

Unlock the Full Potential of 5G to Drive Commercial Success

釋放 5G 無限潛能締造商業成功



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In the 5G era, with the characteristics of high-speed, low-latency, and multi-connectivity, there will be tremendous changes in human lifestyle. As a leading global provider of information and communications technology (ICT) infrastructure and smart devices, Huawei is committed to continuous innovation, specializing in 5G research, standards and product development, and is a valued supplier and partner of various telecom operators in Hong Kong.

Ushering in the fourth industrial revolution, new technologies such as artificial intelligence, IOT, 5G, and bioengineering are being integrated into every aspect of our society, accelerating the digital transformation of the industry and improving the consumer experience comprehensively. With the amalgamation of Cloud, and AI, 5G enables a natural synthesis among industries as it expands people-centered digital connections that require dense connections among devices. Consequently, there will be diverse network services (e.g. telemedicine, smart manufacturing), comprehensive capabilities (e.g. higher uplink bandwidth), various terminals (e.g. drones), and greater connection value (e.g. higher energy efficiency for production).

5G for individuals - The era of visual enjoyment

According to Wilson Wang, General Manager of Hong Kong Representative Office of Huawei, the 5G era will be visual-based, bringing new dimensions to entertainment and communications. Video content providers are now able to stream 4K Ultra HD video contents onto their subscribers' mobile devices any time any place via 5G network. By 5G live broadcast service, it is more cost-effective to produce advanced live video program which offer different angles of view in a music concert or a soccer game etc. to subscribers who can choose from. In the past, 4G has had limitations in video gaming in terms of streaming speed and latency, but not with 5G. It is expected to enhance the gaming performance of players by improving reaction time and increasing internet speed.

步入 5G 時代，藉著 5G 的高速、低延時及連接量多的特性，人類的生活模式將會迎來巨大的改變。華為作為全球領先的資訊及通訊科技基礎建設與智能裝備供應商，多年來持續創新、致力於 5G 的研究和標準，產品開發等，同時亦是香港多間電訊營運商的重要供應商及合作夥伴。

迎來以智慧技術為代表的第四次工業革命，人工智能、物聯網、5G 以及生物工程等新技術正融入到社會每一方面，驅動產業數碼化轉型、全面提升消費體驗。5G 配合雲端及人工智能技術，擴充了以人為中心的數碼聯繫，促使行業之間的自然融合，從而帶動各式各樣的網絡服務，例如遙距醫療、智慧生產、多樣化的終端設備等。

視覺主導時代開始

華為香港代表處總經理王青認為，5G 科技將會帶來一個以視覺為主導的時代，為娛樂及通訊聯繫添加新的體驗。創作者可以通過 5G 網絡，隨時隨地在訂戶的流動裝置提供 4K 超高清影片內容；通過 5G 現場直播服務，不單可以製作更具成本效益的優質現場節目，更可以讓訂戶選擇以不同視角觀看演唱會或足球比賽，大大豐富了娛樂享受。5G 亦可孕育新的電子遊戲方式，不再受 4G 網絡的串流速度和時延所局限，可望提高遊戲網上對戰的反應及速度，全面提升玩家遊戲體驗。

The high data rate and low latency characteristics of 5G also allow both ends of communications parties to exchange data much more than conventional voice and video. The development of holographic 3D video conferencing and haptic communication are two examples representing the possibility to transform our ways of communications and to exchange sense of touch via wireless and wireline network.

另一方面，與傳統話音及視像通訊比較，5G 的兩大特點：高數據流量及低時延，能容許通訊的雙方交換更多數據；而全息 3D 視像會議及觸覺通訊聯繫的發展，亦印證了 5G 如何轉變我們的通訊模式，及如何透過無線通訊和有線網絡來交換觸感連繫的可能性。



5G for society and enterprises - Enabling the digitalization

In addition to the improvement of personal experience, the commercial benefits brought by 5G are remarkable. With powerful analytic resources like image recognition, blockchain, and AI, enterprises would be able to exchange cross-domain data to derive better and more accurate decisions like identifying potential buyers and providing personalized service to customers.

The operation of governments and enterprises will also become agile and efficient due to digitalization and assistance of AI. An open, flexible, easy-to-use, and secure digital platform will become the foundation for the realization of the digitalization of the entire society, empower digital and intelligent transformation in all industries, and fuel social progress and economic growth.

Taking the Greater Bay Area as an example, 5G has been launched in the cities since the second half year of 2019. Various enterprises have formed a 5G industry alliance to bring out the synergy effect. In 2020, the outbreak of epidemic brings a temporary boost to the technology industry with stronger needs of advanced 5G and AI technologies. The emergency and development of autonomous driving, remote medical care, remote manufacturing, and online education are gradually changing our daily lives.

社會及企業數碼化的基礎

個人體驗提升以外，5G 在商業層面上帶來的優勢亦不容忽視，隨時隨地提升商業世界的工作效率。企業可以運用圖像識別、區塊鏈和人工智能等技術，更有效地分析市場數據，通過交換跨領域數據，作出更理想及更準確的決策，例如確認潛在買家、為客戶提供更加個性化的產品和服務等。

政府、企業也將因數碼化、智能化而變得敏捷、高效、開放、靈活、易用、安全的數碼平台，將成為實現整個社會數碼化的根基，激發行業創新和產業升級，帶動社會進步。

以鄰近香港的大灣區作例子，大灣區在 2019 年下半年已開始陸續開通 5G 服務，多間企業也組成 5G 產業聯盟，協同效應初現。而在 2020 年，受疫情影響下，5G 及人工智能的需要更變得成熟，無人駕駛、遙距醫療、遠程製造、線上教育都逐漸興起，這些發展對大家的生活改變將更加大。



Embracing sustainability with healthy ecosystem

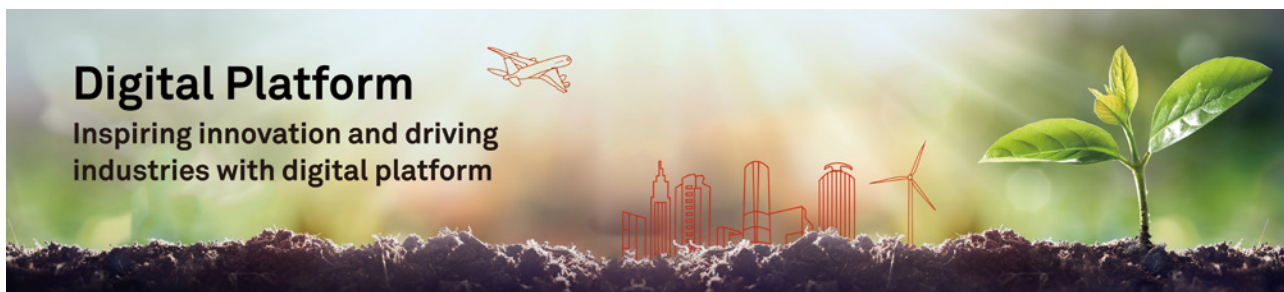
While 5G is definitely beneficial to enhance a city's competitiveness, Wang comments that the auction price set by the government for 5G networks is reasonable, which can urge the development of 5G in Hong Kong to keep pace with the world. The Government also worked with OFCA to introduce the Subsidy Scheme for Encouraging Early Deployment of 5G. This scheme offers nearly 100 qualified projects of up to HK\$500,000 each to facilitate 5G deployment, which is aimed at increasing the overall competitiveness of the city.

"Openness, cooperation, and win-win" have been the global business principals of Huawei as well as the foundation of long term development in the industry. To that end, Huawei has collaborated with various universities in Hong Kong, as well as the Science Park, industry organizations and associations. In addition, Huawei offers free hardware module and software training start-ups for 5G development, enabling Hong Kong's tech ecosystem to kick-off 5G.

建立生態系統 促進行業可持續發展

啟動 5G 網絡絕對是加強城市自身競爭力的重要一環，王青認為，香港政府對 5G 頻譜的定價非常合理，是促進香港 5G 發展與全球其他先發地區步伐一致的其中一項主要貢獻。同時，政府亦與通訊事務管理局辦公室 (OFCA) 推出「鼓勵及早使用 5G 技術資助計劃」，此計劃支持約 100 個合格的 5G 技術項目，資助上限為港幣 50 萬元以促進 5G 部署，提升香港的整體競爭力。

「合作共贏」是華為的信念，亦是行業長久發展的基礎。為此，華為與香港的多間大專院校及香港科學園等合作，透過硬件捐贈及培訓課程，培育人工智能人才，並舉辦比賽及工作坊，吸引開發者互相交流，促使香港建設科技生態系統以開啟 5G 世代。同時，華為亦致力與業界交流和分享最佳管理實踐，探索合作領域並推動標準發展，促進行業可持續發展進程。



Huawei believes that smart society vision can be realised in the next 30 years. The development of global 5G in network, deployment, ecology and experience is beyond imagination. Whether for individuals, families or every organization, 5G is creating unprecedented value. Huawei, as the pioneer of 5G era, will work closely with customers and partners to focus on 5G innovative applications, prosper the 5G ecosystem, and accelerate 5G commercial success. ●

華為相信，未來 30 年，人類將會走進智慧社會。5G 現時在世界各地的網絡、部署、生態和營運經驗方面的發展都超乎想像。無論是對於個人，家庭還是每個組織，5G 正在創造空前的價值。華為作為 5G 時代的先驅，將與客戶和合作夥伴緊密合作，繼續專注研發 5G 的創新應用，使 5G 生態系統更加蓬勃，並加快 5G 帶來的商業成功。 ●