



# Cashing in on Disruptions from Covid-19

## Promoting cashless payments at Singapore's hawker centres.

By Dennis Ng

The Covid-19 pandemic has done for cashless payments what no Singapore government effort could achieve—it has spurred the adoption of cashless payments manyfold at points-of-sale where cash used to be king. The need to reduce physical contact by minimising the use of cash has been a boon to the use of electronic payments (e-payments). As early as March 9, 2020, the World Health Organization made recommendations to decrease the use of cash by emphasising the need to reduce social contact between individuals.<sup>1</sup> There was also an increased use of food delivery apps during the pandemic,<sup>2</sup> where e-payments were the preferred mode of transaction.

In Singapore, there has been a substantial rise in PayNow transactions. Launched in 2017, the PayNow app enables users to transfer funds from one bank account to another in Singapore, simply by using their mobile or personal identification number. In the first 10 months of 2020, the value of PayNow transactions handled by UOB, a Singapore-based bank, grew 220 percent, while the volume of transactions increased by 127 percent compared to pre-Covid-19 levels.<sup>3</sup> At the national level, registrations for PayNow jumped almost 50 percent to 4.9 million by the end of 2020.<sup>4</sup> Registrations for businesses also doubled, meaning that 80 percent of Singapore residents and businesses are currently on this service.<sup>5</sup>

However, it should not be assumed that this trend toward higher adoption of cashless payment would necessarily continue. So how can we consolidate the gains by taking advantage of the situation, as consumers and businesses are now more open to change?

It would be useful to examine first the challenges of introducing high-technology payment applications into settings that tend to be the 'last mile' in a country's cashless journey due to their unique operating environment, which, in this case, are hawker centres. I would also discuss how incentives and habits affect cashless payment adoption, and explore the critical factors required for cashless adoption success from a macro-perspective, with the objective of providing guidance to policymakers as they steer Singapore towards this digital future.

## Technology adoption in Singapore

To address the lack of critical mass in adopting cashless payment, the Singapore government put in place more initiatives to promote cashless payments. In 2017, it launched the Smart Nation e-Payment Initiative to fund the infrastructure cost, as players in the small island-city-state did not have the scale to do so. The government also created a common QR (Quick Response) code called SGQR to improve interoperability among several payment types for low-value payments. Under the Smart Nation Initiative, e-Payment is included as a pillar, together with the common QR code and the provision of infrastructure in hawker centres, convenience stores, and other low-value merchant locations.

## Factors influencing technology adoption in Singapore's hawker centres

The focus of the 'last mile' in a nation's cashless journey should typically be on merchants whose customers make payments below \$100. These merchants usually accept cash as the main mode of payment. The focus therefore is to displace the use of cash. A key component of Singapore's e-Payment Initiative involves encouraging its use in hawker centres. These establishments are open-air complexes that house between 10 and 70 stalls selling a wide variety of affordably priced food and beverages. These food stalls are typically congested workspaces, and they charge around S\$4 (US\$2.95) per meal. A 2016 KPMG report commissioned by the Singapore central bank pointed out that hawker centres topped the list of places in Singapore where paper money predominated.<sup>6</sup>

From a macro-perspective, there are several critical factors for the adoption of cashless payments to be successful. They include demand and supply, as well as mediating factors.

There must be demand for cashless payment in a country for it to be successful in the long run. Cashless payments must offer additional benefits like convenience, speed, and safety. In the context of hawker centres, there is evidently a need for a convenient payment method, especially when considering the physical environment where each stall has limited space and is typically short-handed. Cashless payments can reduce the need to collect cash and return change while also speeding up payments.

Unfortunately, cash has remained an acceptable and popular mode of payment in Singapore over the years. Automated Teller Machines (ATMs) are ubiquitous, so withdrawing cash is convenient. It was reported that Singaporeans' affection for cash was a formidable barrier to cashless payment adoption and a 2017 PayPal study found that nine out of 10 Singaporeans preferred cash as their

Cash is the default mode of payment, while cashless payment is the competing alternative in Singapore.

first payment choice.<sup>7</sup> Cash is therefore the default mode of payment, while cashless payment is the competing alternative in Singapore.

Additionally, currency fraud is almost unheard of in Singapore, compared to places like China.<sup>8</sup> Moreover, the largest denomination of the Chinese RMB is 100 (S\$25)—implying one would need a bagful of cash to make high-ticket purchases—which has led to the popularity of cashless payment platforms like AliPay or WeChat Pay in China. However, in Singapore, the dollar notes are available in various denominations ranging from as low as \$2 to as high as \$10,000.

Sorting out the supply-and-demand-related issues discussed above is thus the first step to bringing about a cashless society in Singapore. However, there are also operational hurdles that must be overcome to ensure that greater demand translates into higher adoption at hawker centres. The following are some other prominent factors that influence the adoption of cashless payments at Singapore's hawker centres.

### TOO MANY DIFFERENT AND DISPARATE SYSTEMS

NETS, EZ-Link, PayNow, PayLah!, Visa, Mastercard, and GrabPay are but some of the several platforms available in Singapore. This becomes an issue because they have to share the small and crowded domestic market, leading to a longer break-even period for investments. The government recognises this problem and has put in place SGQR to minimise overlaps. This would hopefully reduce providers' infrastructure cost, so that they would in turn charge hawkers a lower fee for using their platforms. The disparate systems also pose a challenge to hawkers who have to manage different transactional and settlement processes, and even payment terminals.

### INGRAINED HABIT OF USING CASH

Singaporeans have an ingrained habit of using cash at hawker centres, probably because of the small amounts involved. Despite placing posters and decals promoting incentives for going cashless at the hawker centre, customers habitually reach into their pockets for cash and not their smartphones.<sup>9</sup>

If not for the Covid-19 situation, Singapore's PayNow would not have experienced a significant bump in adoption.

### CONTINUAL NEED FOR SHORT-TERM INCENTIVES

For those who have yet to adopt cashless payments during the pandemic, incentives are necessary to encourage them to change their habits. While it is encouraging that the government funded some small-scale incentives to promote cashless payments, these incentives did not alter the habit of using cash over the long term. Once the promotion period ended, customers reverted to using cash once more.

### LACK OF TRAINING FOR HAWKERS

Many hawkers do not know how to operate the cashless payment terminals. This could be due to their basic education levels, lack of English proficiency, and insufficient training on the use of these terminals. Hawker assistants are also not trained to prompt customers to use cashless payments, even when these customers could enjoy incentives when doing so. Studies have shown that nudges at points-of-sale are an effective way to break the cash habit by coaxing or reminding customers to use cashless payments.<sup>10</sup>

### FEAR OF HIGHER TAXES

While some merchants are keen to support the government's cashless policy, they still prefer to limit the number of e-payments accepted. This is because they are fearful their revenues would be subjected to audits and they might have to pay higher taxes as a result.

### LONG SETTLEMENT PERIOD

Another reason that hawkers do not encourage cashless payments is that they are concerned that they may not be able to collect the money sooner, since settlement occurs two to four days after a transaction. This is a pain point that needs to be addressed, as most hawker stalls are small businesses, so waiting for even four days could strain their cash flow.

Studies have shown that nudges at points-of-sale are an effective way to break the cash habit by coaxing or reminding customers to use cashless payments.

## PRACTICAL LIMITATIONS

Hawkers have also cited practical reasons as obstacles preventing them from adopting e-payments. First, they would have to check whether the transactions are successful. This requires additional time and effort and they are too busy fulfilling orders to do this during peak hours.<sup>11</sup> Second, elderly hawkers and patrons are constantly worried they might press the incorrect button or enter the wrong amount, so they prefer using cash.<sup>12</sup>

## What else can be done?

Below are seven key recommendations that could help promote the adoption of cashless payments.



### 1. Incentives

Consumer incentives for making cashless payments should be offered for longer periods than the common two-week or month-long promotions. Research shows that to break a habit, an incentive

must be provided for at least 66 days.<sup>13</sup> Therefore, one recommendation is for incentive providers to entrench the adoption of cashless payments by providing incentives to consumers for a longer period, so that old habits can ultimately be broken.

### 2. Disincentives

While incentives can help change old habits, these incentives work best when they are also deployed alongside disincentives, which would be 'punishments' for continuing with the old habit of using cash. The government could consider the use of penalties for cash usage. This penalty could be a charge of 30 cents to \$1 for every cash withdrawal from the ATM or bank branch. However, care ought to be taken to ensure that those who do not have access to credit or debit cards, or smartphones, are not penalised. This could be done by setting a maximum amount that one could draw in cash before incurring the surcharge.





### 3. Merchant incentives

Hawkers also need to be incentivised to accept cashless payments. Some countries have implemented tax concessions, which have resulted in the greater use of cashless payments. In South Korea, for example, merchants who accept e-payments enjoy

VAT (Value-Added Tax) deductions of two percent with a 5-million-won (US\$4,495)-ceiling.<sup>14</sup> This is important because hawkers are small-scale merchants who prefer cash because of cash flow concerns. Moreover, the current practice of accepting cash allows them to be excluded from the formal tax system, thereby providing them with little motivation to support cashless payments. Hence, the government may wish to consider introducing tax incentives to encourage merchants to accept cashless payments.

Additionally, schemes like the Hawkers Go Digital initiative that was launched in June 2020<sup>15</sup> could be further enhanced. Under this initiative, hawkers who opt for SGQR would receive a S\$300 bonus for every month in which they chalk up a minimum of 20 cashless transactions. The maximum bonus payable is S\$1,500, so there are five months in a year for which they could potentially earn the bonus, provided they meet the stipulated requirement. Perhaps the bonus amount could be raised in tandem with a higher volume of cashless transactions, and the maximum bonus could also be increased to incentivise hawkers to go cashless.

### 4. Merchant cash flow

Accepting cashless payments requires merchants to wait between two and four days for settlement. This impacts the cash flow of the hawkers, who often use their cash proceeds to buy

raw materials for the next day. For hawkers who have adopted SGQR, payments received before 5 pm would be credited into the merchants' bank accounts by 9 pm the same day; for payments made after 5 pm, they would go through by 9 am the following day.<sup>16</sup> The next benchmark to aim for would be to shorten further the waiting time for funds received from cashless payments.



### 5. Merchant training

Hawkers and their assistants often do not know how to operate the sophisticated cashless terminals. This is likely due to their lower level of education. Therefore, some effort must be invested in training and educating them. This could take the form of formal classroom training which would include how to initiate, settle, and void transactions, as well as simple troubleshooting when problems occur. The recent rollout of 'digital ambassadors' to help hawkers become familiar with digital tools could also be a convenient avenue to provide guidance on basic troubleshooting. As of May 2021, these ambassadors from the Infocomm Media Development Authority (IMDA) SG Digital Office have reached out to more than 10,000 hawkers.<sup>17</sup>

Another area of training required is getting hawkers and their assistants to learn how to nudge customers to use cashless payments at the point-of-sale as this has proven effective in steering consumers away from using cash. Research shows that consumers using cash are 'triggered' by the context of being in hawker centres, which they associate with cash payment, so some form of intervention is required to break the habit.<sup>18</sup>



### 6. Reminders and assurances

Initial resistance can be expected from consumers, as was the case with the M-Pesa mobile payment pilot in Kenya. A key factor for M-Pesa's eventual success was the extensive

use of physical agents on the ground to guide and assure both customers and merchants on how to use the new technology.<sup>19</sup> Similarly, the presence of physical agents in hawker centres can be useful in reminding consumers and providing immediate assistance and assurance to hawkers and merchants alike during the rollout when problems are also likely to arise. For example, each hawker centre could have a 'local onsite mentor' to guide hawkers during the first few months of the rollout.

To make it easier for hawkers to accept payments via SGQR, those using smartphones should be encouraged to download the NETSBiz app. With this app, voice notification can be enabled, so that every time a payment is made, they can hear the message that the amount payable has indeed



been paid.<sup>20</sup> This way, they would not need to look at the confirmation screen on the customer's phone. As and when they wish to track their sales progress for the day, they can also check the transaction history through the app.<sup>21</sup>

### 7. Improvement of implementation support

Overall, implementation must be better organised. There are many loose ends on the ground that need to be tied up for a smoother and more

effective implementation. These include using more prominent displays of marketing and promotional materials, improved frequency for the servicing of faulty terminals, and large-scale training for both hawkers and their assistants.



### Conclusion

It is important to assess the presence of impediments to using cashless payments in the early stages of the launch or pilot before embarking on a large-scale strategy. Evaluation during the early days of the M-Pesa project illustrated how unmet needs and poor alternatives were obvious in the beginning. There was a significant unbanked segment in the country whose payments needs were not addressed by existing arrangements.

In addition, the government and payment providers may want to avoid investing too many resources into marketing a cashless society project until its need for cashless payments can be ascertained. This is particularly true in Asian countries as they take advantage of new and cost-efficient digital technologies to bypass traditional banking infrastructure. The government should also be prepared to accept a longer adoption timeframe if there are barriers that may slow it down.

Third, the government may wish to analyse the wider financial landscape to understand how it makes cash convenient, safe, and cheap. It may then have to explore what is to be done, so that e-payments will embody this set of properties (i.e., being convenient, safe, and cheap) while

rendering cash less so. Only then can it become more successful in promoting cashless payments.

The Covid-19 pandemic has provided a jumpstart for Singapore to move towards more cashless payments, and these early wins should not be allowed to fade away in vain.

### Dr Dennis Ng

is a payments consultant and an adjunct faculty at Singapore Management University, Nanyang Technological University and the National University of Singapore

### References

- Roger Huang, "WHO Encourages Use of Contactless Payments Due to COVID-19", Forbes.com, March 9, 2020.
- Yuyang Zhao and Fernando Bacao, "What Factors Determining Customer Continuingly Using Food Delivery Apps during 2019 Novel Coronavirus Pandemic Period?", International Journal of Hospitality Management, Vol. 91, October 2020.
- Jacquelyn Tan, "Covid-19 Is a Game Changer for Digital Payments", The Straits Times, February 10, 2021.
- Prisca Ang, "Budget Debate: E-payments on the Rise but Singapore Does Not Aim to be a Cashless Society, says Ong Ye Kung", The Straits Times, February 27, 2021.
- Ibid.
- KPMG, "Singapore Payments Roadmap: Enabling the Future of Payments 2020 and Beyond", August 2016.
- Annabeth Leow, "The Future of Money", The Business Times, May 26, 2018.
- Aaron Klein, "China's Digital Payments Revolution", Brookings Institution, April 2020.
- Annabeth Leow, "The Future of Money", The Business Times, May 26, 2018.
- Leo Van Hove, "Could 'Nudges' Steer Us towards a Less-cash Society?", Transforming Payment Systems in Europe, Palgrave MacMillan, 2016.
- Tan Yin Lin, "Transforming the Hawker Industry into a Digital One: Is It Possible?", Rice, July 21, 2020.
- Ibid.
- Phillippa Lally, Coerelia van Jaarsveld, Henry Potts, and Jane Wardle, "How are Habits Formed: Modelling Habit Formation in the Real World", European Journal of Social Psychology, 40, 998-1009, 2010.
- World Bank, "Electronic Payments Acceptance Incentives: Literature Review and Country Examples", April 2020.
- Lester Wong, "Government Will Support Hawkiers through Their Digitalisation Journey: Iswaran", The Straits Times, June 11, 2020.
- Ibid.
- Government of Singapore, "MCI's Response to PQ (Parliamentary Question) on Move towards Complete Paperless Processes and Transactions with Businesses and Public Sector Agencies", May 11, 2021.
- Tina Venema, Floor Kroese, Bas Verplanken and Denise de Ridder, "The (Bitter) Sweet Taste of Nudge Effectiveness: The Role of Habits in a Portion Size Nudge, a Proof of Concept Study", Appetite, Vol. 151, August 1, 2020.
- Susie Lonie, "M-Pesa: Finding New Ways to Serve the Unbanked in Kenya", Innovations in Rural and Agricultural Finance, 18(8), 17-19, 2010.
- NETS, "NETSBiz App", October 2, 2018.
- Ibid.