Solutions without wires

Wireless solutions and technologies come in different forms. **EDMOND NG** finds out some of the types implemented in businesses today.



oing wireless appears to be the hype in technology these days and companies around Asia are discovering the conveniences and competitive advantage it offers.

Besides gaining greater mobility through the use of wireless technologies such as mobile phones, PDAs, and wireless local area networks, the industry is also focusing on technologies to improve customer service, business processes, and cost savings.

The Singapore infocomm Technology Federation (SiTF) Wireless Chapter Vice Chairman Robert Chew says, "Companies that adopt wireless technologies can improve communication and relationship with customers, create new product offerings, increase revenue, and improve business processes and productivity."

"YCH Group is one Singapore company that has benefited from wireless solution. It has build GPRS capability into its Supply Chain System which has helped cut down

turnaround time for each delivery transaction, shorten the whole business cycle, and ensure information are updated instantly," says Chew.

GPRS or General Packet Radio System is a service that provides actual packet radio access to standard mobile phones using Global System for Mobile Communications (GSM).

"The National Library Board is another organisation that has benefited from wireless solution. Through the use of RFID technology, NLB is able to improve its efficiency and reduced operation cost in borrowing, returning, sorting, stocking and locating of library materials," says Chew.

According to information from the National Library Board (NLB), the implementation of Radio Frequency IDentification (RFID) technology for its Electronic Library Management System (EliMS) provided savings of more than S\$50 million a year

Chief Operations Officer James Loo of Y3 Technologies, the company that provides the wireless applications and solutions for its parent organisation YCH Group says:

"The main aim of our organisation investing in wireless technologies is to provide better service to our customers."

The primary business of the YCH Group is to provide integrated logistics services to its customers in areas such as warehousing and inventory management, transportation and distribution management, and freight management services.

"One of the wireless applications developed by Y3 which is used by YCH Group is the electronic Proof of Delivery (ePOD). This application is an electronic acknowledgment system to confirm delivery of items, similar to the Delivery Order. Customers need only to key in the item code, ID and PIN on any GRPS mobile phone to acknowledge items delivered to them," says Loo.

"Using this form of wireless technology in business processes, information can be electronically transferred and updated in a short time to the central database, eliminating extensive administration requirements and lost of delivery orders, thus reducing overall cost," Loo added.

"This means the turnaround time to getting Delivery Orders processed is cut from five days to one and a half day on average. Using ePOD, the process to update the data at the server is instantaneous and available at all times. Once the data is received at the server, it is then up to the scheduler to pick up the records to update the backend ERP for financial processing."

"In the area of productivity and savings, this means fewer voice calls from field staff to confirm delivery details, improved turnaround time for ad hoc deliveries, and faster response to the customers", says Loo.

Another organisation that has benefited from wireless solutions is the Singapore Island Country Club (SICC). Using a point-of-sales (POS) system by CompuWave, the company eliminated double tasking in order taking and receiving payment to speed up its ordering process and reducing members' waiting time for food. This is done using wireless POS for ordering as well as swiping of membership smart-chip cards into Tactel handhelds and Wincor Nixdorf POS terminals. With this solution, club members can now order food or drinks ahead of time and from a far distance from the eating outlets.

"The wireless point of sale (WPOS) system was introduced to two food and beverage outlets at the new Island Swimming and Bowling Complex – Island Poolside Cafe and Island Bowl Lounge," says Island Location Manager Nicholas Lim of the Singapore Island Country Club.

"With this system, members will be asked to give their membership number after they have conveyed their order to the service staff. They may also indicate to the service staff any special requirements such as less salt, or no ice," says Lim.

Incorporating wireless technologies in business processes is only one of the many types of wireless solutions. For many companies who have implemented wireless solutions, their primary focus have been in wireless networking, not just limited within the walls of the companies, but also in public places where hotspots and access points allow mobile workers, travellers and consumers to stay connected where ever they are.

To access a wireless network at McDonald's restaurants, all that is required is a wireless LAN card fitted in the notebook or PDA, and a wireless roaming access subscription with the service provider of the network, in this case, SkyNetGlobal.

With the wireless LAN adaptor in placed, the notebook or PDA will automatically detect the provider's network at the various hotspots. Users accessing the network for the first time will be prompted to enter a name and email address on the browser page. Once the terms and conditions are accepted, the user will be able to surf the Internet and work on the network.

Subscription fee for the wireless roaming access at McDonald's restaurants was waived during the promotional period of the first three months which ends in April this year. A fee of S\$10 per month is chargeable after the promotional period, which includes a rebate for the first 200 minutes. Subscription for the network access may now be made with SkyNetGlobal's reseller, iCell Network.

Director Marketing and Communications of McDonald's B.S. Dharma says, "Technology plays a vital role in our plans. It is not just about introducing Internet terminals, flat-screen televisions and music videos into the re-imaged McDonald's restaurants but also helping to facilitate a wireless networking lifestyle".

"With SkyNetGlobal and our other technology partners, we are able to offer customers a Wi-Fi roaming network that is the most accessible, versatile and at a value price."

According to SkyNetGlobal, McDonald's investment will contribute up to 140 consumer hotspots to their network. The broadband network will operate on an 'open

access model' with full global roaming capabilities, where any carrier or ISP, irrespective of their country of origin, will be able to offer the hotspot service to their own customer base under their own brand, thus eliminating the user's need of having to establish new accounts and receive additional bills.

In a case study provided by Cisco Systems on wireless solutions in the hospitality industry, Meritus Hotels & Resorts, a hotel management company owned by Overseas Union Enterprise (OUE), successfully linkup the local area networks (LANs) of its three Singapore hotels, Meritus Mandarin, Marina Mandarin, and Meritus Negara within a month using wireless solutions.

"The implementation of the wireless bridge paves the way for a seamless tie-up of the three hotel's backend operations that can now be centralised at Mandarin Singapore and backed up at separate locations," says Corporate Director of Projects John Quah of Meritus Hotels & Resorts.

"From the cost perspective, this solution at almost negligible running cost, is a dramatically more cost effective option over that of ADSL and leased lines," Quah continues.

"The wireless bridge solution represents a one-time investment with minimal recurring costs [which] sets the stage for future implementation of value-added technologies such as in-house wireless access, central reservation and e-office solutions," says Quah.

The purpose for the network linkup is to centralise the hotel operations in areas such as computer system support, engineering order processing and maintenance services, reservations, purchasing, data consolidation, and research.

"There are numerous advantages for a company to introduce wireless LANs", says Public Relations Manager William Oei of Cisco Systems.

"Increased connection time and flexibility to work when it's convenient are two components comprising the rise in productivity and cost savings due to wireless LANs," Oei added.

Assistant Vice President Business IP Services of StarHub Walter Lee says, "Using wireless broadband allows the user to have the ability to connect to the Internet with ease and convenience, without being limited to a data outlet".

"It allows customers to connect to the Internet for their informational or entertainment purposes, or to their corporate data network via IP-VPN to retrieve critical information for their work," he added.

StarHub has installed several wireless broadband locations around Singapore, including the Changi Airport. The wireless solution at the airport which cost more than \$74,000 to install, provides passengers the ability to access the Internet through the airport's wireless LAN using a notebook computer or compatible PDA, and a wireless modem card supporting the Wi-Fi standard.

In a Wireless Enterprise User Survey conducted by IDC, reports indicate that organisations in Asia Pacific are ready to spend an average of US\$206,000 this year on wireless solutions to add value to existing IT installations. This is an increase of three to five per cent above the previous year.