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## 博採眾長，創新為先

### ——匯聚全球治理經驗助力北都創科產業發展

經濟研究員 趙辰霖

香港特區政府於2021年底頒布的《北部都會區發展策略》，向香港社會展示了一幅銳意進取、改善民生、促進經濟轉型的全新藍圖。該方案充分配合了國家“十四五”規劃、大灣區規劃及《前海方案》提出的發展戰略和定位，為香港進一步融入國家發展大局及參與共建粵港澳大灣區提供了核心平台。它帶給香港最大的機遇是促進經濟結構轉型，即在過往以金融服務、航運貿易和房地產為主的產業布局之中，加入以創新科技和高端裝備為驅動的全新增長引擎。為實現這一願景，北部都會區將會把香港北部轉變成為一個佔地300平方公里的創新科技經濟引擎和綜合生活區，成為大灣區內資源配置能力強、創新科技能力強、發展帶動能力強的高新發展區，並以此帶動形成香港與大灣區的產業聯動、生活聯通及創科合作。

總體來看，《北部都會區發展策略》以基建先行為方針，包羅萬象地規劃了諸如建設產業園區、精簡土地審批、開拓房屋用地、修建跨境鐵路等方面。在此基礎上，與創新科技相關的宏觀產業政策將是特區政府下一步的規劃重點，也是決定創科產業能否在香港做大、做強的最關鍵環節。回顧過往，香港歷來遵循「小政府，大市場」的原則，限制自身對社會中經濟活動的參與規模，並且政府在過去也沒有像內地或新加坡政府那樣主導創新科技產業發展的成功經驗。有鑒於此，本文將從實用主義角度出發，闡述海內外發展創新科技產業的趨勢和成功案例，以此作為香港在未來創科產業政策制定和實施的方向參考。

## 一、全球創科產業的發展趨勢

根據世界知識產權組織（World Intellectual Property Organization）對全球約 132 個國家和經濟體的創新表現進行的最新排名顯示，由於疫情促進發達經濟體推動數字化轉型與科技發展，因此全球創科產業更加呈現出「贏者通吃」的趨勢。由此可見，未來香港創新科技產業所面臨的競爭將日趨激烈。

### 趨勢一：小型發達經濟體的創新能力強勁

一方面，相較於中、美、英、德、日等經濟大國具備充足的金融與人力資本，小型發達經濟體如新加坡、以色列和瑞士雖然資源稟賦略低、市場規模亦相對較小，但非常擅長利用創新經濟的特點，在個別細分領域展開競爭。此類小型發達經濟體的共同特徵是擁有非常完善的法治體系與知識產權保護制度，對於技術的研究、落地、商轉等流程都具備完善保護，因此能夠吸引跨國企業和技術團隊落地運營，也使得企業的科研投入能夠快速轉化成為產品並賺取可觀利潤。

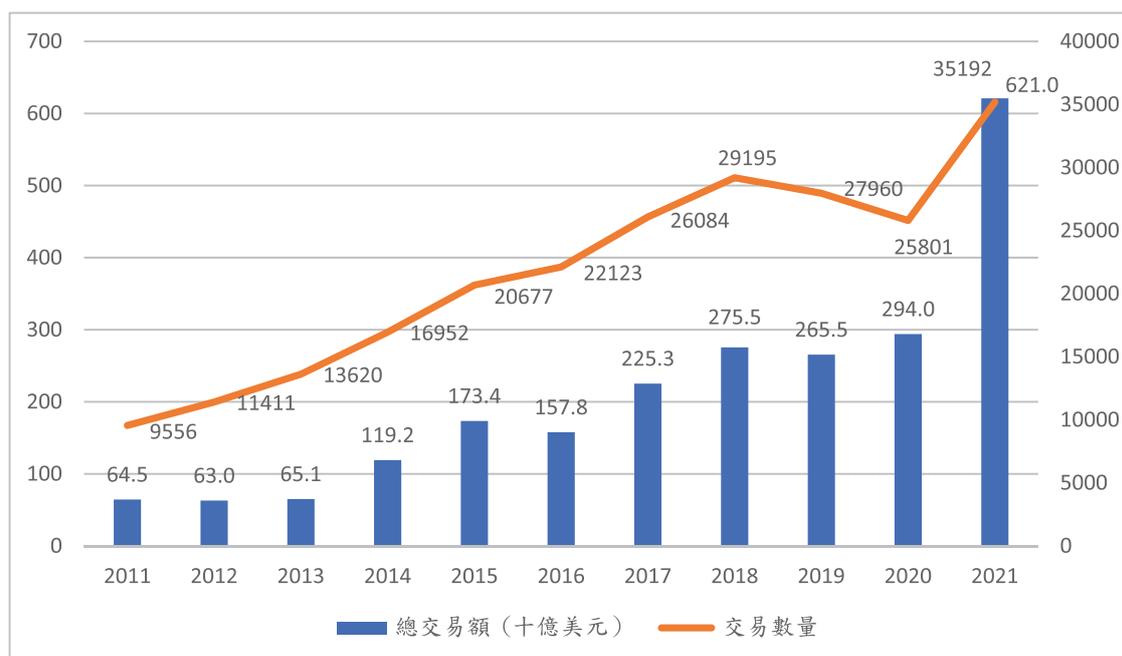
另一方面，以創新為主導的小型發達經濟體亦非常注重搭建與時俱進的技術創新生態體系。以新加坡為例，作為東南亞國家中的創新樞紐，該國政府推出多種產業指導政策，如「智慧國家 2025（Smart Nation 2025）」、「數字政府藍圖（Digital Government Blueprint）」、「中小企業數字化轉型（SME Go Digital）」，以及「Startup 5G」等，成功吸引如 GlaxoSmithKline, Cisco, Google 等跨國企業入駐，並透過提供沙盒實驗室與企業自身覆蓋的市場相結合，從而不斷提高新技術的實用性和市場化水平。

### 趨勢二：創新企業的數量與募資能力是衡量經濟體創新能力的新指標

在傳統的技術投資、論文發表數量等測量指標的基礎上，創新科技企業的數量與募資能力也已成爲評估經濟體创新能力的重要指標。科技的發展與社會環境的變動使創新企業找到切入市場的機會，半導體芯片、生物醫藥、人工智能、雲服務等領域的創新技術正快速崛起並吸引大量投資，創投投資的數量創下十年來新高。近年來發達經濟體爲應對新冠疫情所施行的貨幣寬鬆，亦將創新企業的估值及募資規模推升至歷史新高。

根據國際商業調研機構 CB Insights 的統計（見表 1），全球獨角獸企業 (unicorn) 的數量在 2021 年已經達到 959 家，與 2020 年的 517 家相比激增 69%。截至 2021 年底，全球風險投資金額達 6,210 億美元，與 2020 年的 2,940 億美元相比增長超過一倍，有 44 家新創獨角獸的估值超過 100 億美元。交易量最多的地區依次爲北美、亞洲與歐洲，其中美國以 3,110 億美元佔全球過半比例。在創投之外，基於轉型需求，許多大型企業也紛紛運用企業投資部門（Corporate Venture Capital）進行創新投資，並依托取得的新技術和研發人才，加強企業對市場變革的應對能力。

表 1：全球創投融资年度交易總額及交易數量（2011-2021）



資料來源：CB Insights，中銀香港金融研究院

## 二、海內外創新型城市的轉型案例

### （一）紐約創科產業轉型成果

提起紐約，很多人首先想到的是全球商業和金融中心這一標籤。然而，紐約近年來在科技創新領域已實現爆發式增長，其坐落於曼哈頓的科技產業中心“矽巷”擁有眾多高科技企業群，現今已成為紐約經濟增長的主要引擎，亦被譽為繼矽谷之後美國發展最快的信息技術中心地帶和全球技術研發的核心區域。根據市場調研機構福瑞斯特（Forrester Research）的報告顯示，紐約地區已擁有超過 33 萬名科技從業者，是美國最大的科技人才庫；同時，該地區的近 100 間學術機構每年可為市場輸送超過 7,500 名學習創新科技相關專業的大學畢業生，其綜合人才培養能力已大幅超越矽谷和倫敦。

除了自身卓越的人才培養實力，營造良好的創科環境吸引全球人才和企業落地也是紐約成功實現產業轉型的關鍵因素之一。紐約市政府常年重視城市的基礎設施建設、維護和更新，為市民打造優越的工作和生活環境。其中主要措施有：第一，改善資料傳送速度，完善網路建設。2016 年，紐約政府投資啟動城市 Wi-Fi 基建項目，為城市上百萬市民及訪客提供高速、穩定、全面覆蓋的免費公共 Wi-Fi 網路。第二，為市民和商業機構獲取公共服務提供便利。2003 年，紐約市政府整合 40 多個政府和公共部門的熱線，建立了非緊急公共服務綜合熱線 311，並以超過 180 種語言提供服務。市民和企業只要撥打電話就可一站式諮詢各類公共服務，反映各類訴求。第三，紐約市推出美國有史以來最大規模的“經濟適用房”計劃。該計劃要求開發商將新建公寓的 20%-30% 以低價租給青年企業家和科技人員等中低收入人群。“經適房”計劃的實施，將在一定程度上

使“年輕人住不起房”的現象得到有效改善，從而為紐約吸引和留住更多青年才俊。

從人才的需求出發、服務人才安居樂業，是紐約城市規劃的重要特徵。例如，紐約市城市規劃委員在 2015 年頒布的發展綜合規劃——《同一個紐約：建設一個富強而公正的城市》（One New York: The Plan for a Strong and Just City）是紐約城市發展和公共服務堅持人本導向的具體體現。該規劃注重城市創新能力與人才福利高度統一，強調紐約整體創新產出的提升與人才及其家庭受教育水平、技術獲取水平、財富水平、能力水平和觀念水平的培養和提升息息相關。因此提出在注重創造高新技術就業機會的同時，紐約政府亦將在教育、醫療、住房和社會服務等政策領域發力，全方位打造宜居宜業、創新創業的社會環境。

## （二）台灣新竹創科發展經驗

位於我國台灣省新竹市的新竹科學園於 1980 年成立，目前下轄六個衛星園區，總開發面積達 1,375 公頃。根據新竹科學園管理局發布的數據顯示，截至 2021 年，核准進駐的商業機構已經有約 600 家，僱用總員工近 17 萬人，主要產業包括有半導體業、電腦業、通訊業、光電業、精密機械產業與生物技術產業。2021 年全年，新竹科學園內企業的年度總營業額為 1.5 兆新台幣（約相當於 4,000 億港元），創歷史新高。

新竹科學園區成立 40 多年以來，直接帶動台灣社會科技與經濟發展，而新竹園區內的產業演進，也是當地政府逐步推動產業政策的縮影。新竹科學園的產業發展與國際市場分工高度相關，可以粗略分成以下三個階段：園區在上世紀 80 年代以個人電腦的加工製造為主，主要營收來自出口個人電腦產業鏈中的中下游產品，在 1993 年的總營業額達至約 260 億港幣；園區在 90 年代進入半導體代工階段，1998 年的總營業額已增加至 1,700 億港幣；在進入 21 世紀之後，園區開始進入創新階段，2004 年營業額超過 2,600 億港幣，10 年間增長 10 倍。在專利申請數量方面，僅台積電一家企業在 2021 年的獲批專利就已達 1,780 件，顯示園內的高科技廠商源源不斷的創新動力。時至今日，積成電路和光電產業已發展成為新竹科學園最具代表性的產業，並接連帶動建立台灣高科技產業的全球知名度。

為保障園區高效運營和惠企政策落地實施，當地政府成立的新竹科學園管理局，積極打造各類基礎設施與規劃各項服務措施，其中包括：維護和更新基礎設施、公共服務單窗口一站式辦理、創新研發的稅務和現金獎勵措施、建立產學研合作機制、打造園區優質人力及文化等。其中尤其值得稱道的是管理局出台的園區土地政策。為滿足企業擴大生產及未來的長期發展需求，並考慮到企業建廠及試運營期間所承受的資金壓力，園區內的土地施行只租不賣政策，即企業租用土地或標準廠房後僅按月支付租金，無需一次籌資支付巨額購地成本。這一舉措扶持了許多企業進一步擴大對設備及研發的投資，進而以更大的生產規模爭取商機。

### （三）深圳創科產業升級路徑

近來時值深圳經濟特區建立 42 周年紀念日。短短 40 年光陰，深圳從一個珠江三角洲的鄉村邊陲崛起，蛻變為中國的科技製造重鎮。據統計，2019 年全市有逾 20 萬間不同類型的科技企業，其中國家級高新技術企業總量超過 1.7 萬間，僅次於北京。細數在深圳設立總部的科技巨頭已經覆蓋眾多細分行業，包括騰訊、華為、大疆、華大基因，以及電動車生產商比亞迪等。與此同時，以華強北電子區為依托的大量家庭代工產業則帶動了製造業的快速發展。如今深圳已經成為改革開放中最耀眼的明星、全國領先的創新型城市，被譽為「中國矽谷」和「創新之都」。

80 年代初，深圳並沒有高科技產業的發展條件，僅是在「三資」及「三來一補」企業基礎上，逐步引進國外的先進技術。及至 1984 年，深圳頒布《深圳經濟特區引進先進技術鑑定暫時辦法》，正式由政策推動高科技產業引進。1985 年 7 月，深圳市政府進一步與中國科學院、廣東國際信託投資公司合辦第一個國家級「深圳科技工業園」。在 1987 年，深圳市政府更是出台了全國首個《關於鼓勵科技人員興辦民間科技企業的暫行規定》，允許及鼓勵了一批技術研發人員以技術專利、管理辦法等要素入股企業。任正非正是在此項政策文件的支持下，創辦了今天世界級的華為公司。

自 1999 年起，深圳市每年定期舉辦高新技術成果交易會，幫助科研成果打通與投資基金、科技企業之間的信息壁壘，從而推動了大批高新技術走向市場。進入 21 世紀，深圳高科技企業開始高速發展。隨着高科技企業的數量不斷增加、規模不斷擴大，在 2005 年首次出現產值超過千億的企業。深圳高科技產業的發展，自此超越了依靠「優惠政策」的階段，轉而進入依靠「創新」的可持續發展模式，實現了從「深圳加工」、「深圳製造」到「深圳創造」的歷史性跨越。

## 三、結語

香港回歸後，由於亞洲金融危機的爆發，以及製造業“北移”造成的產業“空心化”，特區政府着手推動“第三次產業轉型”，力圖發展以創新科技為本、以高增值為主要特徵的創新科技產業，並已取得了一定成果。全球各地先行者的創科發展經驗和普遍規律至少在以下兩個方面對香港發展自身的創新科技產業有一定借鑒和啟發之處：一是大膽施行拿來主義，一些好的產業和公共政策可以直接借鑒和應用，幫助香港快速抓住稍縱即逝的市場機遇。二是在面對相同或相似的問題時，國內外的諸多經驗可以作為一個參照系，幫助我們思考如何解決香港的一系列重大問題，比如政府與市場的關係、科技人才的培養和引進、如何引導企業成為創新主體、產學研平台的建設和發展等。相信這些經驗和做法將有助於北部都會區創科產業發展，帶動香港加快向創新型經濟轉型。

## 免責聲明及重要注意事項

本文件由中國銀行(香港)有限公司「中銀香港」刊發只供參考。

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## Learning to Innovate: Promoting Technological Innovation in the Northern Metropolis Through Bringing International Experiences of Effective Governance

Economist, Zhao Chenlin

The Northern Metropolis Development Strategy (the Strategy), promulgated by the Hong Kong SAR government at the end of 2021, displays an unprecedented blueprint for the urban development of Hong Kong by forging opportunities for improving residents' livelihood and supporting the city to develop into an international innovation and technology (I&T) hub. Besides, the direction of development and positioning of Hong Kong stated in the Strategy are increasingly vibrant against the backdrop of the documents promulgated by the Central Government, namely, the National 14th Five-Year Plan, the Outline Development Plan of the Guangdong – Hong Kong – Macau Greater Bay Area, and the Qianhai Plan. The Northern Metropolis certainly will be a colossal urban space for Hong Kong to further integrate into the overall national development and join hands in taking forward the development of the Greater Bay Area (GBA). One of the most significant opportunities the Strategy brings to Hong Kong is to build up an I&T ecosystem for the transformation of economic structure, which is vital to maintaining the city's status as one of the most vibrant and competitive opportunity hubs in Asia. The traditional four key industries in Hong Kong, including financial services, tourism, trading and logistics, and professional and producer services, have been the driving force of Hong Kong's economic growth, providing impetus to the growth of other sectors and creating employment. The Strategy also details the policy supports for the I&T sector and high-end manufacturing industry, which will be a catalyst for greater growth. To achieve this vision, the development plan of the Northern Metropolis will transform the northern part of Hong Kong into a 300-square-kilometer I&T economic engine and a metropolitan area for people to live in, work, and travel. The Northern Metropolis also aims to become a high-tech development zone in GBA with the capacities of resource allocation, technological innovation, and growth facilitation, and lead the formation of inter-industrial linkage, one-hour living circle, and technological cooperation between Hong Kong and its neighboring cities in GBA.

In general, the Northern Metropolis will be a transport infrastructure-led development with railways as its backbone, involving projects such as the Hong Kong-Shenzhen Western Railway linking up Hung Shui Kiu and Qianhai of Shenzhen, extension of the Northern Link, and the East Rail Line. An automated people mover system from Tsim Bei Tsui to Pak Nai will also be explored. On

top of that, pushing out industrial policies to support I&T development has been prioritized on the government's policy agenda. It is noticeable that policy innovation and diffusion could be the determining factor in whether the I&T industry can achieve maximum growth and sustainability in Hong Kong. Looking back, the Hong Kong government has always followed the principle of "small government, big market" by limiting its participation and intervention in economic activities. The government is considered to lack successful experience in leading the development of I&T industry when compared with that of the Mainland and Singapore. Therefore, this analysis elaborates on the trends and successful cases of the I&T industry development worldwide from the perspective of pragmatism, and the findings may serve for Hong Kong's future policy formulation and implementation for the I&T industry.

## 1. Global Landscape in Innovation and Technology Development

According to the latest ranking of the innovation performance of 132 countries and economies by the World Intellectual Property Organization, the global I&T industry increasingly presents a "winner takes all" pattern as the Covid-19 pandemic promotes digital transformation and technological development in advanced economies. Therefore, the competition faced by Hong Kong's I&T industry will become increasingly fierce in the future.

### **Trend 1: Small advanced economies have stronger innovation capacity**

On the one hand, compared with China, the US, the UK, Germany, Japan, and other major economies, which have sufficient financial and human capital, small-developed economies such as Singapore, Israel, and Switzerland have slightly lower resource endowments and relatively small market scales. But the latter countries are very good at using the characteristics of the innovation economy to compete in individual segments. The common feature of such small-developed economies is that they have complete legal and intellectual property protection systems and perfect protection for technology research, implementation, business transfer, and other processes. Therefore, they can attract multinational companies and technical teams to settle and operate. It enables the enterprise's scientific research investment to transform into products and earn considerable profits quickly.

On the other hand, innovation-led small-developed economies also attach great importance to building a technological innovation ecosystem that keeps pace with the times. Taking Singapore as an example, as an innovation hub in Southeast Asia, the Singapore government has launched a variety of industrial guidance policies, such as "Smart Nation 2025", "Digital Government Blueprint", "SME Go Digital", and "Startup 5G", etc.

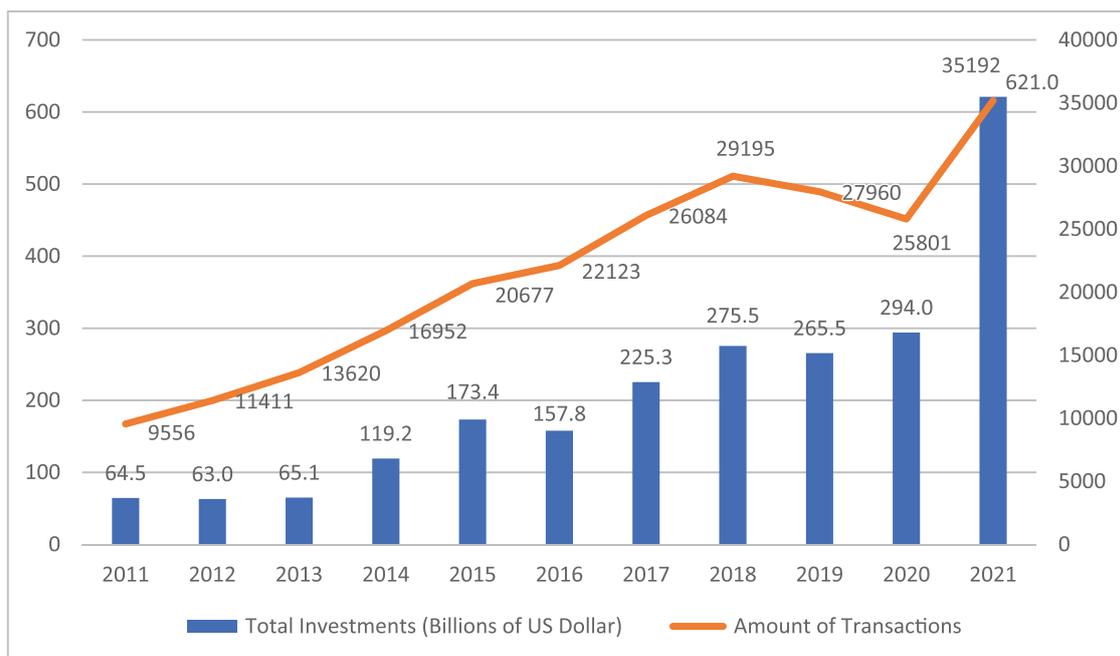
Multinational companies such as GlaxoSmithKline, Cisco, and Google have successfully been attracted to settle. The government also continuously improves the practicality of new technologies by providing sandbox labs that combine with the market covered by the companies, continuously improving the practicability and marketization level of new technologies.

### **Trend 2: Fundraising capacity has become a new measurement for the I&T industry**

Apart from the commonly used measurement such as technology investment and the number of papers published, the number of innovative technology companies and their ability to raise funds have also become important indicators for evaluating the innovation capacity of an economy. The development of science and technology and changes in the social environment enable innovative companies to find opportunities to enter the market. Innovative technologies such as semiconductor chips, biomedicine, artificial intelligence, cloud services, and other fields are rapidly emerging and attracting investment. The number of venture capital investments has hit a new high in the past ten years. In recent years, the monetary easing implemented by developed economies in response to the epidemic has also pushed innovative companies' valuation and fundraising scale to record highs.

According to CB Insights (Table 1), the number of global unicorn companies has reached 959 in 2021, a surge of 69% compared with 517 in 2020. By the end of 2021, global venture capital investment reached \$621 billion, more than double the \$294 billion in 2020, with 44 new unicorns valued at more than \$10 billion. The regions with the largest transaction volume are North America, Asia, and Europe, of which the United States accounts for more than half of the world with US\$311 billion. In addition to venture capital, based on transformation needs, many large enterprises have also used Corporate Venture Capital to implement innovation investments and rely on new technologies and R&D talents to strengthen their ability to respond to market changes.

**Table1: Capital Investment and Amount of Transactions in the Global I&T industry (2011-2021)**



Source of Data: CB Insights, Hong Kong Financial Research Institute of Bank of China

## 2. Transformation Cases of Innovative Global Cities

### 2.1 How New York Became a Tech Town

Many people first think of the label of a global business and financial center when it comes to New York. However, New York has achieved explosive growth in technological innovation in recent years. Its technology industry center, “Silicon Alley” in Manhattan, is home to many high-tech enterprise clusters. Now it has become the main engine of New York’s economic growth. It is also known as another successor next to Silicon Valley, with the fastest-growing information technology center and the core area of global technology research and development. According to Forrester Research, a market research organization, the New York area has more than 330,000 technology practitioners, making it the largest technology talent pool in the United States. At the same time, nearly 100 academic institutions in the region can send more than 7,500 university graduates studying innovation and technology-related majors to the market every year. Their comprehensive talent training capabilities have greatly surpassed those of Silicon Valley and London.

In addition to its outstanding talent training capabilities, creating a good I&T environment to attract global talents and enterprises is also one of the critical factors for New York to achieve industrial transformation successfully. The New York City government attaches great importance to the construction, maintenance, and renewal of the city’s infrastructure all year round to create an ideal working and living environment for citizens. The main measures are as follows: First, improving the speed of data transmission and network construction. In 2016, the New York government invested and launched the urban Wi-Fi infrastructure project to provide high-speed, stable, and comprehensive free public Wi-Fi networks for millions of citizens and visitors in the city. Second, to facilitate access to public services for citizens and businesses. In 2003, the New York City government consolidated more than 40 government and public sector hotlines to create 311, a comprehensive non-emergency public service hotline that provides services in more than 180 languages. Citizens and enterprises can consult public services and reflect various demands at one stop. Third, New York City launched the largest “affordable housing” program in the history of the United States. The plan requires developers to rent 20%-30% of newly built apartments to low- and middle-income groups such as young entrepreneurs and tech workers at low prices. Implementing the “Affordable Housing” program effectively improves

the phenomenon of “young people cannot afford housing” to some extent, attracting and retaining more young talents for New York.

Starting from the needs of talents and serving talents to live and work in contentment is an essential feature of New York urban planning. For example, “One New York: The Plan for a Strong and Just City”, a comprehensive development plan introduced by the New York City Urban Planning Commission in 2015, is a concrete embodiment of the people-oriented orientation in the city development and public services of New York. The plan pays attention to the high degree of unity of urban innovation ability and talent welfare. It emphasizes that the improvement of New York’s overall innovation output is closely related to the cultivation and improvement of talents and their families’ education level, technology acquisition level, wealth level, ability level, and concept level. Therefore, while focusing on creating high-tech employment opportunities, the New York government also makes efforts in policy areas such as education, medical care, housing, and social services to develop an all-around social environment that is livable and suitable for work, innovation, and entrepreneurship.

## **2.2 A Brief History of I&T Development in Hsinchu, Taiwan**

The Hsinchu Science Park, located in Hsinchu City, Taiwan Province of China, was established in 1980 and currently has six satellite parks, with a total development area of 1,375 hectares. According to the Hsinchu Science Park Administration, the park has about 600 approved commercial establishments and nearly 170,000 employees in 2021. The primary industries include semiconductors, computers, communications, optoelectronics, precision machinery, and biotechnology. In 2021, the total annual turnover of enterprises in Hsinchu Science Park is NT\$1.5 trillion (equivalent to approximately HK\$400 billion), reaching a record high.

Since its establishment more than 40 years ago, Hsinchu Science Park has driven Taiwan’s social, technological, and economic development. The industrial revolution in Hsinchu Park is also a microcosm of the local government’s gradual promotion of industrial policies. The industrial development of Hsinchu Science Park is highly related to the division of labor in the international market and can be roughly divided into the following three stages: In the 1980s, the park was mainly engaged in the processing and manufacturing of personal computers. The primary revenue came from exporting mid-and downstream products in the personal computer industry chain. In 1993, the total turnover reached about HK\$26 billion. The park entered the semiconductor foundry stage in the 1990s, and the total turnover in 1998 increased to HK\$170 billion. After entering the 21st century, the park began to enter the innovation stage. In 2004, the turnover exceeded HK\$260 billion with an increase of 10 times in 10 years. In terms of the number of patent applications, the Taiwan Semiconductor Manufacturing Company (TSMC) alone has 1,780 patents approved in 2021, showing the continuous innovation power of high-tech manufacturers in the park. Today, IC and optoelectronics industries have developed into the most representative sectors in Hsinchu Science Park. They have successfully led to establishing the global reputation of Taiwan’s high-tech industries.

To ensure the efficient operation of the park and the implementation of the policy benefiting enterprises, the local government established Hsinchu Science Park Administration to build various infrastructures and plan various service measures, including maintenance and renewal of infrastructure, public service single-window one-stop processing, innovative R&D tax and cash incentives, the establishment of industry-university-research cooperation mechanisms, and building high-quality human resources and culture in the park.

Among them, the park land policy is particularly commendable. To meet the needs of enterprises to expand production and long-term development in the future and take into account the financial pressure on enterprises during factory construction and trial operation, the land in the park implements the policy of renting only. It means enterprises can rent without paying huge land purchase costs at once. This move has supported many companies to further expand their investment in equipment and R&D, striving for business opportunities with a larger production scale.

## **2.3 The Upgrading Pathway of the I&T Industry in Shenzhen**

Recently, it was the 42nd anniversary of the establishment of the Shenzhen Special Economic Zone. In just

40 years, Shenzhen has risen from a rural border in the Pearl River Delta and transformed into a major technology manufacturing center in China. According to statistics, there were more than 200,000 technology enterprises in the city in 2019, of which the total number of state-level high-tech enterprises exceeded 17,000, ranking only next to Beijing. The technology giants that have set up headquarters in Shenzhen have covered many sub-sectors, including Tencent, Huawei, DJI, BGI, and electric vehicle manufacturer BYD. At the same time, many home foundry industries based in Huaqiangbei Electronics District have driven the rapid development of the manufacturing industry. Shenzhen has now become the most dazzling star in the reform and opening up, a leading innovative city in the country. It is known as “China’s Silicon Valley” and “Innovation City”.

In the early 1980s, Shenzhen did not have the conditions for developing high-tech industries and was only able to adsorb advanced technology from the so-called “three types of foreign-funded enterprises” and export processing enterprises. In 1984, Shenzhen promulgated the “Temporary Measures for the Appraisal of the Introduction of Advanced Technologies in Shenzhen Special Economic Zone”, officially promoting the introduction of high-tech industries through the policy. In July 1985, the Shenzhen government further co-organized the first national-level “Shenzhen Science and Technology Industrial Park” with the Chinese Academy of Sciences and Guangdong International Trust and Investment Corporation. In 1987, the Shenzhen government issued the country’s first “Interim Regulations on Encouraging Technologists to Establish Private Technological Enterprises”, allowing and encouraging a group of technological R&D talents to invest in enterprises with technical patents, management measures, and other elements. With this policy support, Ren Zhengfei founded today’s world-class company Huawei.

Since 1999, Shenzhen has regularly held high-tech achievement fairs to help scientific research achievements make breakthroughs in information barriers between investment funds and technology enterprises, promoting many high-tech products to the market. Since the 21st century, Shenzhen’s high-tech enterprises have begun to develop rapidly. With the continuous increase in the number and scale of high-tech enterprises, companies with output values exceeding 100 billion yuan appeared for the first time in 2005. The development of Shenzhen’s high-tech industry has surpassed the stage of relying on “preferential policies”. It has turned into a sustainable development model that relies on “innovation”, realizing the historic leap from “Processing in Shenzhen” and “Made in Shenzhen” to “Creating in Shenzhen”.

### **3. Conclusion**

After the handover in 1997, Hong Kong faced the outbreak of the Asian financial crisis and the industry “hollowing out” caused by the “north shift” of the manufacturing industry. Hong Kong SAR government promoted the “third industrial transformation”, striving to develop innovation and technology-based, high-value-added innovative technology industry, and has achieved certain results. Global pioneers’ I&T development experiences and general laws can provide reference and inspiration for Hong Kong to develop its I&T industry in at least the following two aspects. First, to boldly implement the experiences, some good industrial and public policies can be directly learned and applied, helping Hong Kong quickly seize the fleeting market opportunities. Second, when faced with the same or similar problems, many global experiences can be used as a frame of reference to help think about the solutions to major issues in Hong Kong, such as the relationship between the government and the market, the training and introduction of scientific and technological talents, the guide for enterprises to become the main body of innovation, construction and development of industry-university-research platforms, etc. These experiences and practices are believed to contribute to developing the I&T industry in the Northern Metropolis and drive Hong Kong to accelerate its transformation into an innovative economy.

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# 主要經濟指標 (Key Economic Indicators)

	2020	2021	2022/Q1	2022/Q2
<b>一. 本地生產總值 GDP</b>				
總量 (億元) GDP(\$100 Million)	26,757	28,454	6,732	6,682
升幅 (%) Change(%)	-6.5	6.3	-3.9	-1.3
<b>二. 對外貿易 External Trade</b>			<b>2022/07</b>	<b>2022/01-07</b>
外貿總值 (億元) Total trade(\$100 Million)				
總出口 Total exports	39,275	49,607	3,796	26,802
進口 Total imports	42,698	53,078	4,072	29,147
貿易差額 Trade balance	-3,422	-3,471	-276	-2,346
年增長率 (%) YOY Growth(%)				
總出口 Total exports	-1.5	26.3	-8.9	-1.0
進口 Imports	-3.3	24.3	-9.9	0.2
<b>三. 消費物價 Consumer Price</b>				
綜合消費物價升幅 (%) Change in Composite CPI(%)	0.3	1.6	1.9	1.6
<b>四. 樓宇買賣 Sale &amp; Purchase of Building Units</b>			<b>2022/08</b>	<b>2022/01-08</b>
合約宗數 (宗) No. of agreements	73,322	96,133	5,238	43,063
年升幅 (%) Change(%)	-2.0	31.1	-33.5	-36.8
<b>五. 勞動就業 Employment</b>			<b>2022/04-2022/06</b>	<b>2022/05-2022/07</b>
失業人數 (萬人) Unemployed(ten thousands)	259.1	250.9	17.9	16.8
失業率 (%) Unemployment rate(%)	5.5	5.5	4.7	4.3
就業不足率 (%) Underemployment rate(%)	3.1	2.7	3.0	2.2
<b>六. 零售市場 Retail Market</b>			<b>2022/07</b>	<b>2022/01-07</b>
零售額升幅 (%) Change in value of total sales(%)	-24.3	8.1	4.1	-1.7
零售量升幅 (%) Change in volume of total sales(%)	-25.5	6.5	1.0	-4.7
<b>七. 訪港遊客 Visitors</b>				
總人數 (萬人次) arrivals (ten thousands)	356.9	9.1	4.8	12.4
年升幅 (%) Change(%)	-93.6	-97.4	454.4	192.5
<b>八. 金融市場 Financial Market</b>			<b>2022/06</b>	<b>2022/07</b>
港幣匯價 (US\$100=HK\$)				
H.K. Dollar Exchange Rate (US\$100 = HK\$)	775.2	779.8	784.6	785.1
貨幣供應量升幅 (%) change in Money Supply(%)				
M1	30.1	8.0	-14.2	-7.4
M2	5.8	4.3	0.4	2.4
M3	5.8	4.3	0.4	2.3
存款升幅 (%) Change in deposits(%)				
總存款 Total deposits	5.4	4.6	0.4	2.5
港元存款 In HK\$	6.2	1.4	-3.4	0.7
外幣存款 In foreign currency	4.6	7.9	4.6	4.3
放款升幅 (%) in loans & advances(%)				
總放款 Total loans & advances	1.2	3.8	-2.3	-0.1
當地放款 use in HK	1.7	4.7	-2.4	1.1
海外放款 use outside HK	0.1	1.7	-2.1	-2.9
貿易有關放款 Trade financing	-6.2	14.2	-3.5	-8.9
最優惠貸款利率 (%) Best lending rate (%)	5.0000	5.0000	5.0000	5.0000
恆生指數 Hang Seng index	27,231	23,398	21,860	20,157