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5G CONNECTS HONG KONG TO THE WORLD AND THE UNIVERSE

5G is promising to deliver dramatic changes to how we live, work, entertain and connect with others. This upgrade to the world's telecommunications network is currently being deployed globally. However, in Hong Kong, it is already providing a lifeline for companies hit hard by the COVID-19 pandemic and is bringing the community together to reach for the stars.

PARTNERSHIP MAKES 5G REAL

3 Hong Kong hasn't just plugged in the network and said, "Good luck!" to Hong Kong companies and non-profit organisations. It works closely with them to develop solutions uniquely suited to their needs and those of their customers and fans. It has even assisted them to secure the government funding needed to help them bring forward plans to connect with the world at 5G speed.

Aimed at "enhancing Hong Kong's overall competitiveness", the Hong Kong government's Office of the Communications Authority provides grants to help organisations to fulfil their 5G dreams. In turn, 3 Hong Kong provides its expertise at no cost to help companies negotiate the application process. And when they are successful, everyone wins.

BRINGING THE DANCE TO YOU

The Hong Kong Dance Company (HKDC) has, like performing arts companies everywhere, been hit hard by COVID-19 and the shutdown of performance venues for extended periods. HKDC has responded by bringing their passion out of the studio and transmitting it to people around the world using 3 Hong Kong's unique expertise.

HKDC is adopting 3 Hong Kong's 5G 4K Broadcasting Solution to conduct dance classes online, reaching even more students in Hong Kong and beyond. As restrictions have loosened, they've also started putting high-definition performances online. Artistic passion married to technical



expertise has created a truly global audience. Dr David Tsui, Executive Director of HKDC, says, “5G technology has brought unprecedented inspiration and equipped us with new virtual reality technology to explore brand new markets.”

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SHOPPERS' ROBOT GUIDE

Fortune REIT is deploying a smart robot in their +WOO shopping mall. This friendly antithesis to the Terminator will never have to say “I’ll be back”, as it will always have the answers immediately, spoken and on a display screen. This friendly concierge/ambassador can translate shoppers’ questions in multiple languages, transmit the data via super-high-speed 5G for processing and then provide answers to the shoppers in real-time. It can serve as a mobile kiosk to provide an e-directory for shoppers – but can do more. Not only can it tell you where to go – it can give you directions AND guide you to your destination.

It’s not all sweet stuff though; the robot will be on guard duty when the mall is closed, roaming the halls in the quiet of the night. If it sees anything unusual, 3’s network enables the night-time guardian to capture real-time data to send to a security control room.



SHOW ME ... EVERYTHING

The construction industry is also in a position to realise massive savings. Paul Y. Engineering Group is one of Hong Kong's largest contractors – and a fan of 5G. They are heavy users of building engineering software, but this is frequently bogged down by slow data transmission due to large file sizes. Portable 5G has elevated the Building Information Modelling (BIM, an industry-standard building visualisation software) experience with more efficient data transmission both in the office and at the worksite. By connecting Mixed Reality (MR) devices (e.g. a wearable HoloLens) to 3 Hong Kong's 5G network, they can start seeing project buildouts in hologram-like projections.

James Lee, Chief Executive Officer and Executive Director of Paul Y. Engineering Group, says, "By using the 5G BIM MR Solution, workers can visualise 3D MR images, compare architecture design and onsite situations, conduct 3D clash detection, preview building processes and experience the sense of project completion in real-time on their devices. Defects from planning and design can be detected at the earliest opportunity to save time and cost, where additional construction materials and waste (in cases of project modification) are eliminated to improve environmental efficiency."

Mandarin Enterprises is a leading textiles manufacturer in Hong Kong that brings world-class silks to clients on three continents. Traditional videoconferencing falls far short of showing the vibrancy of colours and the details in texture, patterns and colours that buyers have to see to make a decision about a product. Estella Kwan, Co-Founder and Managing Director, has made 5G-enabled 4K videoconferencing key to her business strategy to continue to communicate with clients in an era of restricted travel. The clients' tactile experience of a silk product can be partially replicated by allowing them to see a dramatically higher level of detail, almost as if they had it in their hands.

5G POWERS AN NFT MISSION TO THE STARS

From the textile arts to digital art, headlines have been much abuzz with stories about art's uniqueness being elevated by the use of non-fungible tokens, known as NFTs. 3 Hong Kong is collaborating with the new media



art group XCEPT to create a space-age experience for the people of Hong Kong: the **3. Orbstellar by XCEPT NFT Big Bang Immersive Experience Hall**. All participants can simultaneously access the 5G network to upload their own digitally created planets. They will be combined into a collective NFT artwork, stored on the blockchain and beamed into space for the cosmos to see – and will also be available online for the people on Earth to enjoy. Small companies, NGOs and consumers alike are benefitting from the arrival of practical 5G solutions. **3** Hong Kong is working to make sure that companies endeavouring to rise above the hardships posed by COVID-19 can make the most of 5G in their business.

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