents for the screen.**

<sup>35</sup> 截止 2021 年，文策院已與 14 家製作公司或協會簽署了合作備忘錄。合作組織包括瀚草影視、鏡文學和動畫特效協會等。

As of 2021, TAICCA has signed MOUs with 14 production companies and associations. Among these partnered organisations are Greener Grass Production, Mirror Fiction, and the Animation & Visual Effects Association.

<sup>36</sup> 電影時長必須至少 60 分鐘；系列連續劇必須最多 26 集。提案必須在其劇本改編/故事概念/創意團隊/角色設定/動畫藝術與設計/動畫與特效中加入台灣元素。

Films must be at least 60 minutes in duration; series must be up to 26 episodes. Proposals must incorporate "Taiwanese elements" in its script adaptations/story concept/creative team/character setting/animation art and design/animation and special effects.

### 3.

## 未來內容原型開發支持計畫 Future Contents Development Programme

### 計畫宗旨 Purpose of scheme:

鼓勵文創產業**對創新型和沉浸式技術的應用持開放態度**，例如虛擬現實 (VR)、增擴實境 (AR)、混合實境 (MR)、人工智能 (AI)、無人機，以及遊戲引擎如 Unity 和虛幻引擎等，並發展出嶄新的且具有影響力的、契合全球趨勢、與時俱進的內容原型。

To encourage CCI players to be **open to innovative and immersive technology use**—such as VR, AR, MR, AI, drones, and game engines like Unity and Unreal Engines, and develop new and impactful content prototypes for the CCI that resonate with global trends and are relevant to the times.

### 計劃目標 Objectives of scheme:

- 推動未來更多文化內容與科技的結合<sup>37</sup>  
To cultivate new, innovative forms of future content brought about by technology<sup>37</sup>
- **推動IP內容開發與科技結合的可能性**。其中一個由本地劇團遞交的資助申請便是以劇場結合AR體驗<sup>38</sup>  
**To leverage on the possibilities of technology for IP development**—there is a project application from a local theatre group which involves integrating theatre with AR experiences<sup>38</sup>

**未來內容原型開發支持計畫是一個由政府主導，鼓勵在創意內容創造和發展中使用創新型和沉浸式技術的例子。**

**The Future Contents Development Programme is an example of a government-led initiative that encourages the use of innovative and immersive technologies in creative content creation and development.**

37 計畫涵蓋所有內容類型，包括音樂、小說、電影、電視劇、動畫、漫畫、遊戲、表演藝術、時裝和設計，以及創新和沉浸式科技的使用，例如VR、AR、MR、AI、無人機、觸覺互動技術以及Unity和虛幻引擎等遊戲引擎。

The programme is open to all content types—including music, novels, films, TV series, animation, comics, games, performing arts, fashion and design—and innovative and immersive technology use, such as VR, AR, MR, AI, drones, haptics technology, and game engines like Unity and Unreal Engine.

38 如果兒童劇團《IF Live!—AR互動線上劇場》是2021年度未來內容原型開發計畫中的項目之一。

This refers to the AR experience prototype development project of Ifkids Theatre Studio from the 2021 funding round.



文策院的各項計劃打破了出版商、影視製作人、編劇以及數字文化企業之間的隔閡，體現了文創產業中的跨界別互動性，更展示了產業化與IP內容開發的真正價值。

## 相對而言，香港文創產業的IP內容開發如何？

對比之下，香港的文創產業政策遺憾地並未體現產業化精神，亦尚未理解IP內容開發的價值。

首先，在文創產業領域，香港並沒有專門支持創意內容IP開發的相關資助政策。

以下表13將介紹香港現時與文創產業相關、最具代表性、最主要的資助計劃，包括電影發展基金、創意智優計劃和藝能發展資助計劃：

Breaking barriers between publishers, screen producers, scriptwriters, as well as digital cultural enterprises, TAICCA's programme is all about intermediality and interactivity across the creative industries. It embodies true industry spirit and understands the true value of IP development.

## How does Hong Kong compare on IP development for the CCI?

Comparatively, Hong Kong's CCI policies do not, regrettably, embody industry spirit nor understand the value of IP development.

To begin, there is no CCI-related funding policy with the specific mandate of supporting the IP development of creative contents.

In Table 13 below, we profiled the most prominent, and representable funding schemes in Hong Kong relevant to the CCI. They include FDF, CSI, and ACDFS:

現時文創產業部分最主要的資助計劃  
Selected key funding schemes relevant to the CCI

資助基金 Funding	相關計劃 Relevant scheme & initiative	成果與分析 Outcome and analysis
<p><b>電影發展基金</b> <b>Film Development Fund (FDF)</b></p> <p>目前由商經局轄下的「創意香港」負責管理 Currently administered by CreateHK under CEDB</p>	<p>劇本孵化計劃 Script Incubation Programme (SIP)</p>	<ul style="list-style-type: none"> <li>為劇情片培養編劇人才和優質原創劇本 Incubates scriptwriting talents and quality original scripts for feature films</li> <li><b>不接受改編作品</b> <b>Does not accept adapted works</b></li> </ul>
	<p>首部劇情電影計劃 First Feature Film Initiative (FFFI)</p>	<ul style="list-style-type: none"> <li>支援電影人才製作他們首部劇情片，創作更多原創劇本和電影 Mandates to incubate original screenplays and films by supporting filmmaking talents to produce their first feature films</li> <li><b>不接受翻譯或改編作品</b> <b>Does not accept translated or adapted works</b></li> </ul>
	<p>電影製作融資計劃 Film Production Financing Scheme (FPFS)</p>	<ul style="list-style-type: none"> <li>電影發展基金中唯一接受以改編作品於電影製作的計劃 The only scheme in FDF that accepts adapted works for film productions</li> <li>過去包含跨媒體的內容開發項目： Past projects that contained cross-medium content development:                             <ul style="list-style-type: none"> <li>《麥兜響噏噏》(2008) 由漫畫改編 <i>McDull, Kung Fu Kindergarten</i> (2008) based on comics</li> <li>《那夜凌晨，我坐上了旺角開往大埔的紅VAN》(2014) 由網絡小說改編 <i>The Midnight After</i> (2014) adapted from web novel</li> </ul> </li> </ul>
<p><b>創意智優計劃</b> <b>CreateSmart Initiative (CSI)</b></p> <p>目前由商經局轄下的「創意香港」負責管理 Currently administered by CreateHK under CEDB</p>	<p>設計<sup>39</sup> Design stream<sup>39</sup></p>	<ul style="list-style-type: none"> <li><b>沒有與 IP 內容開發相關策略</b> <b>No mandate on IP development</b></li> <li>2020 年的 23 個資助項目中，當中 17 項 (74%) 是以活動形式進行 Of a total of 23 funded projects in 2020, 17 (74%) were events-based</li> <li>當中兩個項目包含開發原創內容的元素，即香港設計中心的設計創業培育計劃和時裝創業培育計劃 Two contained elements of developing original content, e.g., Design Incubation Programme and Fashion Incubation Programme by the Hong Kong Design Centre</li> </ul>

資助基金 Funding	相關計劃 Relevant scheme & initiative	成果與分析 Outcome and analysis
<p><b>創意智優計劃</b> <b>CreateSmart Initiative (CSI)</b></p> <p>目前由商經局轄下的「創意香港」負責管理 Currently administered by CreateHK under CEDB</p>	<p>非設計 Non-design stream</p>	<ul style="list-style-type: none"> <li>• <b>沒有與 IP 開發相關策略</b> <b>No mandate on IP development</b></li> <li>• 2020 年的 25 個資助項目中，當中 <b>15 項 (60%) 以活動形式進行</b> Of a total of 25 funded projects in 2020, <b>15 (60%) were events-based</b></li> <li>• 當中四項包括開發原創內容的元素，旨在培育新晉音樂家 / 作家 Four contained elements of developing original content, primarily aimed at incubating emerging musicians/writers</li> </ul>
<p><b>藝能發展資助計劃 (藝術部分)</b> <b>Arts Capacity Development Funding Scheme (Arts Portion) (ACDFS)</b></p> <p>目前由民政局管理 Currently administered by the Home Affairs Bureau</p>	<p>藝術科技資助 (試行) Arts Tech funding (pilot round)</p>	<ul style="list-style-type: none"> <li>• <b>沒有與 IP 開發相關策略</b> <b>No mandate on IP development</b></li> <li>• 2021-22 年度合共收到 28 份與藝術科技相關的資助申請，其中三份成功獲得資助。<sup>40</sup> 申請內容涵蓋演出至沉浸式體驗、培訓和孵化計劃到社區和能力提升，以及實踐內容開發 (例如將舞台劇本改編成電子遊戲；或將文學作品發展成 VR 體驗)<sup>41</sup></li> </ul> <p>Three Arts Tech funding proposals were awarded for year 2021-2022, out of a total of 28 Arts Tech funding applications received.<sup>40</sup> Applications ranged from performance-based to immersive experiences, from training &amp; incubation programmes to community &amp; capacity building, and included content development applications (e.g., developing a theatrical script into a video game; or developing a literary work into a VR experience)<sup>41</sup></p>

39 受資助項目名單由創意香港辦公室取得 (2020 年創意智能計劃資助項目)，並由團結香港基金的研究員進行分析。構成具有「內容開發」元素的項目指它們包含某種形式的內容孵化，例如原創或改編音樂或設計作品。  
The lists of funded projects were directly obtained from the CreateHK office (Projects funded under CreateSmart Initiative in 2020), and were analysed by OHKF researchers. Projects that constitute as having elements of "content development" means they involve some form of content incubation, such as music or design pieces.

40 中華武學會有限公司、Machine and Art NOW Limited 和奧沙藝術基金有限公司是 2021-22 年度藝能發展資助計劃 (藝術部分) 藝術科技首輪資助的三名成功申請者。  
The Institute of Chinese Martial Studies Limited, Machine and Art NOW Limited, and Osage Art Foundation Limited were the three successful applicants awarded the pilot round of Arts Tech funding from the Arts Capacity Development Funding Scheme (Arts Portion) in 2021-22.

41 內容開發相關的申請 (即從一種創意媒介到另一種媒介的發展，如舞台劇本到電子遊戲) 在該輪資助中未能成功獲資助。  
The content development applications (that involved developing contents from one creative medium to another, e.g., theatre script to video game) were not successful in that round of funding.

如上列表13所示，香港大部分資助都是一次性或只針對特定行業，並且通常與其他資助計劃毫無聯繫。這窒礙了不同創意媒介對IP內容的開發，例如，電影發展基金三個主要計劃中有兩個都不接受以改編劇本申請，不僅沒有發掘將其他界別優質內容轉化為電影的潛力，更削弱了所有任何其他IP內容的開發機會。相反，我們可以看到台灣支持各種創意領域的內容開發，尤其是影視內容。

同樣，創意智優計劃和藝能發展資助計劃（藝術科技類別）均未涉及任何與IP內容開發的範疇。從之前的資助項目名單來看，他們主要支持以活動為主的項目。以上種種也表明，**香港的文創產業資助計劃並未能夠互相合作，亦未能真正貢獻個別產業。**

As provided in Table 13 above, most of our funding schemes champion one-off, sector-specific projects, and are kept quite separate from other funding schemes. This prevents any thinking or action done on IP development across different creative media. Of the three major schemes under FDF for instance, two do not support adapted scripts, which undermines potentials for quality content from other sectors to turn into film content, also undermines any other IP development opportunities further down the line. On the contrary, we see Taiwan fully embracing the development of content across various creative sectors, particularly for the screen sector.

Similarly, neither CSI nor ACDFS's Arts Tech funding has any mandate for IP development. They are mainly seen to support events-based projects judging by their previous lists of funded projects. All this points to show that **Hong Kong's CCI funding are not working together, nor contributing to one industry.**

建議  
RECOMMENDATION

2.2

## 設立以支持內容開發為主的新資助機制

### Devise a new funding mechanism for content development, mandated at promoting and supporting the IP development process of creative contents

從香港目前對於文創產業的資助情況來看，的確有針對特定行業的資助計劃，但暫時沒有一個能夠將整個行業連繫起來，以實現更大、更強、更加緊密的行業發展計劃。

因此，我們懇請政府打破目前文創產業相關資助計劃間的隔閡，建立一個鼓勵並允許所有文創產業相關資助計劃相互協作的新機制，只有這樣，我們最終才能夠實現產業化思維。

Judging from the current funding situation for the CCI in Hong Kong, we see that there are funding schemes for sector-specific projects, but none that link the sectors together to build a bigger, stronger, and more coherent industry.

We earnestly implore the Government to break down the current barriers between all CCI-related funding schemes, which would involve devising a new mechanism that encourages and allows all existing CCI-related funding schemes to work together. Only in doing this will we finally realise industry-based thinking.

我們建議這個新機制可以採取新的資助形式，由新局設立管理，以打破當前部門間獨立處理資助的局面。如台灣的案例般，促進和支援創意內容的IP開發過程。

We recommend that this new mechanism take the form of a new funding scheme, set up under the new bureau, which transcends the current sector-silos, and like that of Taiwan's, is mandated at promoting and supporting the IP development process of creative contents.

圖 14  
Figure

設立支援內容開發的資助計劃  
New funding mechanism for content development



我們建議，內容開發的新資助必須涵蓋各個行業的內容開發，從現有資助計劃的實踐和行業反饋中汲取經驗，嘗試解決當前的不足，包括但不限於：

- 電影發展基金目前只支援「劇情片」項目，其他影視形式都不符合申請資格。然而，全球趨勢和業界動向都在指向電視和電影的融合，例如 Netflix 的混合模式便彰顯了兩者協同發展的巨大潛力。**這意味着，電影發展基金或是未來與影視行業相關的資助計劃都需考慮到這一點，以擴大媒介範圍來鼓勵行業進行更多跨界內容開發。**（參考：台灣前期開發支持計畫）
- 創意智優計劃目前沒有與 IP 內容開發相關的範疇，值得注意的是，它應該支持所有（電影以外）的創意產業，包括與本節相關的出版和影視產業。然而，創意智優計劃的資助通常只針對特定行業，這極大限制了文創產業中 IP 內容開發的部分，原創作品以不同媒介方式呈現的潛力也被大幅削弱。**這代表創意智優計劃有待改善，也預示着未來任何新的資助計劃均需助力香港文創產業的 IP 內容開發。**（參考：台灣出版與影視媒合計畫）

We recommend that the new funding on content development must fully embrace the development of content across various sectors, amalgamating lessons learnt and industry feedback from existing funding practices. Drawing from current limitations including but not limited to:

- FDF is currently mandated to support “feature-film” projects only. This means other screen contents are currently not eligible for the funding. Yet, global trends and industry movements have shown that the convergence of TV and film, such as hybridised formats like Netflix, presents immense potentials for synergies between the two. **This signals FDF, or indeed any future funding for screen media, to expand its scope to encourage more content development across different screen sectors.** (Reference: Taiwan’s Development Fund)
- CSI currently has no mandate for IP development, which is notable as it is supposed to champion all creative industries, including publishing, and screen industries (besides film) which were pertinent in this section. However, CSI’s funding across the board tends to be very sector-specific. This limits significantly, the potentials of original ideas to be passed across various formats within the CCI as part of IP development. **This signals for revamps within CSI itself, and also signals any new future funding to be proactive about facilitating IP development across Hong Kong’s CCI.** (Reference: Taiwan’s Book-to-Screen Adaptation)

- 當下藝術科技資助計劃中的資助範疇亦能進一步佐證這一點。儘管該計劃支援以藝術科技為主的項目，以實體活動或製作研發類項目為重點對象，但最終並未關注更多的內容開發，例如將戲劇劇本轉化為電子遊戲，或將文學作品改編成動畫。鑒於這項資助計劃在2020年才開始試行，其資金機制還有改善的空間。**我們亦期望藝術科技資助與日後其他支持內容開發的資助能夠展現跨領域的協同作用。**（參考：台灣的未來內容原型開發支持計畫）

最後，**我們建議這項新的內容開發資助計劃能夠重視對文化IP創造、開發和商業化的教育**，這對文創產業的業界人士來說尤為重要，更有助大眾理解如何在這個行業中持續發展事業，進而鞏固業界中的產業化思維。

- The current mandate observed in the Arts Tech funding would corroborate this further. It currently supports projects that embody Arts Tech as an end in itself—culminating in a physical event or production or an R&D project, but pays no regard to facilitating, say, a theatrical script into a video game, or adapting a literary works into an animation. Given that this funding only piloted in 2020, more can certainly be done to refine its funding mechanism. **We also expect much synergy between the Arts Tech funding and the new funding for content development, of their cross-disciplinary nature.** (Reference: Taiwan's Future Contents Development Programme)

Last but not least, **we recommend this new funding for content development also bring to the fore, the importance of educational initiatives in IP creation, development, and commercialisation**, particularly for CCI practitioners. This serves to build up the critical mass of those in Hong Kong who know how to sustain a career in the CCI, which will in turn consolidate an industry-thinking mindset within the sector.



# 文化數據與「文化IP」數碼建設

## Infrastructures for Cultural Data & IP



此前的章節，我們已闡明了內容創作及開發的重要性。在這一前提下，建立宣傳、傳播及促進交流的內容平台亦同樣重要。

In the previous chapter, we have established the importance of content creation and development. Building on this, it is equally important to have infrastructures that contain, promote, disseminate and trade these contents.

眾所周知，現在大數據和知識產權是全球熱話，並在各地文化政策中佔一席位。不少政府都在計劃建立文化數據資料庫，作數據收集與分析用途，協助制定公共政策及業界市場的商業決策。而文化IP交易平台（包括版權）作為促進文化出口，甚至提升文化軟實力的一種方式，也正在蓬勃發展。

正如學者 Michael Keane (2019) 所言：「對比過去任何一刻，藉數字化使文化『走出去』是現在最明顯且必然的路徑。」而這當中的數碼建設，若能加以正確應用，將為「十四五」規劃中，建設香港成為國際文化藝術交流中心和區域知識產權貿易中心這兩個願景作出重要貢獻。

本章第 3A 節將首先討論如何利用數據，為文創產業創造機遇。在進入第 3B 節前，我們也將探討建立線上文化 IP 交易平台的重要性。我們會參考不同經濟體的文化大數據計劃及版權交易平台，從中選取具啟發性的案例作研究分析。

Big data and IP are hot topics in the global discourse, with observable features in cultural policies around the world. Governments are making plans to build cultural data repositories for data collection and analyses, which would better inform decisions in public policymaking as well as in the private sector. Trading platforms for cultural IP such as copyright are also gaining momentum as a way of facilitating cultural export and even boosting cultural soft power.

As aptly written by the scholar Michael Keane (2019), “the way to activate the “going out” mission now seems to be more than ever digital”. These digital infrastructures, if properly harnessed, can be instrumental contributors to Hong Kong’s aspirations of becoming a hub for international cultural exchanges and regional IP trading centre as per the 14th Five-Year Plan.

Section 3A of this chapter first discusses the opportunities of harnessing data for the CCI, before proceeding to Section 3B that examines the significance of building online cultural IP trading platforms. We will be drawing insights from comprehensive cultural big data plans and existing copyright platforms from different economies as case studies.

### 第3A節：利用數據助力文創產業發展—中國內地及台灣的文化大數據計劃

#### Section 3A: Harnessing data for the CCI—plans to construct cultural big data repositories in mainland China and Taiwan

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大數據正滲透着社會各方面，其中亦包括文創產業。文化數據其中一個功能是記錄文化資產，這包括存放於公共資料館、博物館和圖書館中的文化資訊，以及來自唱片公司、電影公司和其他機構等的創意數碼資產，而中國內地的國家文化大數據建設正正體現了這個功能。另外一種文化數據則反映了觀眾的文化消費習慣。文化機構會收集表列數據、網絡數據或文字數據，用作了解他們的觀眾，例如有目的地收集和 analysing 一場演出的觀眾人數、社交平台的瀏覽數據和觀眾反饋等資訊。這種做法有助增進與觀眾之間的連繫、衡量文化價值，甚至激發更多的創作性實驗 (Mateos-Garcia, 2014)。台灣的文化大數據計劃正好能夠體現這一點。

文化創意工作者及機構均已開始發掘數據的潛能，以此提升藝術創作、了解觀眾和改善營運情況。若使用得當，數據便能提供新見解，成為強大的分析工具。數據能夠幫助文化機構更深入地了解自身運作及觀眾，並協助政策決策者制訂更多有效的策略。

中國內地及台灣這兩個經濟體正是以此為目的，展開了文化大數據建設。同時，他們視大數據作建立具有競爭力的數字經濟核心，因此文創產業的大數據基礎建設亦是發展數字經濟的一部分。

Big data is trickling into nearly all aspects of society, including the CCI. One type of cultural data documents cultural assets. This includes information on the cultural goods stored in public archives, museums, and libraries, as well as creative digital assets from record labels, film studios, and other organisations—mainland China's national cultural big data infrastructure is one manifestation of this. Another type of cultural data reflects audience behaviour. Cultural organisations may generate tabular data, network data, or textual data that captures their relationship with audiences. For instance, the number of audiences at a performance, social media statistics, audience feedback, can all be purposefully collected and further analysed to help broaden connections with audiences, measure cultural value, and even encourage greater creative experimentation (Mateos-Garcia, 2014). Taiwan's cultural big data programme is a manifestation of this.

Artists and organisations have begun tapping into the potentials of data to enhance artistic practices, understand audiences, and improve operations. When used carefully and appropriately, data can become a powerful tool to surface new insights. Data can help cultural organisations gain a deeper understanding of themselves and their audiences, as well as assist policymakers develop more effective strategies.

Both mainland China and Taiwan are two economies embarking on cultural big data projects for these purposes. They see big data infrastructures for the CCI as part of a wider policy agenda that positions big data at the core of building a competitive digital economy.

## 中國內地的文化大數據建設 The Mainland's Cultural Big Data Infrastructure

內地有多份關於建設文化大數據系統的計劃。建立國家文化大數據這一概念首次於2019年出台的《關於促進文化和科技深度融合的指導意見》中提出，翌年的《關於做好國家文化大資料體系建設工作通知》又接着舉出建設文化大數據標準體系的八項任務。

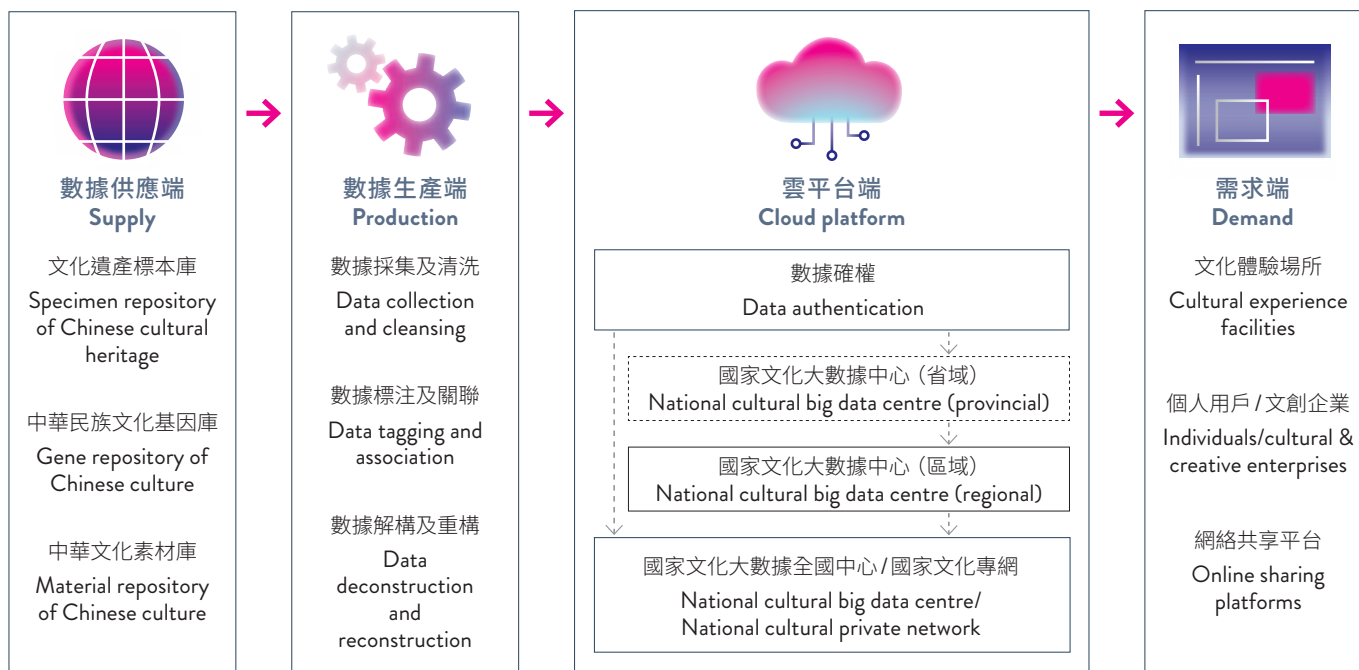
2021年初，《國家文化大資料標準體系》進一步規劃了文化大數據生態的相關各方，並具體列出建設數據基礎的指引方向。參見下圖15：

The Mainland has bold plans for building a cultural big data ecosystem. In 2019, the construction of a national cultural big data infrastructure was first outlined in the *Guiding Opinions on Expediting Deep Integration Between Culture and Technology*, which later expanded into eight policy tasks in the *Notice on Building the National Cultural Data System* the following year.

In early 2021, the *Standard System of National Cultural Big Data* further mapped out relevant parties in the cultural big data ecosystem, and exactly what data infrastructures will be built. See Figure 15 below:

Figure 15

中國內地的文化大數據建設規劃  
Chinese mainland's plan for cultural big data



目標 Objective:

- 培育文化數據生態系統，以數據凝聚文化產業  
To cultivate a cultural data ecosystem and connect all players in the cultural industry through data

目的 Purpose:

- 闡明文化產業中的數據流動，以及各方如何就數據的生產和使用作出貢獻  
To elucidate the flow of data in the cultural industry, and how each party contributes to producing and using data
- 為數據收集、共享及監管措施訂立標準  
To set standards for data collection, data sharing and regulatory measures

資料來源：國家文化大數據標準體系 (2021)、文化產業評論 (2021)  
Sources: Standard System of National Cultural Big Data (2021), Cultural Industry Review (2021)



圖 15 概述了中國內地的文化大數據建設，計劃涵蓋以下四端：**數據供應、生產、雲平台和需求**。

首先是供應端，將由三個數據庫組成，並會對豐富的原始資料進行採集。其次是生產端，將專門處理和匯總這些數據庫中的相關數據。數據在傳送至省級和國家級數據庫和網絡雲平台前，會先進行數據確權。最後，需求方會專注於使用雲端平台的用戶。

Figure 15 outlines mainland China's intended cultural big data infrastructure, which addresses four ends: **data supply, production, cloud platform, and demand**.

At the first level is the supply end, which comprises three data banks that will provide rich repositories of raw information. The second level is the production end, which is dedicated to processing and aggregating relevant data from these data banks. Information will be organised and authenticated before reaching provincial and regional data banks, as well as the cloud platform for web access. Finally, the demand side focuses on end users, and refers to platforms that will access the cloud repository.

與中國內地一樣，台灣也公布了開發文化數據的政策新措施。台灣將於2021年至2025年間，推出聚焦於三類不同數據的三項措施。第一類是文化藝術參與度，包括匯集各文化場所的問卷調查、觀眾紀錄和意見反饋等資料。第二類是文創產業中相關公司的數據庫。第三類將包含對影視及音樂的數碼資產分析，例如識別當前的潮流趨勢和制訂市場策略，參見下一頁的個案研究：

Like the Mainland, Taiwan has also announced policy initiatives for harnessing cultural data. Three initiatives will be carried out between 2021 to 2025, focusing on three different categories of data. The first category is cultural participation, which will include surveys, attendance records, and feedback statistics from cultural venues. The second category is a database of relevant companies in the CCI, while the third category will contain analyses of audiovisual and music digital assets, such as identifying current trends and developing marketing strategies. See case study on the next page:

## 台灣的文化數據計劃 Taiwan's Cultural Data Project

台灣的「文化數據智能分析與決策輔助計畫」是由文化部提出並實行的文化大數據項目。該項目源自「服務型智慧政府2.0推動計畫」，<sup>42</sup>並獲得約三千萬港幣的資助。

Taiwan's Cultural Data for Intelligent Analysis and Policymaking Programme is a cultural big data project proposed and executed by the MOC. The programme was borne out of the Digital Government Programme 2.0 of Taiwan,<sup>42</sup> and received approximately HKD 30 million in funding.

### 目標 Objectives:

- 提高政策管治水平（以數據驅動決策）  
To improve smart governance capabilities through open data (data-driven governance)
- 提升循證決策  
To promote evidence-based decision making

### 目的 Purpose:

- 引導政府的文化決策及資助計劃  
To guide the government's cultural policymaking and funding initiatives

- 分析市場趨勢和觀眾喜好，支援文創產業  
To benefit the cultural and creative industries by analysing industry trends and audience tastes

該計畫含有三項可量度的成果（皆進行中）  
The project encompasses three measurable outcomes (all currently ongoing):

### 成果1：實時藝文參與大數據儀表板 Outcome 1: Real-time cultural participation data dashboard

從不同藝文機構中獲得數據，利用先進的科技，如人工智能及5G，實時在儀表板展示全國的文化參與大數據。

To obtain data from various cultural venues to display nationwide cultural participation on a big data dashboard in real-time by employing new digital technologies such as AI and 5G.

這項工作旨在更好地了解觀眾的行為喜好和文化消費模式，從而協助政策制定。

This commitment seeks to better understand audience behaviour and cultural consumption patterns, which will in turn inform policymaking.

<sup>42</sup> 台灣「服務型智慧政府2.0推動計畫」包含了各政府部門的政策任務，以實現「數位國家·創新經濟發展方案」(DIGI+方案)。  
Digital Government Programme 2.0 of Taiwan laid down policy tasks from various ministries and departments, and was developed in response to the Digital Nation and Innovative Economic Development Programme (DIGI+).



Figure 16

台灣的藝文參與大數據儀表板構想

Taiwan's conception of a cultural participation data dashboard

目標

- 建立藝文參與大數據中心，以提升施政決策
- 整理結構化和非結構化文化數據
- 掌握全面完整的藝文活動參與資料

功能

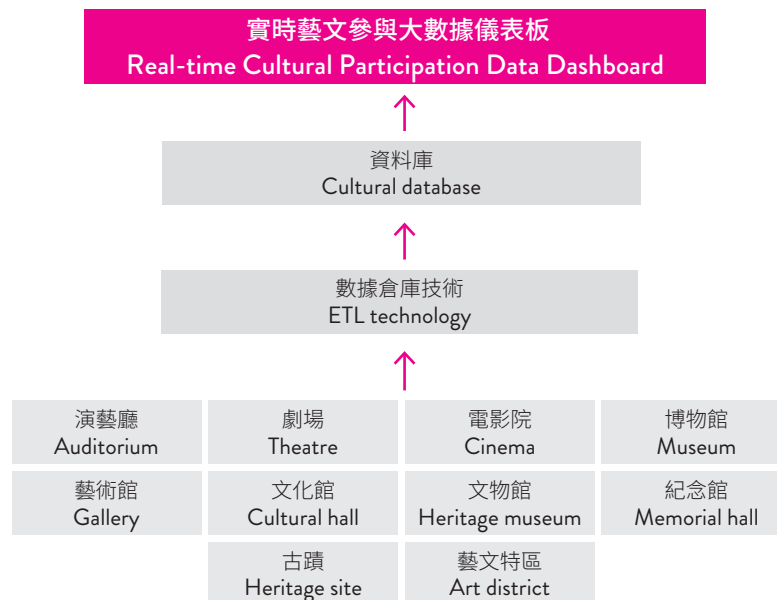
- 展示台灣不同地區文化活動的參與狀況 (例如觀眾數量)
- 洞察收集的數據，以提升對文化消費及參與的認知 (例如購票、票房及人流紀錄)

Aims

- Build a Big Data Hub on cultural participation to enhance policymaking decisions
- Collate structured and non-structured cultural data
- Collect comprehensive cultural participation data

Functions

- Display cultural participation of different cultural activities in different regions across Taiwan (e.g., audience members)
- Data obtained used to conduct in-depth analysis of cultural consumption and behaviours (e.g., ticketing, box office, and attendees)



資料來源：文化數據智能分析與決策輔助計畫 (2021)  
Source: Cultural Data for Intelligent Analysis and Policymaking Programme (2021)

## 成果 2：影視音文創產業分析

### Outcome 2: Database of audiovisual and music companies

透過從私人企業獲得詳盡的資訊，從而建立一個影視及音樂的行業資料庫。此資料庫於將來亦會擴展至其他行業。

To build a database for the audiovisual and music industry through obtaining comprehensive information on private sector companies. The database will be expanded to include other sectors in the future.

**這項工作可建立一個用作推動產業意識和促進業界合作的網絡。**

**This commitment establishes a network to promote company awareness and facilitates cross-sector collaboration.**

## 成果 3：數位影音內容資產評價分析

### Outcome 3: Analysis of digital audiovisual and music assets

透過機器學習和區塊鏈來評估影視及音樂數資產（如分析網站流量、廣告價值、粉絲群等），並將數據提供給Netflix和KKBOX等內容供應商作為鼓勵他們在台灣營商的激勵措施。

To evaluate audiovisual and music digital assets using machine learning and blockchain (analyse website traffic, advertising value, fanbase, etc.) and provide data to content providers like Netflix and KKBOX as incentives.

**這項工作能推動公私營機構之間的合作，令行業內的領頭者得以更好地評估其所提供的內容，從而不斷改善，並進一步為更廣泛的觀眾製作內容。**

**This commitment promotes private-public partnerships, and enables industry leaders to better gauge the performance of their contents, and further improve or tailor their content for the wider audience.**

我們能夠從以上兩個案例中得出共通點。

內地的文化大數據建設是以記錄傳統（具歷史意義）和現代文化資產為基礎，旨在將這些文化資產數字化，並特別注意數據的驗證。內地希望終端用戶和平台可獲得高質量的文化數據，從而幫助他們達成更完整和具意義的分析結果。

台灣的文化大數據在協助政策決策者的同時，亦幫助業界更好地了解觀眾的文化消費習慣和喜好，從而促進由數據驅動的公私營決策。

We can draw common themes from the case studies above.

The Mainland's cultural big data infrastructure was anchored in documenting cultural assets across traditional (historic) and modern cultural contents. It digitises these cultural assets and pays specific attention to ensuring the data supplied to the database is substantiated. Its approach hopes to maximise the quality of cultural data available for end users, which enables them to draw more conclusive findings.

Taiwan's cultural big data model, while benefiting policymakers, also hopes to benefit the industry by better understanding audience behaviours, thereby promoting data-driven decision making in both public and private sectors.

## 香港的文化數據及「資料一線通」在智慧城市藍圖 2.0 下的潛力

香港現時有多個主要的文化數據來源，第一個是「資料一線通」，為政府於 2015 年推出的網上一站式公開資訊平台，出自本港首份智慧城市藍圖。「資料一線通」由創科局下的資訊科技總監辦公室統籌，集合了來自不同政府部門，如民政局和康文署等，及其他公私營機構的數據和資料。除了「資料一線通」，其他機構同樣擁有他們獨立的數據調查，例如香港藝術發展局的《香港藝術界年度調查報告》、政府統計處的文化及創意產業年度專題報告、創意香港的創意產業相關課程的畢業生人數統計，以及其他私人企業如香港票房有限公司的本地票房資料收集。

**我們的研究顯示，香港的文創產業一直缺乏全面的數據統計及分析系統。**首先，當下的數據採集零碎龐雜，傳統文化界與創意產業的數據未能有效整合，不同部門對文創產業的定義和範圍不一，更未涉及跨部門的數據分析。另外，大多公開的數據並非機讀格式，難以作分析用途。同時，現時文創產業的資料都是靜態的，還未意識到文化數據的多元化，其格式實際上可以包括文字、影音、線上或線下等。當中亦未將數碼文化資產包括在內，而有關新興內容或未來市場的數據暫時還沒有被納入現有文化數據統計中。正因如此，業界往往難以真正從現有的數據資料中受啟發，分析觀眾行為喜好或發掘新機遇。這方面的缺陷一直是文創產業發展的主要障礙之一。下圖 17 概括了當下香港的文化數據狀況。

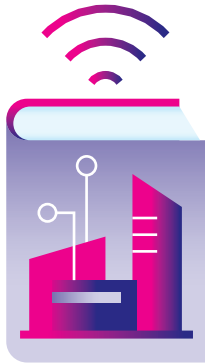
## Cultural data in Hong Kong and potentials for Data.Gov.HK under Smart City Blueprint 2.0

There are several major sources of cultural data in Hong Kong currently, the first being Data.Gov.HK, an open-access, online data platform that publishes public sector statistics and information, launched in 2015 under the first Smart City Blueprint. Coordinated by the Office of the Government Chief Information Officer under ITB, it gathers information from different government departments such as HAB and LCSD, and public/private organisations. Apart from Data.Gov.HK, other entities also compile their own datasets. For instance, Hong Kong Arts Development Council's *Hong Kong Annual Arts Survey Report*, Census and Statistics Department's annual reports on the cultural and creative industries, CreateHK's statistics on the number of graduates of creative industries-related programmes, and many private companies with their own findings, such as local box office statistics by Hong Kong Box Office Limited.

**Our research shows that Hong Kong's CCI has long suffered from the lack of a comprehensive data system.** To begin, the current data collection system is scattered and disintegrated, data from the cultural sector do not aggregate with data from the creative industries, with no agreed definition and scope of the CCI. This also means no cross-sector analyses are taking place. Published data are also scarcely in machine-readable format, which means only a small amount are actually available for data analysis. Information on the CCI is also static, which does not acknowledge the dynamic nature of cultural data, which can be textual, audiovisual, online/offline, and more. Digital cultural assets are also not included. Data on future contents and emerging markets are yet to be included in existing cultural statistics. Because of all this, industry often fails to gain meaningful perspectives on audience behaviours or untapped opportunities. The lack of a comprehensive cultural data system has been a major hindrance to the CCI's development. Figure 17 below encapsulates Hong Kong's current cultural data landscape.

數字經濟  
Digital economy

香港智慧城市藍圖 2.0  
Hong Kong Smart City Blueprint 2.0



目前沒有針對文化及創意產業的數據建設或相關策略

There is currently no strategy on constructing data infrastructures for the cultural and creative industries

數據收集現狀  
Data collection

現有的數據來源 (只列舉部分)  
Existing data sources (non-exhaustive)

- **政府統計處**  
**Census and Statistics Department**  
香港的文化及創意產業 (專題文章)  
The Cultural and Creative Industries in Hong Kong (Feature Article)
- **資料一線通**  
**Data.Gov.HK**  
民政事務局, 包括康樂及文化事務署的相關數據  
Home Affairs Bureau, including LCSD  
商務及經濟發展局的相關數據  
Commerce and Economic Development Bureau
- **香港藝術發展局**  
**Hong Kong Arts Development Council**  
《香港藝術界年度調查報告》  
Hong Kong Annual Arts Survey Report
- **其他私人公司**  
**Other private companies**  
例如香港票房有限公司  
E.g., Hong Kong Box Office Limited

現存挑戰  
Current challenges

- 現有系統缺乏精確完整的大數據資料  
Current system lacks accurate and comprehensive big data
- 數據收集過於零散, 公營和私營機構收集的數據有待被整合  
Data collection is scattered, data from public and private sectors are not integrated
- 傳統文化界的數據未與創業產業的數據有效結合, 造成文創產業的數據不全面  
Data on arts and culture does not aggregate with data on the creative industries. CCI data remains incomplete
- 沒有包括數字文化資產  
Digital cultural assets are not included
- 沒有包括個人創作者或文化機構的原創/版權作品資料 (詳見第 3B 節)  
Information on original creations/copyrighted works by individual creators and cultural organisations are not included (see Section 3B)
- 缺乏有關行內自由職業者的數據  
There is a lack of data on freelancers in the industry
- 沒有對收集的數據進行有利產業發展和政策制定的數據分析  
Data collected has not been utilised to carry out data analysis that would benefit the industry or policymaking

內地和台灣的文化數據建設都是在數字政策基礎上產生的，通過研究兩地的案例，**我們認為「資料一線通」可以擴展文創產業上的數據資料。**的確，此平台已分別匯總了「康樂及文化」相關的數據，當中包括來自民政局和康文署等藝文資訊，<sup>43</sup> 例如博物館入場人次、公共圖書館使用情況、資助名單等。而且如台灣一樣，「資料一線通」屬於開放數據策略之一，也具有實時數據儀表板功能。然而，其數據儀表板功能目前僅應用於交通和天氣等領域，**並未在文創產業中有所應用。**事實上，此儀表板可以進一步發展至將產業的主要資訊以互動地圖儀表板方式，令公眾對行業發展一目了然，例如加入創意產業公司分布、各區文藝設施的數量及位置、不同時段的觀眾人口分布等。**因此，我們認為未來可進一步開發「資料一線通」的文化數據功能，讓文化場所和機構能夠更有效地收集並分析相關數據。**

從當前可用的數據分析來看，文創產業面臨的或許並非數據嚴重不足的問題，而是現有數據中的意義和用途有限。反觀內地和台灣文化大數據政策，其建構文創產業數據庫之目的，不僅是為了收集資料，更是力求收集的數據全面、高質、多元化，從而有助進行有意義的分析，幫助文化機構深入了解自身和受眾、進行評估，提高創作及營運能力。

Following the two case studies of the Mainland and Taiwan, which were borne out of overarching digital government strategies, **we observe that Data.Gov.HK can be further expanded to better apply themselves to the CCI.** We acknowledge that the platform has been aggregating datasets related to “Recreation and Culture”, which include arts and cultural data from entities like HAB and LCSD,<sup>43</sup> publishing information such as the number of visitors to museums, usage of public libraries, and list of grantees. And like Taiwan, Data.Gov.HK is part of an open data strategy with real-time data dashboard functions, but its data dashboard currently only covers areas such as traffic and weather, with **no data execution strategy for the CCI.** When in fact, the data dashboard can be further designed to offer the public an interactive map displaying key industry information. For instance, it can include the geographical data visualisation of creative companies, the number and location of cultural facilities in each district, and the distribution of audiences at different times of the day. **We observe there is potential for Data.Gov.HK to expand data dashboard functions to display cultural data in the future,** and enable cultural venues and organisations to gather, monitor, and analyse data more effectively.

The amount of data currently available suggests that the CCI is not necessarily suffering from a severe data deficit, but the inferences that can be extracted from the existing available data is severely limited. Learning from cultural big data policies of the Mainland and Taiwan, the purpose of constructing a comprehensive data infrastructure for the CCI is not merely to gather mass information, but to ensure the extent, quality and variety of data captured, that can enable useful analysis of purposefully collected datasets to help cultural organisations better understand themselves and their audiences, carry out review and evaluation and, in turn, drive positive changes.

<sup>43</sup> 這些政府部門必須公布年度公開數據計劃以列出將在「資料一線通」上發布的數據。  
These government entities have to publish Annual Open Data Plans to set out the datasets that will be released on Data.Gov.HK.

## 建立文化數據數碼建設 Build an Infrastructure for Cultural Data

基於內地和台灣的政策案例及共同元素，**我們建議政府建立文化數據數碼建設**，其主要目標應是：i) 整合文化資產和資源；ii) 協助文化政策制定；iii) 通過全面的數據分析為業務決策提供有價值的信息。無論是擴展「資料一線通」的範圍和功能，亦或是發展新的基礎建設，都應具備這八個特點：

Based on the models and common-derived themes from the Mainland and Taiwan, **we recommend the Government build a cultural data infrastructure** with the main objectives of: i) integrating cultural assets and resources; ii) assisting cultural policymaking; iii) informing business decisions through comprehensive data analyses. Whether this is through expanding the scope and functionalities of Data.Gov.HK, or developing a new separate infrastructure, the infrastructure shall bear these eight features:

圖 18  
Figure

### 文化數據建設的八大特點 Eight features in a Cultural Data Infrastructure





**1. 利用人工智能、區塊鏈、大數據及5G等新科技  
Utilise new technologies such as AI, blockchain, big data, and 5G:**

拓寬和豐富文化機構和相關行業參與者於供需兩方的文化數據收集，並對已收集的數據進行深層次分析和解讀。

人工智能和區塊鏈等新技能惠及文創產業。例如，作為人工智能的應用，機器學習可以實現更全面和自動化的文化數據分析；區塊鏈則可以透過分散式賬本技術，令數據存證更加透明、具追溯性和防止篡改。<sup>44</sup>

Widen and enrich the collection of cultural data from cultural organisations and relevant players from supply to demand sides, and enable more sophisticated interpretation of collected cultural data.

New technologies such as AI and blockchain can benefit the CCI. For instance, machine learning as a subset of AI can enable more comprehensive and automated cultural data analysis; blockchain can allow for more transparent, traceable, and tamper-proof data storage with the use of distributed ledger technology.<sup>44</sup>

**2. 促進傳統和新興文化內容的公私營數據共享  
Facilitate private-public data sharing across traditional and new/emerging cultural content:**

建立公私營合作關係，綜合更多資源，並提升來自博物館、劇場、資料館、古蹟遺產、電影院、畫廊等一系列文化機構的數據質量。

Forge public-private partnerships to build more integrated sources, and enrich the quality of data from a range of cultural organisations, such as museums, theatres, archives, heritage sites, cinemas, galleries, etc.

**3. 為數據的收集、處理、分發和存取訂立範圍  
Define the scope for data collection, processing, distribution, and access:**

建立一個集數據收集、數據清洗和處理/整合為一體的核心平台，並開放數據存取權限。各政府部門之間應有統一標準。

Establish the key contributors to data collection, data cleaning and processing/consolidation, as well as providing a platform to enable data access requests by approved parties. This should be standardised across government departments.

**4. 協助政策制定和行內決策  
Assist policymaking and decision making in the CCI:**

為公共政策制定和行業策略性決策提供關鍵、有用的見解。

Provide useful insights to inform public policymaking and strategic industry decisions.

<sup>44</sup> 分散式賬本技術可讓資訊在網上多個位置被存取、驗證和記錄，而且不被篡改。  
Distributed ledger technology (DLT) is a technology that allows access, validation, and record of information across a network that is spread across multiple locations, in an immutable manner.

## 5. 公開資訊予公眾使用

### Make data publicly available:

開放數據給文化機構、研究中心和公眾人士，鼓勵他們發掘數據中的潛能，以提升自身藝術創作、深入了解觀眾、改善營運模式和促進研發等。在這過程中應加強數據價值及應用的公眾教育。

Make cultural data accessible to cultural organisations, research institutions, and members of the public, allowing them to tap into the potentials of data to enhance artistic practices, understand audiences, improve operations, R&D, etc.; and to strengthen public education on the value and application of data during the process.

## 6. 與文化IP交易建設結合

### Connect with the cultural IP trading infrastructure:

連接文化數據建設和文化IP交易建設，從而促進文化出口（將於第3B節中討論）。

Enable licensing options between the cultural data infrastructure and the cultural IP trading infrastructure, in so doing enabling cultural exportation (details to be discussed in Section 3B).

## 7. 建立認證機制

### Establish an authentication mechanism:

利用適當的技術執行可靠的認證系統，用以驗證文化數據來源、數據庫存取權限，並在適當的情況下給予驗證證明。

Enforce a robust authentication system with the technologies in place to verify the sources of cultural data, database access privileges, and issue certification where appropriate.

## 8. 符合監管機制

### Comply with regulatory measures:

確保數據收集、分析和其他用途上的準確度、安全性和保障。同時，文化大數據可牽涉到個人喜好等較敏感的資訊，需要有清晰嚴格的規管，例如可以用區塊鏈保護個人資訊隱私權，或允許同意分享個人數據的相關人士查閱紀錄。

Ensure the accuracy, safety and security of data collection, analysis and other usages. Concurrently, cultural big data may involve more sensitive information such as personal preferences, requiring strict and clear regulatory measures. For example, consider using blockchain to protect the privacy of personal information or to allow access to records by those who have agreed to share their personal data.

最後，為了充分利用香港的獨特地理位置，**我們建議文化數據數碼建設向粵港澳大灣區市場開放**，以建立一個更大、更全面和更廣闊的文化數據資料庫。Last but not least, to leverage fully on Hong Kong's unique geographical location, **we recommend the cultural data infrastructure to open to Guangdong-Hong Kong-Macao Greater Bay Area market** for a bigger, fuller and more comprehensive cultural data bank.

## 第3B節：打造「文化IP」數碼交易平台，助力文化「走出去」

### Section 3B: Building Digital Cultural IP Trading Platforms for Culture “Going Out”

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現在我們將集中探討促進文化IP交易的數碼建設。如上文所述，「十四五」規劃中提及支持香港建設成為區域知識產權交易中心。而這一定位與打造香港成為中外文化藝術交流中心的定位相互連繫，知識產權與文創產業關係緊密，使這兩個定位交疊。

本節將進一步討論知識產權，尤其是版權，以及為何版權是促進文創產業商業活動的核心。從南韓和台灣的案例研究，可證明結合數據庫和交易功能的網上平台對於促進創意作品的商業利用，發揮着關鍵作用。

#### 何謂「文化IP」？

根據世界知識產權組織，知識產權是透過人類智慧所創造出來的，如發明、文學和藝術作品、設計及符號等 (WIPO, 2017)。知識產權建基於創意，所以保護知識產權便是保護創意。承認及保護創作者的知識產權可以為他們帶來經濟收益之餘，亦能激勵他們繼續創作。

We now move onto infrastructures that facilitate cultural IP trading. As mentioned, the 14th Five-Year Plan promulgated the development of Hong Kong into a regional IP trading centre. This positioning can go hand in hand with the mandate to develop Hong Kong into a hub for arts and cultural exchanges between China and the rest of the world, as the interdependence between IP and the CCI naturally brings the two together.

This section expands on the technicalities of IP—specifically copyright—and why it is at the core of commercial activities in the CCI. Case studies from South Korea and Taiwan further demonstrate to us that online platforms which combine database and trading functions are crucial to facilitating the commercial exploitation of creative works.

#### “Cultural IP”: How is IP relevant to the CCI?

According to the World Intellectual Property Organisation, IP is the creations of the mind, such as inventions, literary and artistic works, designs, and symbols (WIPO, 2017). IP stems from creativity and so the protection of IP protects creativity. Protecting and recognising the IP rights of individual creators can engender economic gains and incentivise them to further create.

知識產權，包括版權、商標、專利和外觀設計<sup>45</sup>等都是創意的貿易載體。其中，版權保障了創意思想的表達，創意思想的表達在文創產業中往往以書籍、歌曲、電影、畫作、表演、廣播等形式呈現，這些創意作品均受到版權保護，也說明了為何版權在文創產業中非常重要。<sup>46</sup>

**版權構成了文創產業中大部分經濟活動的基礎。**這是因為文創產業主要依靠版權來表現對原創及抽象形式作品的擁有權，並藉此進行貿易產生經濟效益，這是其他行業所不具備的特徵 (Erickson, 2018)。調查顯示，全球版權產業對國內生產總值的貢獻平均為**5.54% (WIPO, 2021)**，而這些產業恰恰是創新的關鍵動力。

然而版權本身並不具備很大的價值，版權必須透過商業利用開發才可以供創作者獲得經濟利益。而版權的商業利用則是指創作者通過授權、商品銷售和/或特許經營獲得市場價值 (IPD, 2017)。基本上，受版權保護的作品需要進行交易才能為創作者創造收入和價值。

因此，知識產權及其為經濟與文化發展所帶來的貢獻，對一個具競爭的創意經濟不可或缺。隨着文創產業與數字化日益交織，這一特徵也會越來越明顯。這也促使我們去思考，知識產權制度能夠如何容納更多的創新技術，並鼓勵更多的交易。<sup>47</sup>

IP rights including copyright, trademark, patent, and design<sup>45</sup> are all vehicles of trade for creativity. Of those, copyright protects the expression of an idea, which is why for the CCI, where creativity often takes shape in books, songs, films, paintings, performances, broadcasts, etc., copyright is particularly important.<sup>46</sup>

**Copyright constitutes the basis for most economic activities in the CCI.** This is because the CCI primarily, though not exclusively, relies on copyright to assert ownership in original and intangible expressions to generate monetary gains, a feature not shared by other industries (Erickson, 2018). **It is estimated that the average contribution of copyright industries to GDP is 5.54% worldwide (WIPO, 2021)**, and that these industries are key drivers of innovation.

But copyrights have very little value on their own. Instead, they must be commercially exploited for creators to derive economic benefit. Commercial exploitation of copyright is when creators gain the market value of their work through licensing, merchandising, and/or franchising (IPD, 2017). Essentially, copyrighted works need to be traded to generate income and value for creators.

A competitive creative economy is thus underpinned by IP and its contribution to economic and cultural development. This is becoming more apparent as the CCI becomes increasingly interwoven with the digital sphere, which propels us to think about how the IP regime can accommodate more innovative technologies, as well as encourage more lucrative trading across and beyond the CCI.<sup>47</sup>

45 除了版權外，其他知識產權都亦和文創產業相關，例如商標可反映出品牌的價值、專利保護技術發明、外觀設計也可以保護商品的外形（如形狀及圖案）。

Besides copyright, other IP rights are relevant to the CCI, such as trademark that reflects brand value, patents that apply to tech invention, and designs that cover the appearance (e.g., visible shape and pattern) of products.

46 文學與藝術作品在創造時已自動地受版權的保護。有別於商標、專利和外觀設計，版權不需註冊也會成立有效的保護。

Literary and artistic works are automatically protected by copyright upon creation. Unlike trademark, patent and design, copyright does not need to be registered for effective protection.

47 知識產權的交易指買賣、授權及整體的知識產權商品化。

IP trading refers to the buying, selling, licensing and overall commercialisation of IP rights.

在此背景下，我們用「文化IP」一詞來概括受版權及其他類別的知識產權保護的無形文化創意作品，例如書籍、電影、視頻、歌曲、漫畫、角色設計等。在第二章中，我們討論了文化IP於內容開發的重要性。接下來，我們認為香港應充分發揮自身在交流及交易方面的優勢，這不僅與「十四五」規劃中的願景相輔相成，更可以確保本地藝術家和創作者的創意得到認可和尊重，並得以持續發展。

In this context, we use the term “cultural IP” to broadly cover wide-ranging intangible cultural and creative goods that could be protected under copyright and other forms of IP law, such as publications, films, videos, music, comics, character designs, etc. In Chapter 2, we discussed the importance of developing cultural IP as part of content development, now we derive implications for Hong Kong to ride on our strengths with exchange and trading. This not only seeks to align with national vision, but more importantly, to also ensure the creative outputs of our local artists and creators are acknowledged, respected, and sustained.

南韓和台灣的政策顯示，成功的文化IP交易數碼建設，應是**集資料庫和交易功能於一身**的一站式平台。

Analyses of South Korea and Taiwan initiatives show that an effective digital infrastructure for cultural IP trading should act as an online one-stop-shop that combines the functions of a **database and trading platform**.

個案研究  
Case study

## 南韓數碼版權交易所 South Korea's Digital Copyright Exchange

數碼版權交易所是於2007年推出的版權數據庫和交易平台，由南韓文化體育觀光部轄下的韓國著作權委員會管理。數字版權交易所是一個一站式平台，結合了各種版權資訊和授權選項，<sup>48</sup>旨在鼓勵更廣泛地使用版權作品。如圖19所示，平台有主要三個功能：

Digital Copyright Exchange (DCE) is a copyright database and trading platform established in 2007, managed by the Korea Copyright Commission which is an agency under the MCST. It acts as a one-stop platform with comprehensive information on copyrighted works and licensing options,<sup>48</sup> which serves to encourage a wider use of copyrighted work. As illustrated in Figure 19, the platform has three main functions:

48 在2012年，數碼版權交易所整合了南韓的兩個版權相關系統，分別是著作權綜合管理編號，即一種記錄和管理註冊版權的標識系統，以及版權授權管理系統，即版權擁有者和用戶之間在網上簽訂授權協議的一站式服務。

In 2012, DCE integrated two copyright-related systems in South Korea. They are the Integrated Copyright Number (ICN), a unique identification system that records and manages registered copyrights, and the Copyright License Management System, a one-stop service for online licensing agreements between rights holders and users.

圖 19  
Figure

## 南韓的數碼版權交易所 South Korea's Digital Copyright Exchange

### 收集、儲存和管理版權資訊(數據庫) Collect, store and manage copyright information (Database)

3,000 萬項資料輸入：  
30 million data entries on:

- 原創作品\*  
Copyrighted works\*
- 版權擁有人  
Copyright holders
- 授權選項  
Licensing options



### 促進版權授權協議(交易) Facilitate copyright license agreement (Trading)

≥ 28 個合作夥伴，包括：  
≥ 28 partnerships with:

- 版權擁有人  
Copyright holders
- 版權發行機構  
Copyright distributors
- 版權特許機構  
Collective management organisations

### 開放予公眾使用 Publicly available to conduct searches

#### 版權網上使用過程 Digital Copyright Use Process

搜索原創作品的相關資料  
Search for info on copyrighted work



識別版權及其他權利  
Identify the rights



使用者授權合約  
Contract to approve use of copyright



簽訂合約  
Sign contract



使用作品  
Use of copyrighted work

註：\* 受版權保護的原創作品包括音樂作品、文學作品、圖片、電影、廣播、公共作品、藝術作品等。  
Note: \* Copyrighted works include musical works, literary works, pictures, films, broadcasts, public works, artistic works, etc.

資料來源：韓國著作權委員會 2018 年度報告 (2018)  
Source: Korea Copyright Commission 2018 Annual Report (2018)

1) 收集、儲存和管理版權資訊 (數據庫) :  
Collect, store and manage copyright information (Database):

- 截至2018年，數碼版權交易所包含了逾三千萬項版權資料的數據輸入。

DCE contains over 30 million copyright information data entries as of 2018.

- 版權資料包括：文學和音樂作品、圖像、電影、新聞和廣播稿件（交易類別以音樂作品居多）。

Copyright information includes: literary and musical works, images, films, news, and broadcasting scripts (musical works make up the majority of trading activities).

表格中為所收集的資料 Table showing examples of information collected:

版權著作 Copyrighted works	收集的資料 Information collected
<b>音樂作品</b> Musical works	歌詞、作曲家、編曲、歌手、表演者、製作人、專輯、歌名、發表年份等 Lyrics, composer, arrangement, singer, performer, producer, album, title, year of release, etc.
<b>文學作品</b> Literary works	作者、翻譯者、書名、發行國家、出版日期、媒體類型等 Writer, translator, book title, country of publication, publication date, media format, etc.
<b>圖片</b> Pictures	圖片名稱、作品簡介、拍攝日期、拍攝地點、攝影師等 Title, explanation of work, date of picture taken, shooting place, photographer, etc.
<b>廣播稿件</b> Broadcasting scripts	字幕、集數、情節、首播日期、首播節目時長、頻道等 Subtitle, episodes, plots, date of original broadcast, time of original broadcast, channels, etc.
<b>新聞</b> News	正副標題、媒體公司、記者、發布時間、文章連結等 Sub-headlines, media companies, journalists, publication time, article links, etc.
<b>電影</b> Films	字幕、題材、電影類型、電影評分、時長、製作年份、上映日期、底片格式等 Subtitle, genres, types of films, film rating, running time, year of production, release date, format information, etc.
<b>藝術作品</b> Artistic works	字幕、主要材料、創作日期、收藏日期、擁有收藏品的機構名字等 Subtitle, main materials, date of creation, date of collection, name of organisation possessing the collection, etc.

資料來源：韓國著作權委員會2018年度報告 (2018)  
Source: Korea Copyright Commission 2018 Annual Report (2018)



- 版權資料來源：版權擁有者、發行人、版權集體管理機構，包括由國家資助的合作機構（如韓國電影振興委員會）、非牟利機構（如韓國音樂著作權協會、韓國作家協會、韓國新聞基金）、私人公司（如現為 Kakao M 的 LOEN 娛樂和 CJ E&M）。

Sources of copyright information: copyright holders, distributors, collective management organisations. Partner organisations range from state-supported entities (e.g., Korean Film Council), non-profits (e.g., Korea Music Copyright Association, Korean Society of Authors, and the Korea Press Foundation), to private companies (e.g., LOEN Entertainment, now known as Kakao M, and CJ E&M).

## 2) 促進版權授權協議（交易）：

### Facilitate copyright license agreement (Trading):

- 數碼版權交易所將版權擁有者與使用者聯繫起來，讓創作者公開且透明地得到合理的報酬。

DCE connects copyright holders with users, creating a streamlined remuneration system for creators.

- 個人使用者和企業可以尋找他們想要使用的版權作品，並確定相關版權資訊，從而和版權擁有者於網上簽署授權協議，最終獲得作品的使用權。

Individuals and businesses can look for copyrighted works they would like to use, identify the rights, and sign online licensing agreements with the copyright holders to eventually use the works for their own purpose.

## 3) 公開版權資訊供公眾搜索和使用：

### Make collected copyright information publicly available for search and use:

- 只要用戶在數碼版權交易所所有登記，便可以查閱到所有版權資訊，這有助於國內外市場的版權使用。

DCE makes all copyright information visible by the general public, as long as the user has a registered account on the platform. This allows for easy access by domestic and international markets.

除了南韓之外，台灣也公布了建立版權基礎建設的計劃：

Besides South Korea, Taiwan has also announced plans to construct a copyright infrastructure:

個案研究  
Case study

## 台灣文化內容授權平台<sup>49</sup>

### Taiwan's Cultural Content Licensing Platform<sup>49</sup>

文化部的「數位文化內容流通機制推動計畫」源自2020年推出的「服務型智慧政府2.0推動計畫」，此計畫將在2021年至2025年間建設以區塊鏈為技術支撐的文化內容交易平台。與南韓的數碼版權交易所相類似，台灣的平台會**結合數據庫和交易功能於一身**：「後端」的版權存證與認證平台將扮演數據庫的角色，而「前端」的文化內容授權平台將作貿易用途。

Borne out of the Smart Government 2.0 Programme in 2020, the Ministry of Culture's project on building a Digital Cultural Content Distribution Mechanism will see the construction of a blockchain-led cultural content trading platform between 2021 to 2025. Like South Korea's DCE, Taiwan's infrastructure will **combine database and trading functions in one**: the “back-end” copyright management and authentication platform will act as the database, and the “front-end” content licensing platform will enable trade.

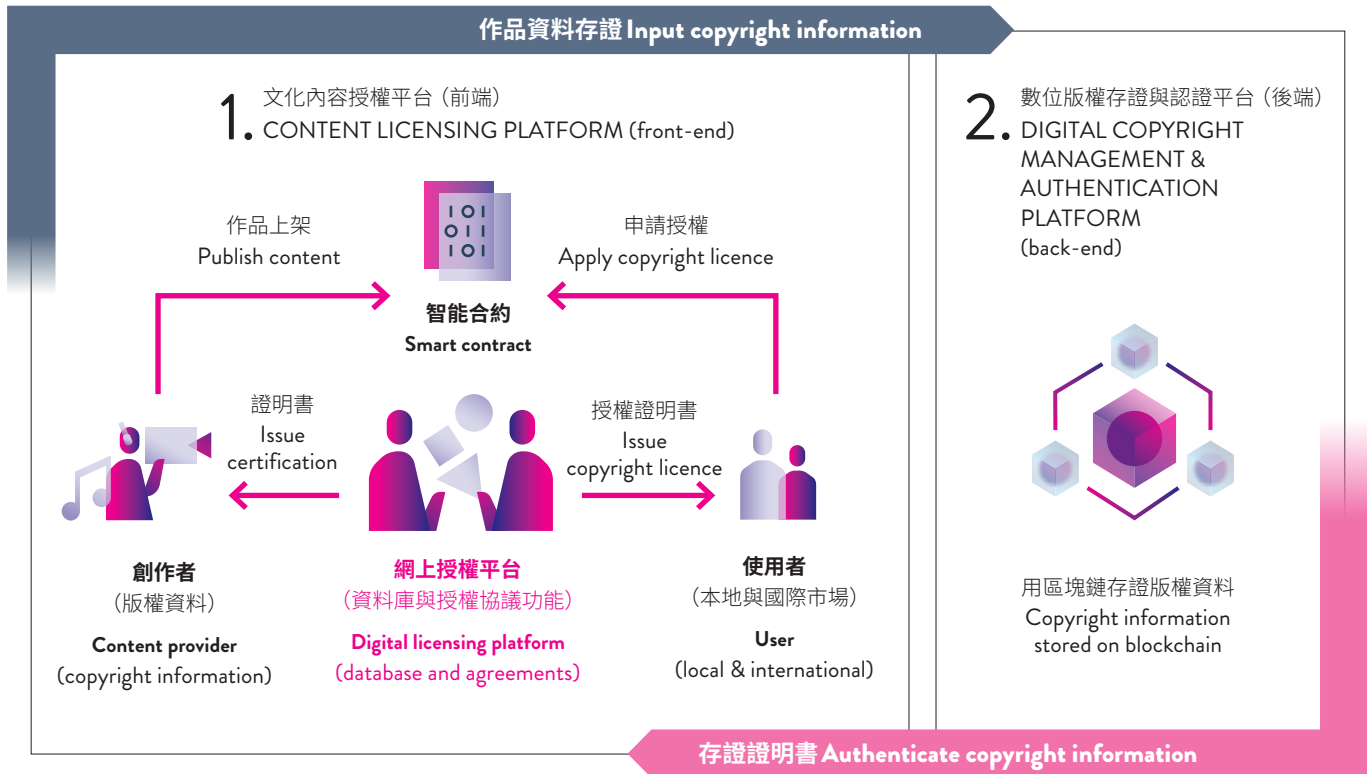
以下將詳細說明，區塊鏈技術如何應用於這些資料庫和交易功能中：

How blockchain technology is utilised across these database and trading functions are elaborated below:

<sup>49</sup> 撰寫本報告之際（2022年3月），此計劃仍在進行中。  
At the time of writing (March 2022), this infrastructure is currently ongoing.

圖 20  
Figure 20

## 台灣的網上文化內容交易平台 Taiwan's digital cultural content licensing platform



資料來源：數位文化內容流通機制推動計畫 (2021)  
Source: Digital Cultural Content Distribution Mechanism Promotion Programme (2021)

1) 儲存及認證數據庫中的版權資料 (資料庫) :  
Storage and authentication of copyright information in the database (Database):

- 所有版權資訊會透過區塊鏈認證，並傳送至數據庫，以釐清版權和擁有權，同時確保資訊不被篡改。

Blockchain will be used to authenticate all copyright information fed into the database—clarifying rights and ownership, and making sure information is immutable.

- 將版權資訊的儲存與流通數碼化，確保於授權平台進行的網上交易得到保障。

It is also used to digitalise copyright storage and flow, and to ensure the security of online deals signed on the licensing platform.

- 版權資料來源：與公私營文化機構合作，例如公營資料庫和音樂版權集體管理機構，整合來自傳統文化界和創意產業的內容。

Sources of copyright information: works with both public, and private cultural organisations, such as public archives, and collective management organisations for musical works, to consolidate contents from the traditional cultural sector and the creative industries.

2) 結合智能合約，促進平台交易 (交易) :  
Combine with smart contract to facilitate transactions on the licensing platform (Trading):

- 引入區塊鏈技術和智能合約，以保障內容授權平台上的數碼授權協議，並計劃於以太坊區塊鏈上運行交易。

Digital licensing agreements on the content licensing platform warrant the introduction of blockchain-enabled smart contracts, and this is envisioned to run on the ethereum blockchain.

- 促進更快、更透明的交易，以自動化的模式為內容創作者提供公平合理的報酬。

This will facilitate faster and more transparent deals, and provide fairer compensations to content creators, all in an automated manner.

台灣的文化內容交易平台同樣**目標向公眾開放**，以促進更廣泛地使用版權作品。不過撰寫本報告之際，這方面的詳情尚未公布。

Taiwan's cultural content trading platform also **aims to be publicly accessible** to promote wider use of copyrighted works, though details on this are yet to be released at the time of writing.

就以上案例可看出，南韓及台灣政府都留意到版權、文化IP和創意的巨大潛力，較早起步的南韓已從他們的版權產業中獲得經濟收益。隨着台灣計劃以區塊鏈技術支撐，構建文化IP貿易基礎建設，我們亦需要反觀香港在這方面的進展。

## 香港在「文化IP」交易上相形見拙

要建立一個卓有成效、具有遠見，且能夠促進創意作品交易的知識產權制度，政府必然扮演着重要的角色。

事實上，在國家政策頒布之前，知識產權署長期以來都在推動香港成為區域知識產權貿易中心。早在2015年，知識產權貿易工作小組就這一願景發布了策略框架，提出的四個策略之一便是「支援知識產權的創造和利用」，正與創意產業的授權和特許經營等業務相契合（商經局，2015）。

**然而，在文創產業方面，我們目前仍無法如南韓及台灣般，充分發揮文化IP的經濟潛力。**

From the case studies discussed above, it is evident that both the South Korean and Taiwanese governments realise the immense potentials related to copyright, cultural IP, and creativity. With an early start, South Korea is sure to be reaping significant economic benefits from their copyright industries. As Taiwan plans for its blockchain-led cultural IP trading infrastructure, we consider where we are on the map for this.

## Hong Kong's approach to “cultural IP” trading pales in comparison

The Government plays an important role in building an effective and future-proof IP regime that facilitates the trading of creative works.

In fact, prior to the national policy's announcement, IPD has long been promoting Hong Kong as an IP trading hub, and the Working Group on Intellectual Property Trading had published a strategic framework to realise this vision back in 2015. One of the four strategies proposed was to “support IP creation and exploitation”, in which licensing and franchising arrangements in the creative industries apply (CEDB, 2015).

**However, as far as the CCI is concerned, we have not been able to fully leverage the economic potentials of cultural IP the same way South Korea and Taiwan have.**

首先在香港，版權議題並未獲得如南韓及台灣般的重視，甚至容易被忽略。政策方面，知識產權署亦沒有特別為完善版權資料收集及授權等業務制訂策略；而在南韓和台灣，這些都是由政府主導的。

由於版權在香港毋須註冊自動生效，版權資料收集和授權多數是由獨立營運的版權特許機構管理，這些機構亦稱為「版權集體管理機構」或「收集機構」，版權特許機構獲版權擁所有者授權，以代表其批出特許給版權作品使用者（IPD，2004）。

香港目前有六家版權特許機構。<sup>50</sup>而知識產權署只是負責協助這六家機構進行再註冊，卻無其他支持版權交流和交易的措施，更遑論制訂利用文化IP的策略，以提升香港的文化軟實力。

**因此，我們認為香港的版權制度是有龐大的發展空間，去專門推動文創產業發展，特別是在文化IP交易方面，促進線上貿易。**

To begin, copyright in Hong Kong does not carry the same weight as it does in South Korea or Taiwan. Structurally it may be overseen by IPD, but operationally, IPD has no policy mandate over how copyright information collection and licensing is done—yet in South Korea and Taiwan, these are mandated and government-led.

Because copyright is an automatic right in Hong Kong, copyright information collection and licensing largely fall on independently-run, and privatised “copyright licensing bodies”, also known as “collective management organisations (CMOs)” or “collecting societies”, which are organisations that are authorised by copyright owners to grant licenses of copyrighted works to users on their behalf (IPD, 2004).

There are currently six of these licensing bodies in Hong Kong.<sup>50</sup> And as far as IPD is concerned, other than assisting the re-registrations for these six licensing bodies, there is no further mandate for IPD to bolster opportunities for cultural IP trading and exchange, let alone devise strategic policies of exploiting cultural IP in Hong Kong to boost cultural softpower.

**Hence, we suggest that Hong Kong’s copyright regime has a lot of room for development as a standalone portfolio for the CCI, especially in the realm of cultural IP trading—and an online one at that.**

<sup>50</sup> 六家機構分別是香港作曲家及作詞家協會有限公司、香港音像聯盟有限公司、Motion Picture Licensing Company (Hong Kong) Limited、香港音像版權有限公司、香港複印授權協會有限公司，以及香港書刊版權授權協會有限公司。

The six licensing bodies are Composers and Authors Society of Hong Kong Limited, Hong Kong Recording Industry Alliance Limited, Motion Picture Licensing Company (Hong Kong) Limited, Phonographic Performance (South East Asia) Limited, The Hong Kong Copyright Licensing Association Limited, and the Hong Kong Reprographic Rights Licensing Society Limited.

事實上，就文化IP貿易而言，政府一直有為文創產業舉辦大型貿易活動。例如香港國際影視展可說是香港、甚至是亞洲最大型的年度電影及電視內容市場，一直有不錯的成績。<sup>51</sup> 另一個例子是每年一度的香港國際授權展，當中包含角色、設計、動畫和時裝內容的貿易。香港國際授權展被認為是授權交易的強大推動者，匯聚了眾多企業和公司，每年都促進了可觀的商業配對。<sup>52</sup> 然而，這些實體活動都有一定的局限，最明顯的局限是所有交易均受到時間和地點的限制。

隨着線上線下混合模式的興起，以及由於新冠疫情而舉辦的網上活動成為新常態，我們嘗試尋找香港有否由政府主導的網上知識產權交易平台。我們的研究顯示，的確有由政府主導的網上大型交易及資訊平台，即亞洲知識產權交易平台。此平台於2013年推出，以「加強國際性知識產權交易」和「促進香港成為亞洲知識產權交易樞紐」為目標。平台由香港貿易發展局創立及管理，目前收集了全球28,000項可交易的知識產權清單，清單分為四個類別，分別有專利、版權、商標和註冊設計。

**然而，我們發現亞洲知識產權交易平台同樣在對外文化貿易上，並沒有明確的策略或政策目標。**

Indeed, as far as cultural IP trading goes, the Government has admittedly organised some of the largest physical events that involved IP trading opportunities for the CCI. Hong Kong FILMART, for example, is Hong Kong's—and arguably Asia's—largest annual marketplace for film and TV content trading, and has shown demonstrated success.<sup>51</sup> Another example is the annual Hong Kong International Licensing Show (HKILS), where characters, designs, animation, fashion contents are traded. HKILS is deemed a strong facilitator of licensing transactions, gathering a large community of businesses, and facilitating a promising number of matchings each year.<sup>52</sup> However, there are obvious limitations to physical events. A most notable one, is that transactions are restricted by time and place.

With the rise of hybridised modes and the new normal of digitally-held events over physical due to the pandemic, we looked for any government-led digital platforms for IP trading. Our research shows there is the Asia IP Exchange (AsialPEX), a government-led online portal and database established since 2013, with the aims of “strengthening international IP trading” and “becoming Asia’s IP trading hub”. Developed and managed by the Hong Kong Trade Development Council (HKTDC), it assembles 28,000 tradeable IP listings on four types of IP from around the globe—patents, copyrights, trademarks, and registered designs.

**Again, we find there is no articulate strategy, mandate, or policy goal on pushing for foreign cultural trade on AsialPEX.**

51 2021香港國際影展吸引了來自81個地區的7,000多名觀眾，促成了近2,200部影視內容的推廣和發行。過去兩年，香港國際影展轉為網上舉行，為業界人士在新冠疫情之下，提供了線上內容交易和會面的平台（香港貿易發展局，2021）。

FILMART 2021 attracted over 7,000 attendees from 81 regions, and facilitated the promotion and distribution of nearly 2,200 film and TV contents. For the past two years FILMART took place online, providing a virtual content trading and meeting platform for industry players during the COVID-19 pandemic. (HKTDC, 2021).

52 2021香港國際授權展吸引了來自47個地區的250多家企業，並促成了1,200多個企業配對（香港貿易發展局，2021）。

HKILS 2021 attracted over 250 businesses from 47 regions, and facilitated over 1,200 business matchings (HKTDC, 2021).



首先，創意作品的清單並非全面。例如，當中包括一些電影和動畫作品，但卻沒有音樂作品。這或許是因為亞洲知識產權交易平台未必與版權特許機構合作，換言之，交易平台並非完全具代表性。從我們與持份者的訪問中可得知，文創產業或知識產權業界都對此平台較陌生。該平台亦缺乏詳細的版權分類，導致查找不便。**這些現象都反映出，我們缺乏真正善用亞洲知識產權交易平台的策略，去促進文化IP交易。**

我們認為政府應該通過文化IP交易平台，有效地連接版權擁有者和使用者。平台的資料庫功能需收集並清晰列出香港創作者或文化機構的版權作品之基本資訊（如南韓數碼版權交易所般），例如劇本或音樂作品，並且利用區塊鏈等新興技術，讓這些作品能夠在平台上進行安全的交易（如台灣文化內容授權平台般）。

考慮到我們在第3A節中也討論了文化數據，政府亦可以思考如何令文化數據和IP交易建設發揮協同作用。

在新常態之下，我們是時候考慮建立一個文化IP數碼建設，在最大程度上把握國內外的商業機會。除了實體市場之外，我們亦應將眼光放遠，開始着力推動研究數碼建設，讓更多交易能夠安全和高效地完成。

First, the listings on creative works are incomprehensive. For instance, we were able to find some publications and audiovisual works pertaining to film and animation but there were no musical works. This might be because AsiaPEX does not necessarily partner with collecting societies, meaning its database is not fully represented. Based on our stakeholder interviews, the uptake of the platform among the CCI or IP practitioners is also questionable. It also lacks a detailed categorisation of copyright items, rendering it difficult to navigate. **All this signals the lack of strategy in leveraging AsiaPEX to push for more robust and competitive cultural IP trading.**

We suggest the Government, through a cultural IP trading platform, to play the role of connecting copyright owners and users. The database function of the platform should seek to collect and display basic information on copyrighted works from Hong Kong-based individuals or partnered cultural organisations (like that of DCE)—such as scripts or music compositions—and allow them to be used and traded securely on the platform using new technologies such as blockchain (like that of Taiwan's content licensing platform).

Bearing in mind our discussion on cultural data in Section 3A, the Government could also think about how to best synergise the databases of cultural data and IP infrastructures.

As we continue to live the new norm, it is indeed high time to consider an infrastructure that digitalises cultural IP trading to maximise commercial opportunities domestically as well as internationally. We should think beyond physical marketplaces and start looking into digital infrastructures that will allow for greater volumes of transactions that are done more securely and efficiently.

建議  
RECOMMENDATION 3.2

## 設立文化 IP 交易數碼建設，推動文化「走出去」

## Set up a cultural IP trading infrastructure for culture “going out”

觀乎全球趨勢，我們建議政府建立一個致力於推動和推廣文化 IP 交易的數碼平台，以展示出版權的經濟潛力是香港文化「走出去」的其中一部分。政府可以考慮完善現有的亞洲知識產權交易平台，或建立專門用於文化 IP 交易的新平台。

Based on our observations of where global trends are heading, we recommend the Government build a digital platform dedicated to the facilitation and promotion of cultural IP trading and exchange, and show it recognises the economic potentials of copyright as part of culture “going out” for Hong Kong. The Government can consider building on the existing AsiaIPEX, or establish a new digital infrastructure dedicated to cultural IP trading.

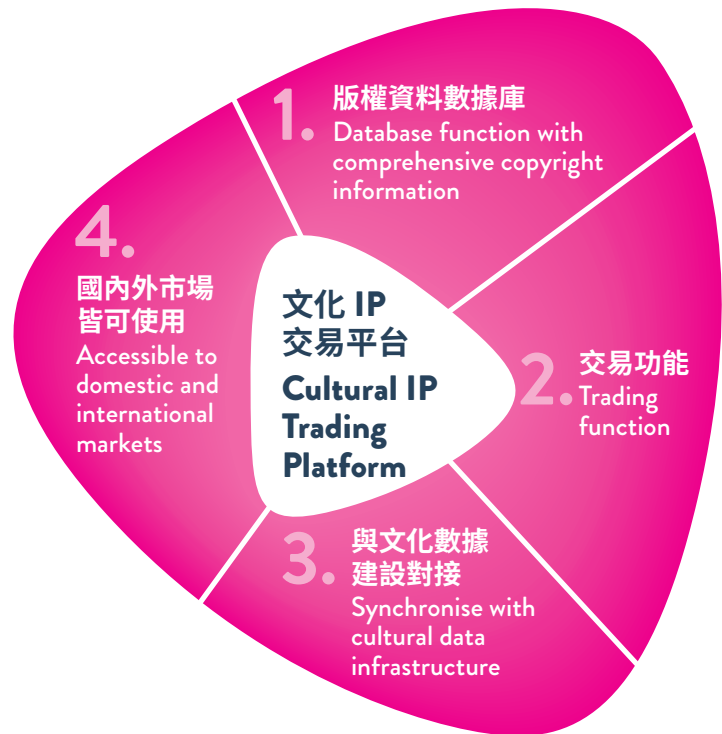
參考南韓和台灣，我們建議這個文化 IP 交易建設具備以下四個特點：

Based on the models of South Korea and Taiwan, we recommend this cultural IP trading infrastructure demonstrate four features:

圖 21  
Figure

## 文化 IP 交易平台的四大特點

## Four features of a Cultural IP Trading Platform



### 1. 全面的數據庫功能，用於儲存和管理從公私營文化機構收集而來的版權資料

**Comprehensive database function that stores and manages copyright information collected from public and private cultural organisations**

- 與文化及創意產業和版權特許機構有更緊密的合作，透過特許機構去整合版權作品資訊，包括但不限於音樂和文學作品、電影和動畫等。

Work closely with organisations in the CCI as well as with collecting societies to gather a representable range of copyrighted works, including but not limited to musical and literary works, films, animations, etc.

- 集中資訊，顯示版權作品由哪些特許機構或版權擁有人管理。（參考南韓數碼版權交易所）

Centralise information that shows which copyrighted works are handled by which collecting societies or copyright owners. (Reference: South Korea's Digital Copyright Exchange)

### 2. 交易功能，以促進版權擁有人和使用者之間高效透明的網上授權協議

**Trading function that enables efficient and transparent online licensing agreements between copyright holders and users**

- 為版權擁有人 / 內容創作者建立一個易於追蹤的合理報酬機制。

Built-in fair compensation mechanism for copyright holders/content creators that are easily trackable.

- 利用區塊鏈和智能合約等新技術，<sup>53</sup> 打造更快和更透明的交易。（參考台灣文化內容授權平台）

Use new technologies such as blockchain and smart contract<sup>53</sup> to create greater speed and transparency of transactions. (Reference: Taiwan's Cultural Content Licensing Platform)

<sup>53</sup> 智能合約儲存於區塊鏈中，當達到合同中的預定條件（如與授權相關條款）時，交易便會自動執行。例如，當創作者的作品被使用時，報酬就會自動交到創作者手中。

Smart contracts are stored on the blockchain and automatically execute when predetermined conditions—such as licensing terms—in the contract are met. For example, it can enable automatic remuneration to creators when their works are being used.

### 3. 連接文化數據建設，並與其同步（建議3.1中提及）

#### Link, and synchronise to the greater cultural data repository infrastructure (as mentioned in Recommendation 3.1)

- 註冊和記錄來自兩個系統內的交易更新。  
Register and document transactional updates from both systems.

### 4. 供本地、區域及國際市場使用

#### Accessible by domestic, regional, and international markets

- 為本地、大灣區以及國際市場的用戶搭建平台和系統，供他們使用。

Establish a platform and system for users across local, GBA, and international markets to access.

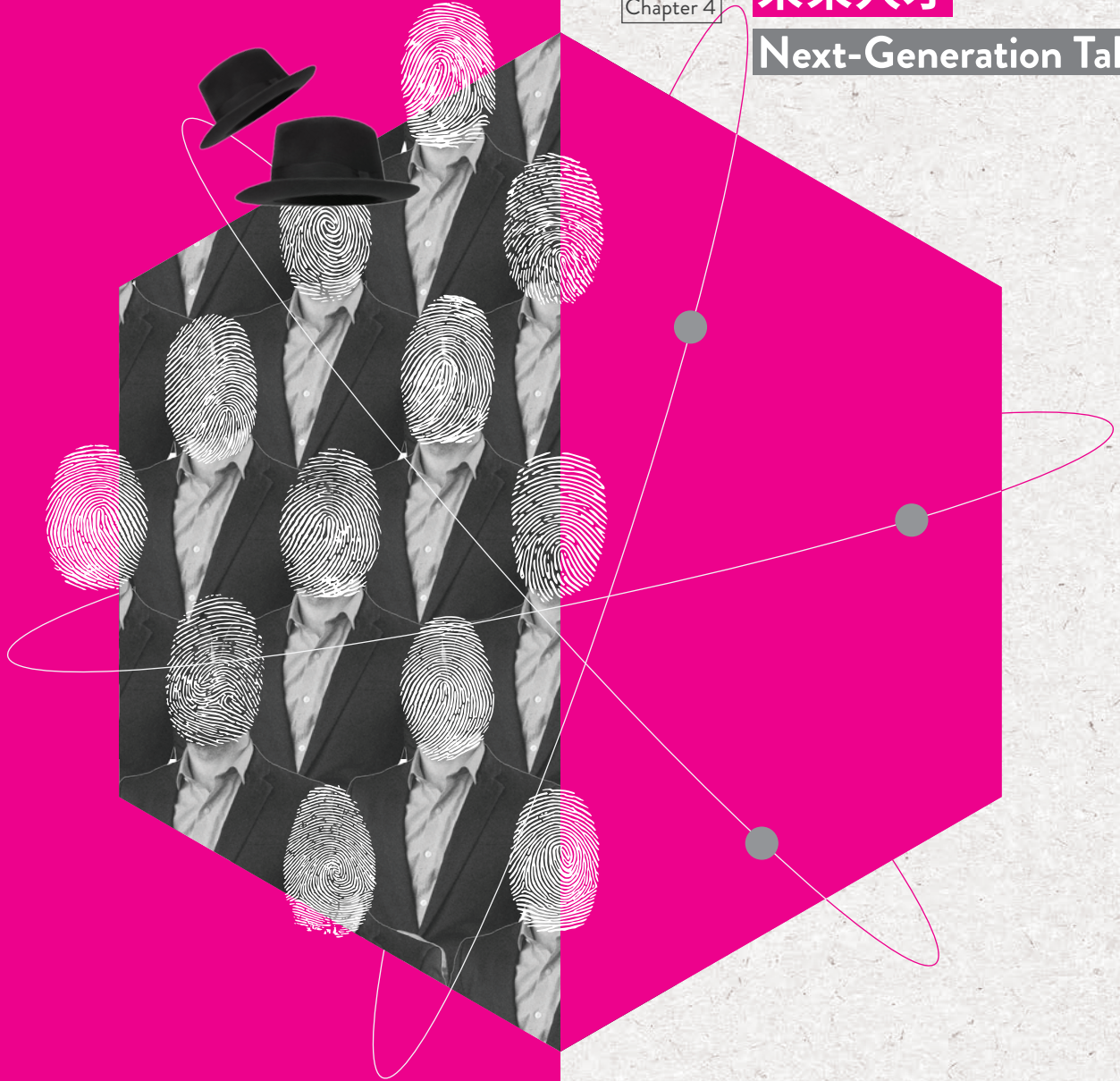
這將有助進一步實現國家「十四五」規劃中，香港成為中外文化藝術交流中心和區域知識產權貿易中心樞紐的兩個願景。

These will further contribute towards our greater ambitions of being a cultural exchange and IP trading hub as per the National 14th Five-Year Plan.

第四章  
Chapter 4

# 未來人才

## Next-Generation Talents



最後，人才培育亦是助香港實現「十四五」新文化願景與定位之關鍵。正如《2021年施政報告》中指出，藝術科技人才在未來將起到至關重要的作用。<sup>54</sup> 本章將討論全球對「沉浸式人才」日益增長的需求，尤其是能夠掌握實時遊戲引擎技術的人才，以及討論該現象對人才規劃的影響。我們將先研究英國及南韓在新世代人才培育方面的最新動向，再進一步闡述香港在大灣區中的獨特優勢，並作相關建議。

Last but not least, nurturing talents is also a key strategy to realising Hong Kong's new cultural visions and positioning under the 14th Five-Year Plan, and as per *Policy Address 2021*, Arts Tech talents will play an important role.<sup>54</sup> This chapter discusses the increasing global demand for “immersive talents”—specifically those who can navigate Real-Time Game Engines (RTGE)—and its implications for the talent pipeline. We start by examining the latest institutionalised efforts by the UK and South Korea on grooming these next-generation talents, before considering Hong Kong's unique advantages within the GBA and submitting our recommendations.

54 《2021年施政報告》第70段（發展中外文化藝術交流中心）與第158段（藝術文化人才）中有所概述。

This is outlined in *Policy Address 2021* Paragraphs 70 (Developing into an East-meets-West Centre for International Cultural Exchange) and 158 (Arts and Culture Talents).



## 全球對「沉浸式人才」(包括藝術科技)的需求不斷增加

### Increasing Global Demand for “Immersive” (and also Arts Tech) Talents

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「沉浸式」一詞在這裏涵蓋虛擬現實、擴增實境、混合實境和延展實境等可以增進虛擬空間現實感的技術。過去數年，我們注意到沉浸式內容體驗與技術日益興起，並開始在文化創意領域佔據重要位置。這主要體現在電子競技的興起、延展實境技術<sup>55</sup>於實體演出中的應用，以及在融合電腦合成影像與遊戲引擎技術後，影視製作轉向虛擬製作的顯著轉變。

近期，「元宇宙」<sup>56</sup>這一概念通用於虛擬空間的發展，也鞏固了沉浸式技術的快速成長，使未來對沉浸式技術的依賴更加明顯。從賈斯丁·比伯的虛擬音樂會到蘇富比的虛擬畫廊，元宇宙見證了虛擬實境在文化娛樂中應用的激增。文化界具標誌性的人物和新晉人才皆踏入虛擬世界，將數碼空間視作創意內容的下一個前沿陣地，邁向文化生產與消費的新時代。

The term “immersive” here refers to an overarching bracket of virtual, augmented, mixed and extended reality technologies that can elicit the realistic feeling of being present in a virtual space. Over the past few years, we notice that immersive contents and technologies are on the rise and beginning to take centre stage in the cultural and creative sectors, as evident in the rise of esports, the application of extended reality<sup>55</sup> in live performances, and perhaps most noticeably, the paradigmatic shift towards virtual production (VP) in filmmaking and screen industries, which involves combining computer generated imagery (CGI) and game engines to enable completely new ways of making film and TV.

More recently, the developing notion of a universal digital space referred to as the “metaverse”<sup>56</sup> can further solidify the current growth and dependency of immersive technology in the future. From Justin Bieber’s virtual concert to Sotheby’s virtual gallery, the metaverse has witnessed the proliferation of mixed reality cultural and entertainment experiences. Cultural icons and newcomers alike are caught maneuvering into the virtual world, carving their own digital spaces as the next frontier for creative content, and paving way towards a new era of cultural production and consumption.

<sup>55</sup> 「延展實境」是沉浸式技術中總括性的術語，其中包括了虛擬實境 (AR)、擴增實境 (VR) 和混合實境 (MR)。

“Extended reality” is a wide-encompassing term for immersive technologies, including virtual reality (VR), augmented reality (AR), and mixed reality (MR).

<sup>56</sup> 簡而言之，「元宇宙」是一個由虛擬現實、擴增實境等科技手段構建的虛擬與現實交融的空間。有人認為，元宇宙最終將融入現實生活，滲透如商務會議、購物、遊戲等多個領域。

In the simplest terms, the “metaverse” is a digital space characterised by interconnected virtual experiences built by technologies such as VR and AR. Some people imagine that the metaverse will eventually penetrate all sorts of activities in the physical world, such as business meetings, shopping, gaming and beyond.



有關元宇宙的數據初步顯示，直到2028年，其全球市場規模將超過8,000億美元（約6萬億港元）（Emergen Research，2021）。**這些趨勢均表明，沉浸式產業將成為文創產業的重中之重，而能夠掌握和應用沉浸式技術的人才也變得格外重要。**

在此背景下，「藝術科技」自然成為用藝術和科技元素創造沉浸式體驗的載體，由此對該領域的人才產生更大需求。

## 實時遊戲引擎是沉浸式技術中的關鍵技能 Of immersive skills, a key skill to master is in Real-Time Game Engines (RTGE)

**實時遊戲引擎**是創建實時3D內容的關鍵工具。根據Epic Games和Burning Technologies報告（2019），在過去五年裏，該領域**經歷了爆炸性的需求增長**。這是因為實時3D在文創產業中的應用日趨普遍，用以實現更大規模的想像，如輔助創造數碼內容、設計視覺化、三維建模和渲染等。VR頭戴式裝置和動作捕捉便是實時3D應用的兩個例子。

報告顯示，在2017年至2018年期間，多個英語<sup>57</sup>和歐盟國家有超過315,000個與3D電腦繪圖相關的職位，其中超過30,000個（約10%）需要實時3D技能（Walsh et al., 2019）。該報告亦顯示，擅長使用遊戲引擎的遊戲開發者享有最高的10年預計增長率，為21%。

57 五個英語國家分別是英國、加拿大、澳洲、新西蘭和新加坡。  
The five English-speaking nations are the UK, Canada, Australia, New Zealand, and Singapore.

Initial research into figures related to the metaverse suggests that its global market size will surpass USD 800 billion (approx. HKD 6 trillion) by 2028 (Emergen Research, 2021). **All these trends point to the high probability for the CCI's future to thrive on immersive experiences, and talents who can craft, navigate and generate those experiences will be coveted.**

Against this backdrop, “Arts Tech”—among other definitions—becomes the practice to amalgamate artistic and technological elements to create immersive experiences, which generates a high demand for talents who possess the expertise to create them.

**RTGE** are the key tools to creating real-time 3D contents—which according to a report by Epic Games and Burning Technologies (2019) is an area that **has experienced explosive demand growth** over the past five years. This is because real-time 3D is increasingly prevalent in the CCI to realise grander imaginations, assisting digital content creation, design visualisation, 3D modelling, and rendering, to name a few. VR headsets and motion capture are two examples of real-time 3D applications.

The report shows that between 2017 to 2018, there were over 315,000 3D graphics skills-related job postings in English-speaking<sup>57</sup> and EU nations, and of those, over 30,000 (around 10%) specifically required real-time 3D skills (Walsh et al., 2019). Video game developers who are adept at the use of RTGE also have the highest 10-year projected growth rate of 21%, according to the same report.

值得關注的是，雖然遊戲引擎最初是為了促進電腦遊戲的發展而創造的，但後期已延用至許多不同用途，如電影電視製作、數據可視化、聲音裝置等。同時，虛擬現實、擴增實境和混合實境也廣泛滲透文創產業中的各個範疇，包括設計、建築、時裝和表演藝術等。事實上，香港的電影業界人士對遊戲引擎也倍感興趣，希望用以進行虛擬製作。遊戲引擎可以在拍攝過程中實時生成逼真的繪製圖像，並且可以根據現場的藝術指導立即進行修飾和調整。

It is important to note that even though RTGE was originally created to enhance the development of computer games, they have since grown into many other uses such as film and TV production, data visualisation, sound installations as well as VR, AR and MR—penetrating the wider spectrum of the CCI including design, architecture, fashion, and the performing arts etc. Indeed, a phenomenon currently observed in Hong Kong is that film industry professionals have expressed the most interest in leveraging RTGE on virtual productions. With RTGE, hyper-realistic, pre-drawn imageries can be conjured up in real-time during production, and can be instantly retouched and adjusted based on artistic directions made on set.



專才正在用遊戲引擎進行內容創作  
Talents using game engine to create content

Epic Games 的首席執行官 Tim Sweeney 曾說……他認為遊戲引擎在本世紀的作用相當於相機於上世紀的作用一樣，這就像……你不會指望一個不懂使用相機的人能夠成為導演一樣。

Tim Sweeney the CEO of Epic Games [Unreal's owners] basically said... He thinks that the game engine will be to this century what the camera was to the last century which means ... the same way that you couldn't expect to be a director without knowing how to use a camera.

Mohen Leo  
體驗開發總監 Director of Experience Development  
ILMxLAB

資料來源：《英國未來故事學院創造沉浸式體驗所需技能報告》(2020)  
Source: StoryFutures Academy Skills for Immersive Experience Creation Report (2020)

遊戲引擎的靈活性意味着它將成為這個時代最重要的內容創作及發行平台，其影響力可擴散至文創產業和其他相關領域 (Bennett & Murphy, 2020)。近年來，虛幻引擎與 Unity 等遊戲引擎已在沉浸式體驗製作行業中站穩陣腳，懂得操作它們的技能變得必不可少。**文創產業的未來發展因此急需遊戲引擎的助力。**

This flexibility means that RTGE are set to become this era's most significant content creation and distribution platform, impacting all sectors of the CCI and beyond (Bennett & Murphy, 2020). In recent years, game engines such as Unreal Engine and Unity have gained a foothold in the immersive experience production industry, and the ability to operate and manipulate them has become not only desirable but essential. **Going forward, the proficiency in RTGE for the CCI is imminent.**

## 整裝待發：各國政府如何培養未來人才？

### Getting *virtually* ready: how are Governments around the world grooming next-generation talents?

現時世界各地皆缺乏沉浸式人才，尤其是遊戲引擎技術人才。其原因主要是，雖然該行業在全球高速發展，卻仍處於起步階段。各地政府如英國和南韓，都不遺餘力地去回應此領域在經濟上帶來的指數增長。他們亦正推行相應的政策去培養下一代沉浸式人才，以彌補目前的技能短缺。

首先，我們將介紹英國新成立的一個國家機構——英國未來故事學院。該學院旨在提高英國的創意勞動群在**實時製作技術方面的技能**，以加強沉浸式內容故事創作。接着，我們將探究隸屬南韓文觀部的韓國文化產業振興院的資助項目，這些項目旨在培養沉浸式內容和文化技術研發的專業人才。

It is currently a global challenge to gather talents fluent in immersive skillsets, especially in RTGE, because the industry—though picking up its pace—is still at its infancy globally. Governments around the world, such as the UK and South Korea, have spared no time in realising the exponential growth this field will bring. They are making institutional efforts and policy commitments to groom next-generation immersive talents to make up the current skills shortage.

We begin with a newly-established national institution in the UK, the StoryFutures Academy, aimed at upskilling the UK's creative workforce on **real-time production technology for immersive storytelling**. We then delve into an ongoing funding programme operated by KOCCA, an agency dedicated to arts tech affiliated with South Korea's MCST, that is targeted at incubating professional talents in immersive and cultural technology R&D.

## 英國未來故事學院 The UK's StoryFutures Academy

英國未來故事學院是一所**國家沉浸式故事中心**，成立於2018年，政府斥資一千萬英鎊（約1.06億港元），是產業策略挑戰基金中未來觀眾計劃的關鍵，由英國國家電影電視學院和倫敦大學皇家哈洛威學院聯合運營。該學院旨在培訓參與者掌握最先進的沉浸式技術，使**英國創意產業人才成為世界上最懂得使用虛擬現實、擴增實境和實時製作技術進行沉浸式內容故事創作**的一批人。

StoryFutures Academy is the UK's **National Centre for Immersive Storytelling**. Established in 2018 with GBP 10 million funding (approx. HKD 106 million), it is a key element of the Audience of the Future Programme that is part of the Industrial Strategy Challenge Fund. The centre is jointly run by the National Film and Television School (NFTS) and Royal Holloway, University of London. The Academy aims to lead the charge in training participants on the next frontier of immersive technology so that the **UK creative workforce is the most skilled in the world** in the use of VR, AR and **real-time production technology for immersive storytelling**.

### 英國國家電影電視學院虛擬製作 (實時電影製作技術) 證書

### NFTS Virtual Production (Filmmaking with real-time technologies) Certificate

#### 主要目的 Main aim:

該課程由英國未來故事學院 (**政府資助**) 提供支援，旨在提升影視行業中年輕從業者的水平，為他們提供核心技能和基礎知識，以滿足電影和電視虛擬製作中的特定需求。此兼讀制課程為期24週，由英國國家電影電視學院 (**高等教育院校**)、華納媒體、WarnerMedia Access (**業界**)，以及英國未來故事學院合作運營。

Supported by the StoryFutures Academy (**government-enabled**), this course aims to upscale young practitioners working in the screen sector, providing them with a grounding in the core skills and knowledge required to meet sector-specific demands in VP technical set-ups in film and TV. This 24-week, hybrid-mode, part-time programme is run by NFTS (**HEI**) in partnership with WarnerMedia, WarnerMedia Access (**industry**), and StoryFutures Academy.

## 申請人資格 Applicant eligibility:

- 擁有至少兩年影視行業經驗，包括製作或後期製作。**參與者會在虛擬製作領域中擔當主要藝術和技術人員**（例如可能在遊戲、視覺效果、3D動畫、平面設計等領域工作過），同時包括技術美術員、燈光師、調色師、技術設計師/總監、拍攝器材硬件/軟件工程師、LED硬件工程師或虛擬製作技術通才（NFTS，2021）。

At least two years of screen industry experience, including in production or post-production. **Participants are those who fill key artistic and technical disciplines within VP production** (they could have worked in games, VFX, 3D animation, graphic design etc.), including Technical Artists, Lighting Specialists, Colour Specialists, Technical Designers/Directors, Camera Hardware/Software Pipeline Engineers, LED Hardware Engineers, or VP Technical Generalists (NFTS, 2021).

## 成果 Outcomes:

- 掌握**虛擬製作的關鍵技術**，包括虛幻引擎的核心及更高級的功能、LED牆顯示屏技術設置和攝影機追蹤技術、引擎內照明以及數碼和實體資產的顏色匹配等。<sup>58</sup>

To become familiar with **VP's key underlying technologies**, including the core functionalities and more advanced elements of Unreal Engine, LED Wall technical set-up and camera tracking technologies, tutorials on lighting in-engine and colour matching of digital and physical assets, etc.<sup>58</sup>

- 學員可以擔任虛擬製作領域的初級職位，例如技術部門的入門級實習生或助理，並擔當硬件或軟件工程師角色。

Applicants can assume junior positions such as entry-level trainee or assistant on set within the VP Technical Department and partake in a hardware or software pipeline Engineering roles.

<sup>58</sup> 核心功能包括場景設計、燈光、定序器、程序裝置等基本知識。進階知識則包括優化技術、藍圖編程、技術美術和視覺效果等，LED牆技術設置是指LED牆顯示屏的設置和攝影機追蹤技術。

Core functionalities include the basics of scene design, lighting, sequencer, and animation, etc. More advanced elements include optimisation techniques, blueprints programming, technical art and VFX, etc., and LED Wall technical set-up refers to the setup of the LED Wall and camera tracking technology.

## 訓練營 (業界實習)

### Bootcamps (Industry placements)

#### 主要目的 Main aim:

為電影、電視、戲劇和遊戲行業的專業人士提供實習機會和資助，在具有**沉浸式內容製作**優勢的工作室或平台中實習。在最新的一期，學員可到動態圖像和動畫工作室 Potion Pictures 或電子競技技術平台 The Weavr Consortium (**業界**) 體驗為期兩天的電視沉浸式製作訓練營。此訓練營主要學習如何將沉浸式技術流程融入傳統廣播和影視製作。

To offer professionals from the film, TV, theatre, and games sectors funded placement opportunities at studios or platforms with an edge in **immersive content production**. The latest edition featured two-day bootcamps on immersive technology for TV at either Potion Pictures, an award-winning motion graphics and animation studio, or The Weavr Consortium, an e-Sports technology platform (**industry**). The bootcamps cover skills to seamlessly incorporate immersive workflows into traditional broadcast and screen productions.

#### 申請人資格 Applicant eligibility:

- 申請人應在相關的創意領域具工作經驗。由於計劃是**因應參與公司的迫切需求**去挑選學員，因此訓練營對申請人的要求較高，如製作人、助理製作人、具遊戲引擎技術技能的設計師等。

Applicants should have a substantial body of work and experience in relevant creative sectors. Requirements are relatively higher as participants are selected **based on the participating companies' immediate needs**, such as producers, assistant producers, and graphic designers with technical skills in game engines.

#### 成果 Outcomes:

- 完成訓練營後，參加者可以選擇前往 Potion Pictures 或 The Weavr Consortium 繼續進行**帶薪實習**，獲得進一步的在職培訓。

Upon completing the bootcamp, participants have the choice to enter longer **paid placements** at Potion Pictures or The Weavr Consortium for further on-the-job training.

上述案例清晰顯示，英國響應大趨勢，在沉浸式人才方面加以培訓，以加強文創產業的未來發展。英國政府資助了一個**以培養新時代創意人才為核心的國家機構**，並**強調利用產學合作關係來提高學員在沉浸式技術方面的能力**，尤其是針對虛擬製作和遊戲引擎這兩項對行業影響最大的技術。

與英國相似，韓國文化產業振興院的資助和成果展現了對文創產業發展沉浸式技術的重視，強調要培養虛擬現實產業人才，以及深化官產學三方合作的重要性。

值得一提的是，下文出現的所有成功案例均重視院校與業界的合作（有時亦涉及第三方研究機構），推動產學研發展。一方面，這有助於學校通過企業反饋與需要，及時培養專門人才。另一方面，也有利於推動更多科研成果在企業轉化，培育研發人才。

The above case study has clearly shown the UK's swift action and response to the imminence of immersive talents needed to sustain its CCI going forward. It has funded a **national institution centered around the grooming of next generation creative talents**, and placed an emphasis on **leveraging industry and educational partnerships** that can **accelerate their literacy in immersive technologies**, particularly in VP and RTGE—the wildest game-changers by far.

Similar to that of the UK, the funding requirements and outcomes from KOCCA's schemes are able to shed light on the emphases placed on developing immersive technologies for the CCI, grooming cross-disciplinary talents in so doing, as well as the importance of anchoring government-industry-HEI partnerships.

Delving deeper, note that all successful applications in the following pages share an emphasis on collaborations between the industry and university departments, with strong R&D capabilities on both sides (sometimes even involving a third-party research unit). For one, this helps communicate industry demands to universities, thereby upscaling the talent pipeline and ensuring the timeliness of their training. Simultaneously, this model facilitates tech transfer of latest research efforts, and cultivates R&D specialists.



## 韓國文化產業振興院予內容科技專才培訓與研發的資助 KOCCA's Funding for Content Technology Talent and R&D

韓國文化產業振興院是南韓藝術科技的孵化器。它每年獲得文觀部資助，並通過資助研發項目，培育文化科技專才。2021年，韓國文觀部撥款1,139億韓元（約7.96億港元）用於發展藝術技術（MCST，2021），這筆款項的一部分就是撥給了振興院，下文提供的案例只是該部分中眾多計劃的其中兩個。

KOCCA is South Korea's dedicated Arts Tech incubator. It receives funding from MCST every year to incubate professional cultural technology talents through funding R&D projects. In 2021, the MCST allocated KRW 113.9 billion (approx. HKD 796 million) to developing cultural technology across the board (MCST, 2021)—a portion of that goes to KOCCA, and the schemes provided with details below are only two of the many that came out of that portion.

### 文化內容研發專業培訓 (1)

#### Cultural Content R&D Professional Training (1)

##### 主要目的 Main aim:

該計劃旨在通過支持研發項目，**培養研究生層次的文化技術人才**。該計劃資助期為2021年至2023年，每個項目最高可資助27.5億韓元（約1,800萬港元）。該計劃希望**從沉浸式內容與技術兩方面培育新一代研發人才**，尤其是結合虛擬現實、擴增實境和混合實境的文化內容，並應用於表演、展覽、電影和遊戲等場景。

This scheme supports the **cultivation of cultural technology talents at graduate school levels through R&D projects**. The funding period spans from 2021 to 2023 and can grant up to KRW 2.75 billion (approx. HKD 18 million) per project. It aims to **incubate next-generation R&D talents in content and immersive technologies**, specifically cultural contents combined with VR, AR, MR, and applied in performances, exhibitions, movies, and games settings.

## 申請人資格 Applicant eligibility:

- **研究院**：碩士或博士專才  
**Graduate schools:** masters and doctoral-level professionals
- **聯合研發機構**：專上院校、科研機構 / 研發單位、企業  
**Joint R&D organisations:** universities, research institutions / R&D units, enterprises

## 成果 (部分成功案例) Outcomes (examples of successful applications):

- 韓國中央大學：中央大學的高級影像科學、多媒體及電影研究院和其藝術與技術學院 (**院校**) 與 VFX 工作室 MOFAC (**業界**)，以及人工智能研究所 (**科研機構**) 合作，培訓專才使用虛擬製作技術建構元宇宙內容。

Chung Ang University: Chung Ang University's Graduate School of Advanced Imaging Science, Multimedia & Film, and its College of Art and Technology (**university**) partnered with MOFAC, a VFX studio (**industry**), and the Artificial Intelligence Research Institute (**research unit**) to train specialists for building metaverse content using virtual production skillsets.

- 韓國國立藝術大學：韓國國立藝術大學和浦項工科大学 (**院校**) 與韓國電信運營商 LG U+，以及工作室 Jiffycrew 和 Birdhand (**業界**) 合作，創造建基於人工智能和擴增實境技術的元宇宙內容。

Korea National University of Arts: Korea National University of Arts partnered with Pohang University of Science and Technology (**university**), LG U+, and production studios Jiffycrew and Birdhand (**industry**) to create metaverse content based on AI and AR technologies.

## 文化內容研發專業培訓(2)

### Cultural Content R&D Professional Training (2)

#### 主要目的 Main aim:

該計劃通過資助結合藝術和科技（高端技術）元素的研發項目來支持藝術科技人才培訓。該計劃的資助期為2021年至2022年，每個項目最高資助金額為7億韓元（約460萬港元）。此計劃與先前的相似，但申請人資格擴展到**研究生以外的專才**，旨在**培養下一代藝術科技研發人才**。

This scheme supports cultural technology talent training through funding R&D projects that combine arts and science (cutting-edge technologies) elements. The funding period spans 2021 and 2022 and can grant up to KRW 700 million (approx. HKD 4.6 million) per project. It is similar to the first scheme but is extended to **professionals beyond graduate schools**, with the aim to **incubate next-generation R&D talents in cultural technologies**.

#### 申請人資格 Applicant eligibility:

- 文藝機構、專上院校、科研機構/研發單位、企業  
Arts and cultural organisations, universities, research institutes/ R&D units, enterprises

#### 成果（成功案例） Outcomes (successful application):

- 西京大學：西京大學（**院校**）與 Almaloco 和 Nalda 公司合作（**業界**），培養專業人士掌握數字孿生技術，以此開發虛擬演員（CG 角色）創造超現實的表演。僅有一個項目獲得資助。

Seokyeong University: Seokyeong University (**university**) partnered with companies Almaloco and Nalda Factory (**industry**) to train professionals through developing digital actors (CG characters) using digital twin technology to create ultra-realistic performances. Only one project was awarded funding.

## 香港藝術科技與遊戲引擎技術培訓狀況

香港首份藝術科技政策於2020年推出。自此之後，許多專上院校便積極推出新課程。例如香港知專設計學院Unreal Engine數碼影像證書和香港專業教育學院的遊戲軟件開發高級文憑，課程當中亦有教授遊戲引擎技術。最值得一提的是，香港浸會大學領導的研究計劃「香港人機共生藝術創造平台技術建設」，於2021年獲研究資助局的「主題研究計劃」撥款5,283萬港元資助。這是研資局首次對藝術科技項目撥出大額資助。

## The Landscape of Arts Tech and RTGE training in Hong Kong

Hong Kong's first policies on Arts Tech were only introduced in 2020. Since then, many tertiary institutes have responded proactively by introducing new courses and programmes, such as Hong Kong Design Institute's (HKDI) Certificate in Digital Visualisation with Unreal Engine, and Hong Kong Institute of Vocational Education's (HKIVE) Higher Diploma in Game Software Development which teaches Unity. Most notably, Hong Kong Baptist University (HKBU) secured funding in 2021 to undertake the research project "Building Platform Tech for Symbiotic Creativity in Hong Kong", receiving HKD 52.8 million from the Research Grants Council's (RGC) theme-based Research Scheme. This is the first large-scale arts tech project funded under the RGC scheme.



香港浸會大學賽馬會創意校園數碼繪製圖

A digital rendering of the Jockey Club Campus of Creativity, Hong Kong Baptist University

儘管香港的藝術科技政策仍處於起步階段，但在過去兩年裏已獲得大量關注。例如康文署為業界人士舉辦了多個藝術科技工作坊；數碼港和科學園等亦組織了業界交流峰會；「藝術科技」專才也被涵蓋在香港「優秀人才入境計劃」（「優才計劃」）中。<sup>59</sup> 這些措施都有助鞏固藝術科技專業技術的地位。

現時，香港雖已開始回應專業人士的訴求並推出相應舉措，但年輕一代的能力建設和人才培養仍未得到重視，更遑論培養具有沉浸式能力的新時代人才。

雖說藝術科技專責小組有教育局的參與，但教育局仍未採取確實行動來促進藝術科技的相關培訓，或是支援提升專上院校現有的培訓計劃和課程。

與其他國家和地區相比，政府所展現出的重視程度不免相形見绌，而這難免加劇長期以來對文創產業缺乏遠見和策略布局的劣況。

不同於政府相對被動的態度，本地的專上院校已抓緊這機遇。下表顯示了一些主動將遊戲引擎培訓納入其課程體系的專上院校。表內列舉之資料或未能概全。

Our Arts Tech policy is still in its infancy, and we've seen a lot of traction gained in this field in the past two years. LCSD, for instance, has organised multiple arts tech workshops for industry professionals, tech hubs like Cyberport and Science Park have hosted summits for industry networking, and arts tech experts have now made their way onto the Talent List of Hong Kong.<sup>59</sup> All these have helped legitimise the arts tech profession.

While there are relatively more initiatives targeted at professionals, Hong Kong still has not assigned much priority on capacity building and talent grooming at a younger level, not to mention cultivating next generation talents with immersive capabilities.

The Arts Tech Task Force rightly involved the Education Bureau, yet the bureau has taken little further action to introduce government-enabled training for Arts Tech, or initiatives that would upscale existing training programmes at HEIs.

Our Government's ambition in this pales in comparison with our overseas counterparts, only to reinforce the longstanding lack of farsightedness and strategy for the CCI all this time.

Despite the Government's passiveness, local tertiary institutions have leapt to the opportunity. The table below shows some of the more active local tertiary institutions in Hong Kong that have RTGE training incorporated into their curriculum. It is by no means exhaustive.

<sup>59</sup> 更新後的香港人才清單中「表演藝術方面的藝術科技專才」有：(i) 延展實境，包括虛擬實境、擴增現實、混合實境和替代實境；(ii) 人工智能，包括機器學習、深度學習、自然語言處理、數據視覺化；(iii) 傳感器；(iv) 全息技術；(v) 虛擬形象和虛擬存在；(vi) 實時動態捕捉和動畫；及 (vii) 無人機和機械人。  
The Talent List has been updated to include 'Performing arts professionals in arts technology', they are: (i) extended reality (XR), including virtual reality (VR), augmented reality (AR), mixed reality (MR) and substitutional reality (SR); (ii) artificial intelligence (AI), including machine learning, deep learning, natural language processing, data visualisation; (iii) sensors; (iv) holography; (v) avatar and virtual presence; (vi) real-time motion capture and animation; and (vii) drones and robots.

Table 22

## 香港高等教育院校提供 RTGE 培訓的課程概況 (非詳盡)

A snapshot of programmes offered by tertiary institutions in Hong Kong that provide RTGE training (non-exhaustive)

院校 Institution	課程 Programme(s)	提供培訓 RTGE available
香港大學 HKU	計算機科學理科碩士課程 (多媒體計算方向：遊戲設計與開發) MSc in Computer Science (Multimedia Computing: Game design and development)	?*
樹仁大學 HKSYU	媒體設計與虛擬實境科技 榮譽文學士課程 BA (Hons) in Media Design and Immersive Technology	✓
理工大學 PolyU	TEAL 工作坊：Unity 基礎知識 TEAL Workshops: Unity Basics for Students	✓†
都會大學 HKMU	電腦及互動娛樂 榮譽文學士課程 BA (Hons) in Computing and Interactive Entertainment	✓
浸會大學 HKBU	遊戲設計與動畫 榮譽傳理學學士課程 BCOMM (Hons) in Game Design and Animation	✓
城市大學 CityU	理學士 - 創意媒體 BSc in Creative Media	✓
香港專業進修學校 HKCT	電腦學高級文憑 (流動應用程式及遊戲開發) Higher Diploma in Computer Studies (Mobile Applications and Game Development)	✓
	毅進文憑 (跨平台遊戲及動畫製作) Diploma Yi Jin (Cross-Platform Games and Animation Production)	✓
香港專業教育學院 IVE	遊戲軟件開發高級文憑 Higher Diploma in Game Software Development	✓
香港知專設計學院 HKDI	Unreal Engine 數碼影像證書 Certificate in Digital Visualisation with Unreal Engine	✓
中文大學專業進修學院 CUSCS	Unreal Engine 3D 電腦遊戲設計入門 Introduction to 3D Game Design using Unreal Engine	✓

註：\* 代表可能提供實時遊戲引擎培訓；† 代表非恆常的課程。

Note: \* Indicates the course may provide RTGE training; † indicates that the training is non-regular.

資料來源：各大院校的課程網站 (截至 2022 年 3 月)

Sources: Programme websites of the institutions (as of March 2022)

CH. 1  
第一章CH. 2  
第二章CH. 3  
第三章CH. 4  
第四章CH. 5  
第五章

從表22所見，許多專上院校都提供了遊戲引擎培訓。但根據上述人才培養政策的成功案例可見，為了確保課程能夠滿足行業的需求，與業界的合作十分重要。

## 結合產學研在粵港澳大灣區跨境協同發展

雖然我們能夠列舉出一些設在香港的行家，但現在也是個好時機，與大灣區的公司或研究機構探討合作空間，促進跨境、系統性的研發和培訓活動。這對香港來說是一個獨特的機會，尤其是當跨境研發機構正在冒起。

市場和行業動態皆指向此發展趨勢，而我們這個主張亦有政策根據。參照2020年12月發布的《粵港澳大灣區文化和旅遊發展規劃》，專欄6曾提出建立「粵港澳大灣區文化協同發展平台」<sup>60</sup>這一重要策略。

此策略以發展文創產業建設為重點，由香港、澳門和廣東省政府共享基礎設施和服務基地，同時欲加強大灣區內文化交流，拓寬人才培養渠道。相信在政策的推動下，香港有能力把握大灣區所帶來的文化交流發展機遇。

As we can see from Table 22, many institutions have made RTGE available, but based on what we have derived from successful policies on talent grooming above, we know it is equally important to involve extensive industry partnerships to make sure the curriculum meets sector-specific standards.

## Imagining cross-border R&D and training with institutes and industry partners in the GBA

Even though we are able to name a few eligible industry players based in Hong Kong, it would also be timely and opportune to entertain the space for institutionalised, cross-border, R&D and training collaborations with companies or research institutes in the GBA. This presents an opportunity unique to Hong Kong, as cross-border R&D institutions are observably emerging and assuming in place.

Aside from market trends and industry movements which are quite indicative, our proposition comes with relevant policy support too. In reference to the *Culture and Tourism Development Plan for Guangdong-Hong Kong-Macao Greater Bay Area* issued in December 2020,<sup>60</sup> there is a direction under Strategic Focus 6 entitled *Guangdong-Hong Kong-Macao Platform on Cultural Development and Synergy*.

This strategic focus stipulates the construction of infrastructures centered around CCI development, including the function to develop emerging technologies. These infrastructures will be shared by Hong Kong, Macau, and Guangdong governments to enhance cultural exchange within the GBA and broaden talent training avenues. Powered by policy support, Hong Kong is well-positioned to capitalise these opportunities in the GBA.

60 此政策文件由文旅部、粵港澳大灣區建設領導小組辦公室和廣東省人民政府聯合公布。

The policy plan was issued by the by the MCT, the Office of the Leading Group for the Development of the Guangdong-Hong Kong-Macao Greater Bay Area, and the People's Government of Guangdong Province.



綜合上述觀察，並分析英國與南韓在人才培育政策方面；以及梳理兩者共同特徵後，我們向香港未來文創產業人才培育政策提出以下建議：

Consolidating all observations, analyses and common key features from talent policies of the UK and South Korea, we make our recommendations toward Hong Kong's future talent planning in the CCI as follows:

建議  
RECOMMENDATION 4.1

建立提升文創產業發展的跨境培訓項目或機構，以製造官產學合作機會，重點培養未來藝術科技和沉浸式人才

Explore cross-border CCI-specific institutions to enable government-industry-university collaboration opportunities, with focus on grooming next-generation arts tech and immersive talents

**我們建議**政府探索與大灣區研究機構和產業合作的可能性，建立提升文創產業發展的跨境機構，實踐新一代創意人才的培訓。這些機構應具備文創產業相關技術的研發能力、能夠提供產業培訓的機會、並跨越粵港澳三地，以便加強大灣區的文化交流，拓寬人才培養的渠道。

**We recommend** it is timely and opportune for the Government to explore establishing cross-border institutions with research institutes and industry partners in the GBA that are centered around CCI development and aimed at grooming the next-generation creative workforce. These institutions shall have R&D capacity to develop CCI-related technologies, offer training opportunities with industry partners, and cross Guangdong-Hong Kong-Macao borders to enhance cultural exchanges within the GBA to broaden talent training avenues.

基於英國未來故事學院和韓國文化產業振興院人才培養計劃的共通點，**我們建議**未來的跨境培訓機構必須獲業界、政府和高等院校支持，並具備以下三個要素：

Based on the key common features shared by the talent training schemes from the UK's StoryFutures Academy and South Korea's KOCCA, **we recommend** that future cross-border institutions must find support and anchorage from industry, government, and higher education institutions respectively, and demonstrate the following three elements:

### 1. 面向未來 Future-proof:

這包括但不限於發展沉浸式技能，如遊戲引擎。隨着這項技術顛覆行業，創意產業工作流程也將更新換代，加上市場上人才缺口不斷擴大，藝術科技人才需要提高他們在遊戲引擎和其他實時3D技能的能力。

(參考：英國未來故事學院的培訓計劃和韓國文化產業振興院資助的項目都有支持未來式、甚至元宇宙內容與技能)

This includes, but is not limited to, adeptness in immersive skills such as proficiency with RTGE. With RTGE, the game-changing technology set to transform creative production workflows, and given the talent gap in the market, arts tech talents will need to upskill their capabilities in RTGE and other relevant real-time 3D skills.

(Reference: skills and knowledge covered by StoryFutures Academy-affiliated training programmes and metaverse content projects funded by KOCCA)

## 2. 業界主導 Industry-led:

培訓計劃應與業界合作夥伴的實際工作保持一致，以確保人才與行業的快速發展同步，並允許業界工作者參與培養未來人才。

(參考：英國未來故事學院的培訓計劃和韓國文化產業振興院資助的項目皆注重行業參與)

Training should be fuelled by practical work placements with industry partners to ensure the talent pipeline keeps pace with rapid industry developments, and allow innovative industry players to cultivate the future workforce.

(Reference: industry participation in StoryFutures Academy-affiliated training programmes and in projects funded by KOCCA)

## 3. 注重人才 Talents-driven:

政策層面上，建議必須對人才建設作出長遠規劃，並採取以人為本的宗旨來提升下一代創意人才水平。措施亦需持續推動能力建設，建立專業知識群，並確保他們真正為「虛擬」的未來做好準備。

(參考：英國未來故事學院和韓國文化產業振興院於虛擬製作和沉浸式技術方面的人才培訓措施)

Policy must envision a long-term talent pipeline, and adopt a people-centred approach to upscale the next generation creative workforce. Initiatives must focus on the continuous capacity building, building a community of expertise, and ensuring they are “virtually” ready for the future.

(Reference: emphasis on upscaling talents in virtual production and immersive technologies in both StoryFutures Academy and KOCCA initiatives)

如前文所述，我們的研究從多方面反映出香港的人才培養和能力建設迄今尚未有足夠的政策重視。透過採訪業界人士和高等教育機構工作者，我們得知此情況尤其影響文創產業。

人們普遍認為，具遠瞻性的未來人才策略能夠團結業界並加速培訓。**我們認為，政府需要聆聽業界聲音，制定清晰的願景和實際人才培養策略。**

As mentioned earlier in this chapter, our research has shown that talents grooming and capacity building had not hitherto been top priority policy items in Hong Kong. Feedback from our extensive interviews with industry practitioners and educators at HELs shows this is especially the case for the CCI.

It was universally agreed that a long-term manpower planning roadmap is needed to galvanise the sector and expedite training. **We believe it is important for the Government to consider the voices from the sector and devise concrete, farsighted talent training strategies.**

## 建議 RECOMMENDATION 4.2

**制定長遠人才培養策略，尤須注重數字化和沉浸式趨勢下所需的技能**

**Devise a long-term manpower planning roadmap for CCI development, drawing specific attention to skillsets required under an increasingly digital and immersive landscape**



成立於2020年的藝術科技專責小組，本應制訂並發布推廣藝術科技的策略和措施，然而至今仍未公布進一步的細節。

重要的是，政府需制定並實施文創產業的未來人才策略，以確保該行業的競爭力。**我們建議**政府透過藝術科技專責小組，為文創產業制訂長遠人才發展規劃，並且注重數字化和沉浸式趨勢下所需的技能，提升香港文創產業實力，讓大家都可參與其中。<sup>61</sup>



虛擬製作攝影棚  
Virtual production set

The Arts Tech Task Force effective as of 2020 was supposed to be accountable for devising an Arts Tech strategy that includes a manpower plan, but no concrete plans have been announced up till today.

It is of utmost importance that a government-initiated strategy on future CCI talents is devised, and implemented, to ensure a competitive future of the industry. **We recommend** the Government—via the new bureau, the Arts Tech Task Force or otherwise, formulate a long-term manpower planning roadmap to galvanise the sector and expedite training. This farsighted Human Resources Strategy for CCI development shall draw specific attention to skillsets required under an increasingly digital and immersive landscape, with strategic plans and achievable visions to strengthen Hong Kong's ever-expanding CCI where virtually everyone can play a part.<sup>61</sup>

61 南韓則有法律監督文觀部履行其職責，包括制定人才培訓政策：例如南韓《內容產業促進法》的第14條指明文觀部需通過學校、專上院校和韓國文化產業振興院，為內容產業培訓專才（請注意南韓採用大陸法，與香港的法律體系不同）。

There are laws in South Korea that mandate the MCST to carry out its responsibilities, including to formulate strategies related to talent training: Article 14 of South Korea's Content Industry Promotion Act, for instance, mandates MCST to train specialists for the content industry via schools, colleges, and KOCCA (note that South Korea has a civil law system, which is a different law system compared to Hong Kong).



總結  
Conclusion

# 建議概要

## Summary of Recommendations



我們針對四個主要政策範疇，總結了八項建議，供下屆政府作參考，以擬訂數字文化策略的核心工作：

A summary of eight recommendations under four main policy arenas, for the next Administration to consider as key action items for a Digital Culture Strategy:

## 1. 新局 （「文化」部分） New Bureau (with respect to culture)

### 1.1) 架構 Structure

由四部分組成：i) 文化與藝術；ii) 創意產業；iii) 版權；iv) 傳媒（參考南韓、英國、中國內地、台灣）：

Comprise of 4 components: i) Arts & Culture; ii) Creative Industries; iii) Copyright; iv) Media (Ref. South Korea, the UK, mainland China, Taiwan):

1.1.1) 將目前分散於民政局的文化科、西九工程策劃組，以及商經局的創意香港遷至新局

Move HAB's Culture and WKCD Branches, and CEDB's CreateHK office into the new bureau

1.1.2) 將知識產權署、香港電台，以及經貿辦的部分元素納入新局

Include elements from IPD, RTHK, and ETOs into the new bureau

1.1.3) 成立專門（藝術科技）機構支持和推進香港未來的文化及創意產業政策（參考韓國文化產業振興院和台灣文化內容策進院）

Create dedicated (arts tech) agency that champions and implements future CCI policies in Hong Kong (Ref. Korea's KOCCA, Taiwan's TAICCA specifically)

### 1.2) 策略 Blueprint

制訂藍圖，當中應有具前瞻性的目標和策略性資金分配，並強調內容創作、知識產權開發和產業化。其他目標包括建設有利於文化交流和貿易的數碼建設，以及培育下一代文化及創意產業人才的計劃（參考南韓）

Devise a blueprint with timely goals and strategic allocations of funding that emphasise on content creation, IP development and being industry-based. Other goals include building digital infrastructures conducive to cultural exchange and trading, and plans for grooming next-generation CCI talents (Ref. South Korea)



<b>2. 內容創作及開發</b> <b>Content Creation &amp; Development</b>	<b>2.1) 內容創作</b> <b>Content/ IP Creation</b>	<p>確立藝術科技政策的主要目標之一：利用科技，從傳統文化中發掘新的藝術內容（參考內地《「十四五」藝術創作規劃》）</p> <p>Define key policy outcomes in Arts Tech Strategy: to leverage technology as a means of creating new artistic content from traditional cultural forms (Ref. The Mainland's 14th Five-Year Plan for Artistic Creation)</p>
	<b>2.2) 內容開發</b> <b>Content/IP Development</b>	<p>設立以支持內容開發為主的新資助機制，提高整個文創產業的跨界創作和互動（參考台灣內容開發專案計畫）</p> <p>Set up new funding on content development mandated at supporting IP development of creative contents and facilitating intermediality and interactivity across the CCI (Ref. Taiwan's Creative Content Development Programme)</p>
<b>3. 文化數據與「文化IP」數碼建設</b> <b>Infrastructures for Cultural Data &amp; IP</b>	<b>3.1) 文化數據建設</b> <b>Cultural Data Infrastructure</b>	<p>建設緊貼時代發展的文化數據建設，收集、整合並利用文創產業相關數據，以更有效地為公共政策和業界提供決策依據（參考中國內地、台灣）</p> <p>Build a Cultural Data Infrastructure fit for the era, integrating and utilising a comprehensive collection of CCI-related data to better inform decisions in public policymaking and private industries (Ref. Mainland China, Taiwan)</p>
	<b>3.2) 文化IP交易平臺</b> <b>Cultural IP Trading Platform</b>	<p>構建數碼文化IP交易平臺，促進文化IP交流和交易，助力文化「走出去」。平臺應具有數據庫和交易功能，與建議3.1的文化數據建設同步，並可供本地、區域和國際市場使用（參考南韓、台灣）</p> <p>Build a Digital Cultural IP Trading Platform that facilitates the exchange and export of cultural IP as part the culture “going out” mission. It shall bear database and trading functions, synchronise to Recommendation 3.1's cultural data infrastructure, and be made accessible by local, regional, and international markets (Ref. South Korea, Taiwan)</p>
<b>4. 未來人才</b> <b>Next-Generation Talents</b>	<b>4.1) 跨境文創合作及培訓機構</b> <b>Cross-border CCI collaborations &amp; institutions</b>	<p>探索跨境文創產業機構，以製造官產學合作機會，重點培育下一代藝術科技和沉浸式人才（參考英國、南韓）</p> <p>Explore cross-border CCI-specific institutions to enable government-industry-university collaboration opportunities, with focus on grooming next-generation arts tech and immersive talents (Ref. The UK, South Korea)</p>
	<b>4.2) 人力規劃</b> <b>Manpower planning</b>	<p>為文創產業發展制訂具有遠見的人力資源策略，特別要關注日益數碼化和沉浸化的環境之下所需的技能</p> <p>Devise a farsighted Human Resource Strategy for CCI development, drawing specific attention to skillsets required under an increasingly digital and immersive landscape</p>

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## 前言

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## 第一章：新局架構及政策方向

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## 第四章：未來人才

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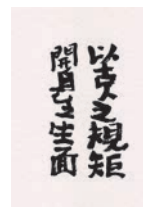


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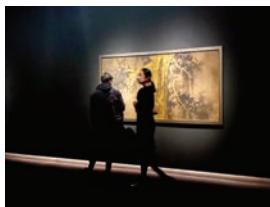
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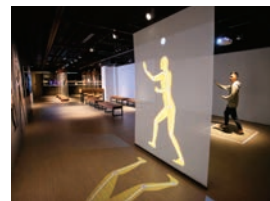
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