# DAILY NEW





# **Nicholas Wong**

Mr. Nicholas Yong, senior consultant in Huawei, focuses in assisting public and government agencies to embrace their digital transformation. Work closely with Huawei Product.

More than 17 years of experience in communication and technology, actively involved in management consulting product management and solution design covering areas of IT infrastructure network, network, data center, cyber security, IOT and Artificial Intelligence.

Sharing with us about the detail of the next generation of wireless generation, what is exactly is 5G and Wi-Fi 6, how this is a crucial leap in technology of internet. How 5G and Wi-Fi 6 work. How this can be used in today's world.

**5G** The next generation of wireless communication, 5G, is changing how people connect. It offers speeds not seen before, ultra-reliability, and better flexibility than Wi-Fi. This is a communication medium that connects a vast amount of devices, including sensors, with peak data rates of around 10 Gbps and  $\tilde{1}$ Enhanced mobile broadband is an latency. appropriate term to capture this next wireless era, but 5G can potentially serve huge areas of industrial applications and smart city opportunities including massive machine-type communications and ultrareliable low-latency communications.

Future use cases include augmented and virtual reality, smart vehicles, entertainment and automation in the vehicle, smart grids, and drone deliveries. Moreover, 5G drives economic growth by enabling smart tourism, high-tech industrial parks, and AR/VR-based virtual education, creating new opportunities for innovation and employment.





**WiFi-6** The evolution of wireless connectivity has reached its peak with Wi-Fi 6, which offers superior speed and efficiency with greater capacity compared to its predecessor, Wi-Fi 5. With enhancements such as 1024-QAM, OFDMA, and MU-MIMO, Wi-Fi 6 delivers more bandwidth, optimized parallel processing, and reduced latency, enhancing user experience for multiple devices. In addition, Huawei's AirEngine Wi-Fi 6 has revolutionized the landscape with cutting-edge features such as SmartRadio calibration and robust security mechanisms. As the modern world embraces technological transformation, Wi-Fi 6 offers a fast, secure networking and more reliable experience to the user for our connected future.

## **Huawei Innovations**

Pushing forward with technological innovation in a variety of fields, Huawei strengthens its position as the market leader worldwide. With cutting-edge smartphones, wearable technology, smart home appliances, and integrated lifestyle services, the company broadens its line of consumer electronics products. Autonomous driving, intelligent sensing, in-car cloud services, and next-generation communication connectivity are the main focuses of its intelligent automotive solutions.

Huawei is still at the forefront of data transmission, transport, access, wireless networks, and core networks in the telecom



industry. Ascend computing, data storage, and hybrid cloud solutions further enhance the company's computer and cloud capabilities. As part of its commitment to sustainability, Huawei is also developing digital power solutions, such as embedded power, data center energy, site energy, smart photovoltaics (PV), and integrated smart energy systems.

### Summary

To sum up, our honorable speaker first introduces the vision and mission of his company, Huawei: Leading Provider of Infrastructure and Smart Devices. Then, he explains 5G, including future use cases of 5G, opportunity and benefits of 5G then following by the differences of 4G and 5G. Afterwards, Wifi-6 is introduced, mainly explaining the major differences of WiFi-5 and WiFi-6. Furthermore, he introduces Huawei the Engine WiFi-6 Technology, the latest technology created Huawei which provide wireless throughput of up to 10.75 Gbps which is the world first AP that can provide wireless throughput of over 10Gbps. At the last Q&A session, the speaker and listeners discussed the difference of 5G and WiFi-6 which tackles the major confusion among the listeners.

## Reflection

#### **Tey Xin Yi (A24CS0201)**

From the valuable talk by Nicholas Wong, not only I understand about 5G and WiFi-6, but also understand the evolvement of ICT increases exponentially, even though it is during the pandemic, but Huawei is still able to create Huawei Engine WiFi-6 Technology. Pandemic or any kind of external hinder will not be an excuse to stall us from improving and thriving.

#### Fakhira Anisa binti Mohd Radzi (A24CS0070)

This talk opened my eyes to how 5G and Wi-Fi 6 go beyond faster connectivity. I was impressed by how 5G enables autonomous vehicles, smart cities, and AR/VR thus transforming healthcare and education. Wi-Fi 6's efficiency and multi-device support improvements also make smart homes and businesses more seamless. These advancements aren't just about speed but also building smarter communities.

#### Muhammad Nasyat Bin Mohamad Nasir (A24CS0141)

The talk highlighted Wi-Fi 6 and 5G are the revolution of connectivity. 5G offers ultra-low latency and high speeds, transforming industries like healthcare and smart cities. Wi-Fi 6 enhances network efficiency, supporting more devices in dense areas. Together, they complement each other, 5G for wide-area coverage and Wi-Fi 6 for local networks. Therefore, it became a must to provide unlimited bound for us to keep innovating.

#### Nur Syafiqah Binti Abdul Malek (A24CS0167)

This talk made me realize how 5G and Wi-Fi 6 are more than just upgrades, they're shaping future. I found it amazing how 5G enables innovation like autonomous vehicles, while Wi-Fi 6 improves everyday connectivity. It's impressive how technology keeps evolving despite challenges, proving that progress never stops. This talk also made me appreciate how these advancements transforming industries and our daily life.

#### Dasneem Banu Binti Haja (A24CS0066)

This talk inspired me about how 5G and Wi-Fi 6 are revolutionizing connectivity with higher speed and improved efficiency. Advanced features such as OFDMA, MU-MIMO and power saving mechanisms enhance multi-user access in this tech-driven world. Nicholas Wong's insight were highly impressive and motivate me to contribute to create a better community through technology.