TP-LINK Helps TSUI WAH Restaurant Provide Wi-Fi Coverage in Hong Kong

- **CUSTOMER PROFILE**

  Name: Tsui Wah Restaurant
  Location: Hong Kong
  Industry: Catering Industry

- **BACKGROUND**

  Tsui Wah Holdings Limited is a restaurant chain in Hong Kong. Its branches now cover Hong Kong, Macau, Shenzhen, Guangzhou, Shanghai, Hangzhou, Nanjing and eight other big cities in China. It has expanded into a popular and well-known restaurant chain with more than 30 branch shops in Hong Kong since its start in 1967 as a small restaurant called "Ice Café."

- **CHALLENGE**

  - Existing, outdated 802.11g AP couldn’t support wireless ordering system

  To improve their service and food ordering efficiency, Tsui Wah Holdings built a wireless food ordering system for customers in each restaurant in Hong Kong. When the customers place orders, the waiter will key in the order using a small tablet. The order information will
then be sent directly to both the kitchen and the cashier via Wi-Fi.

The restaurant had upgraded their ordering system to improve the customers’ experience while ordering food. However, the existing outdated 11g APs were unstable and slow, which limited the benefits of the wireless ordering system.

“The outdated APs were too slow and unstable, which badly affected the customer experience of the system,” said Mr. Ben Leung, IT Engineering and Maintenance.

• Too much interference negatively impacted Wi-Fi connections

Each one of the 30 restaurants are located in crowded areas with many Wi-Fi signals around, which creates interference between the tablets and APs. Because of this, Tsui Wah wanted the new APs to perform well in environments with multiple wireless signals.

“There are a lot of Wi-Fi signals around us,” said Mr. Ben Leung, “It would be better if our Wi-Fi gets less interference from the Wi-Fi signals around.”

• Large bandwidth usage by select customers

Not only are there many customers using Wi-Fi in the restaurant, some of them might also use it for activities needing using a great deal of bandwidth, such as streaming HD video, playing games, or downloading larger files. This affects the Wi-Fi experience of all the customers in the restaurant, thus limiting the bandwidth of each client is necessary.

• Need for many APs required cost-effective solution

Tsui Wah Holdings Limited wanted to replace all the APs in its 30 restaurants, with each restaurant needing two or three devices depending on the size of each restaurant. After evaluation, it was determined that 80 APs were needed. Because of its budget and the large number of APs needed, the unit price of each AP was important to Tsui Wah.

• SOLUTION

After evaluation and comparison, Tsui Wah Holdings Limited selected the TP-LINK Auranet Wi-Fi solution, containing 80 Auranet EAP220 enterprise APs and 30 TL-SG1008P PoE switches. In each restaurant, two to three EAP220s provided complete Wi-Fi coverage while one TL-SG1008P transmitted data and provided power to the APs.
• Business-class features provide better stability and faster speed

With business-class Qualcomm Atheros 560MHz chipsets, the Auranet EAP220 ensures incredible wireless coverage and reliability. 802.11n technology helps the EAP220 provide faster speeds than legacy 802.11g APs. What’s more, business-class software features such as load balance, QoS and band steering enhance Wi-Fi performance in high-density environments.

“We need to ensure all our customers have a good experience using our Wi-Fi, and people using too much bandwidth has a bad effect on this,” said Mr. Ben Leung.

• Wider and interference-free 5GHz band support

The EAP220 supports simultaneous dual band in 2.4GHz and 5GHz. Because the 5GHz band is wider and interference-free, the EAP220 can use this band to improve Wi-Fi speed and stability when many different wireless signals are causing interference.

• Rate Limit helps ensure overall Wi-Fi experience

The EAP220 supports a function called Rate Limit, which can limit the speed of each connected client device in case one client takes too much bandwidth. Thus Wi-Fi manager of the restaurant used this function to ensure the whole Wi-Fi experience of most customers.

• Free Controller Software with multi-site management and captive portal

TP-LINK has launched free EAP Controller Software, which allows users unify management for TP-LINK’s EAP products, including the EAP220. The software has a multi-site management function that allows network administrators to monitor and manage hundreds of EAPs at multiple sites from any connected PC within the network.

This allows all EAPs in every restaurant in Hong Kong to be under unified control from one location. Plus, a captive portal function provides one convenient method of authentication and limits the duration of use for Wi-Fi guests. Captive portal also includes customizing a unique Wi-Fi authentication page, which helps restaurants display promotional or marketing content.
• No performance shortage at a cost-effective price

When compared with competitors, TP-LINK products perform equally well while being more cost-effective. Because of this, Tsui Wah Holdings Limited chose TP-LINK’s products after a detailed comparison with many indoor Wi-Fi solution providers such as Cisco, Aruba and UBNT.

“TP-LINK’s solution provides the same Wi-Fi performance at a much better price, which works within our budget much better,” said Mr. Ben Leung.

**RESULT**

After deploying the Auranet Business Wi-Fi solution, the Wi-Fi speed in each restaurant improved, allowing the waiters to take orders faster and better serve the customers. The average order time was shortened from XX to XX, which increased customer satisfaction with Tsui Wah’s efficiency. In addition, the Wi-Fi experience of customers improved significantly, allowing them to enjoy smooth web browsing while waiting for their order. What’s more, the restaurant became better known thanks to the ability of customers to upload photos of it to social media.

“TP-LINK helps us provide much better Wi-Fi than before. This improves our service substantially and our reputation among customers,” said Mr. Ben Leung.