



**'Virtual waiter':** NUS students Jay Teo (left) and Qiao Liang of BigSpoon. Their app shares some similarities with the one Aptsys offers but it also includes additional functions such as the ability to get a waiter's attention.



**Feedback-friendly:** Timbre has an iPad e-menu installed at almost every table of its four biggest and most bustling outlets. The group has also digitalised another aspect of its dining experience - feedback it gets from diners. Using the e-feedback app tribe, it sees 50 to 100 comments from each of its outlets every fortnight.

# No waiter, please! We've the e-menu

Developed by local tech firms, these automated systems not only help ease manpower crunch at eateries but also eliminate the chances of errors in orders, reports **RACHEL LOI**

**B**LACK-FACED waiters, disputes over wrong orders and maybe even service charge could all be a thing of the past if the food and beverage industry here decides to go down the automated route.

It could also solve the manpower crunch that's crippling eateries all over Singapore, with more eateries turning to solutions such as iPad menus and iPhone apps developed by local technology companies to run their operations.

One of the frontrunners in the business is 10-year-old local company Aptsys Technology Solutions Pte Ltd. Three years ago, it developed its iPad e-menu as well as an iPod touch system that waiters can use to send orders directly to the kitchen instead of having to key it into a separate point-of-sale terminal.

Restaurants simply have to provide their own iPads, and Aptsys will install its customised menu into them. Customers can then browse at their own leisure and place orders without the hassle of flagging a flustered waiter. Using a solution like this also means restaurants no longer have to reprint their entire menu every time they come up with a new dish.

## Removing bottleneck

Says Aptsys founder Ernest Lim: "This app removes the bottleneck in the entire workflow of the restaurant operation, and hence greatly increases productivity. Waiters can concentrate on serving food and presenting the bill, and customers can now get service easily with just a tap on the iPad."

His e-menu system took about half a year of research and development (R&D) before he could release it into the market, and restaurants can now purchase the app off-the-shelf for a minimum of \$28,000 for their first outlet.

This initial fee covers customisation, installation, as well as commission. Each iPad then costs \$1 a day to run, and that is capped at \$10 a day per outlet, to cover the service charge incurred when the restaurant needs help with any technical issues such as the adding and removing of items from the menu.

This bodes well especially for European restaurant Napoleon, which



**e-Wait to be seated:** Ticktok (above right) is the brainchild of SMU graduates (from left) Lee Jun Kiat, Tan Junguang and Chong Zi Xin. The trio provide eateries an automated queuing system for their customers.



**Serving well:** Aptsys' iPad e-menu is especially helpful for Napoleon which carries 32 different wines that change every one or two weeks. This helps the restaurant avoid the cost of printing wine lists. Aptsys' iPod Touch has enabled the rooftop bar Loof to reduce manpower.

carries 32 different wines that change every one or two weeks as part of their restaurant concept. "I cannot afford to always be printing a wine list, so this way I can avoid the printing cost," says Jean-Christophe Cadoret, one of Napoleon's owners.

The Aptsys iPad menu has also

caught the eye of many other establishments. Currently, over 40 restaurants in Singapore are installed with one of Aptsys's systems, and the number of requests has been rising. So much so that Mr Lim has his own manpower issues and can install only about three or four systems a week for now. This is because each process can take up to two months depending on the clients' demands. New applicants would now have to join a three-month waiting list.

Mr Lim foresees that about 80 per cent of local sit-down restaurants will



eventually have to introduce an e-menu system in order to cope with the lack of manpower and high wages.

In response to the growing demand for such system, a new start-up company, BigSpoon, is also developing its own e-solution. Fronted by two graduating students from the National University of Singapore (NUS) who managed to get a \$10,000 grant from the NUS Innovation and Entrepreneurship Practicum Grant to help kick-start their project, BigSpoon's app shares some similarities with the one Aptsys offers but it also includes additional functions such as the ability to get a waiter's attention.

But the biggest difference is that restaurants do not have to get iPads to install the e-menu, as it will be downloadable for customers to carry around on their own smartphones.

Think of it as a personal virtual waiter that you can take to any restaurant that subscribes to the service - one that even knows your favourite dishes as well as your allergies. Their app is still in the making, and will be released to the public only after January next year when initial tests with selected restaurants are complete.

To develop such an elaborate programme is not cheap, however. BigSpoon co-founder Jay Teo reveals that most of the NUS grant has already been used up just to develop this first version of the app and he is mentally prepared to eventually dig into his own pocket for more R&D.

"We are just at the beginning of changing the delivery of dining services to consumers. The demand for better service will always be there, and to meet these demands, the right tools are required," says Mr Teo.

"To some, it may seem impersonal to interact with a mobile device as opposed to a human. But one of our survey respondents said they would be fine ordering on a device if it knows them better and has more timely service than a human," he adds.



But some restaurant owners see things a little differently and feel a personal touch is still important.

The Lo & Behold Group's chief operations officer Andrew Ing, who has equipped three outlets with the Aptsys iPod Touch system, says: "I hated the idea of e-menus at first because I thought where is the interaction between the server and the guest? That's still very important. So I was not keen on iPad e-menus but I thought the Aptsys iPod Touch system was much more efficient and it allows servers more time to interact with guests."

## Guests impressed

With the system, customers still use hardcopy menus but waiters punch orders onto their iPod Touches instead of walking back and forth from the POS system. It has also allowed Mr Ing to cut manpower at the rooftop bar Loof, from about 14 staff on a Friday to about 10 or 11, making his investment a worthwhile one.

"Technology is cheaper now. An iPod Touch is only about \$100 each, and of course there's investment in software and programming but that is almost a one-off cost," he explains.

According to Mr Ing, the system impresses guests with how the company is moving forward with technology. Sometimes there's just a "mental block" that needs to be gotten over, he says.

Sharing his view is Shaun Markus Lee, owner of Thai barbecue restaurant Moojaa and founder of the mobile dining app Alfred, which is similar to BigSpoon's. His app will be launched next month but it is already in use at Moojaa.

"So far, using the system has cut my manpower by two," says Mr Lee. "It's between the devil and the deep blue sea, really. Because as much as restaurants might want to keep the human element... when it comes to a point where they can't find people to hire, they won't have much of a choice."

As for Timbre Group's establishments, they have an iPad e-menu installed at almost every table of their four biggest and most bustling outlets.

Managing director Edward Chia expresses surprise when customers in their 50s embraced the idea of an e-menu. "We are lucky because our customers are generally working executives, so they are more tech-savvy. But from time to time, of course, you do get people who still prefer the tradi-

tional method for the human touch," he says.

Timbre has also digitalised another aspect of their dining experience - feedback it gets from its diners. Using an e-feedback app called tribe, they see between 50 and 100 feedback comments from each of its outlets every fortnight.

Unlike the apps by Aptsys and BigSpoon, tribe is more consumer-driven. Established last year, it attracts diners to give feedback by offering rewards like a \$10 voucher for their next visit.

The app costs between \$65 and \$130 per month per location depending on what features clients want - such as a consolidated bi-weekly report of the feedback so clients can evaluate their own service performance levels.

Another specialised app is Ticktok - the brainchild of three Singapore Management University (SMU) graduates who love to eat but hate to wait. It was funded by the Spring Singapore Young Entrepreneurs Scheme for Startups (YES! Startups) grant, which gives young entrepreneurs up to \$50,000 to start their own business.

What they do is provide busy eateries such as Saver, Grub, and Wild Honey an automated queuing system where customers just have to key their phone number onto an iPad placed at the door, and they will receive an automated phone call once their table is ready.

Says co-founder Chong Zi Xin: "Instead of standing aimlessly in front of a restaurant, customers can move around and do some shopping even. And restaurants increase manpower productivity as manual calling processes have become automated. The host can easily call customers with a single tap."

But even with the wide array of digital options in the market, it seems there are still restaurants that are hesitant to jump on the e-solutions bandwagon.

Napoleon's Mr Caboret, for instance, does not intend to subscribe to any of the other technologies even if he expands his business.

"For the moment the e-menu is not enough. We don't want too much technology here as well. Though I am thinking of opening a second outlet, and will definitely keep the e-menu because it's very efficient. But the thing is you cannot survive on just iPads. You still need people because that's still very important," he says.

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