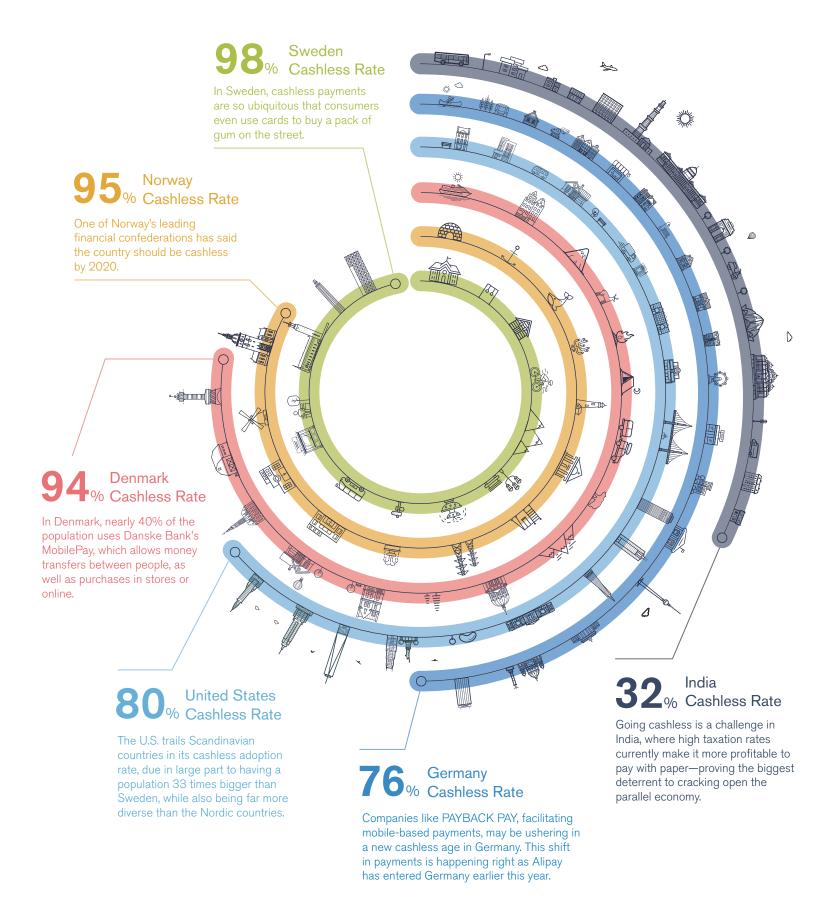
IN THE NORDICS, A CASH-FREE SOCIETY LOOMS • BEYOND DEMONETIZATION

LOVE IN THE TIME OF PCI MANDATES • PAYBACK PAY FUELS GERMAN PAYMENT INNOVATION

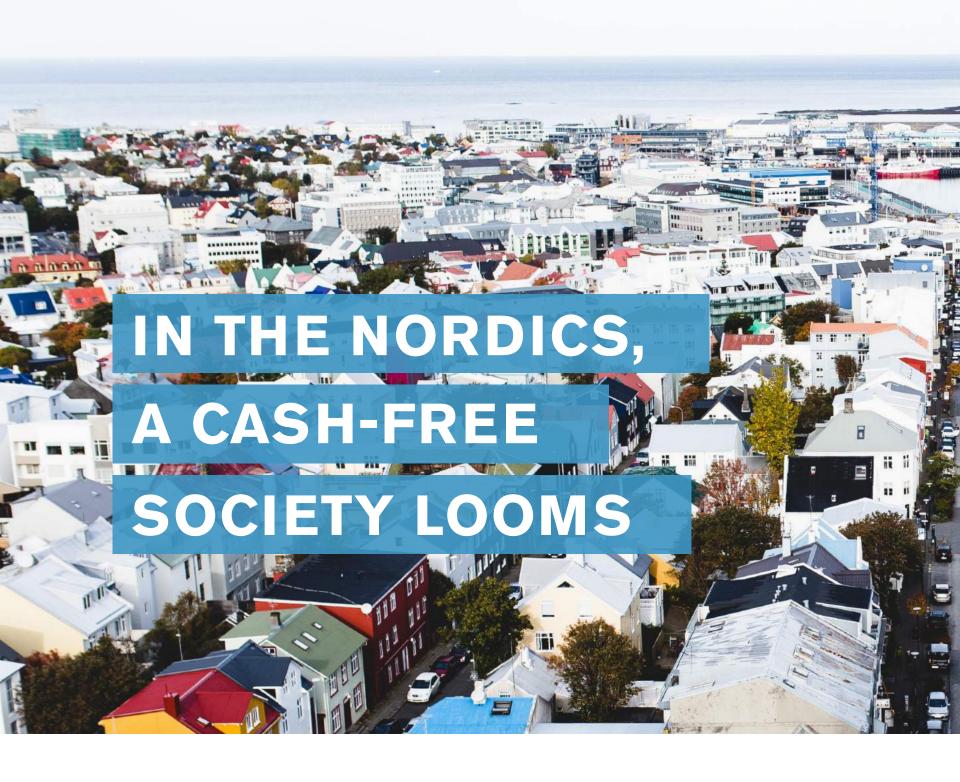
MILLENNIAL PAY • CARBON'S FOOTPRINT EXPANDS TO ISRAEL

paybook

Presented by Verifone Vol. VI • July 2017



The Cash-free World



Scandinavia is phasing out notes and coins at such a rate that it's not a question of *if* the region will go cashless—but *when*.

In the mid-17th century, the Swedish Empire, a major power in Europe, experienced sweeping changes to its economy. One of those changes, in 1661, was becoming the first European country to introduce paper money—as an alternative to copper coins that, due to their low intrinsic value, were rather large and inconvenient to carry.

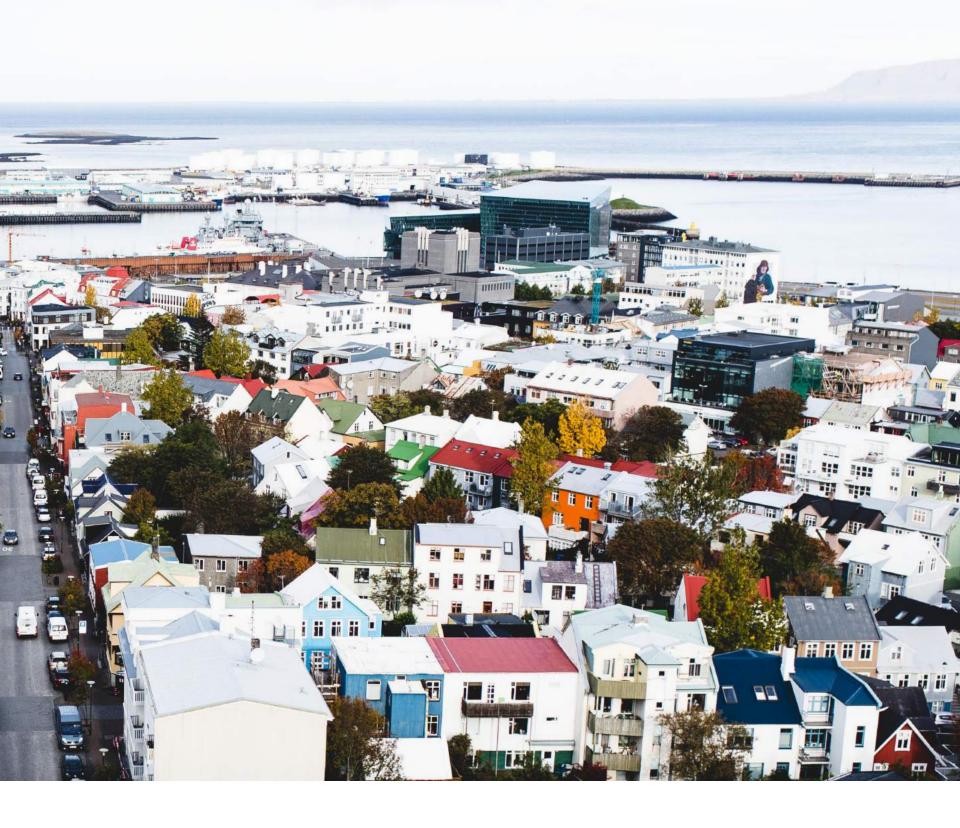
Now, more than 350 years later, Sweden is on the verge of becoming one of the first countries to go cashless. And they're awfully close—according to Riksbank, Sweden's central bank, cash transactions amounted to barely 2% of the country's total payments in 2016.

And it's not just Sweden. The Nordics as a whole—Denmark, Norway, Finland, and Iceland included—are at the global forefront of the cashless revolution. Each country is making strides to go cashless, whether through mobile payment startups, ceasing printing of new bills, or adopting cryptocurrency like Bitcoin. The Danish government, in fact, has set a target deadline of 2030 to be completely rid of paper money.

The region's pole position in the race to cashless is rooted in a culture of payment efficiency. Already among the top users of payment cards worldwide, Nordic countries opt for plastic (with a rising adoption of mobile technology) for greater convenience and cost-effectiveness compared to cash. The ability to build up rewards and loyalty points, minus the burdensome ritual of withdrawing cash (sometimes with fees) and handling loose change, has made the decision rather easy for payment progressives across Scandinavia.

"We don't have cash in our wallets anymore," says Pal Fredriksen, Director of Product Management Nordic & Baltic at Verifone. "Even a pack of gum, we will pay for it with a credit card."

The credit card itself has advanced, now with NFC/CTLS technology, and major Scandinavian retailers like IKEA are already accepting tap-and-go payments. It's projected that 40% of cards in Europe will be contactless by 2020.



While traditional and contactless cards figure to remain prominent across the Nordics, mobile payment technology is now embedded in every country. In Sweden, services like iZettle, Klarna, and SEQR are innovating commerce for merchants and consumers alike. In Denmark, Danske Bank's MobilePay app has become the standard in mobile wallets and has already spread its reach to Norway and Finland. And in Iceland—which is currently 99% cashless, the highest rate in the world—Auroracoin has established itself as the country's cryptocurrency and offers mobile wallets compatible with most operating systems.

It's clear the Nordics embrace efficiency and ease of use with their move to cashless, and Verifone enjoys playing an integral role in the region's payment ecosystem. Last fall, Verifone partnered up with Retail Payment, a

Norway-based payment acceptance platform provider that aspires for an open, omni-channel approach to commerce. Taking pride in its country having the "world's most secure and efficient payment system," Retail Payment sought partnerships with Verifone and other fintech leaders (Intel, IBM, Forgerock) to collectively "manage the de facto standard infrastructure for future payments."

Specifically, Retail Payment and Verifone will collaborate to deliver Verifone Engage and Carbon series devices to the Norwegian market, which are connected to Verifone Commerce Platform. The scalable solutions will build upon Retail Payment's existing Norwegian BankAxept payment network, which enables the use of contactless and mobile payment technology.

"Having partnered with leading technology providers such as Verifone, we can easily scale cross-border solutions that offer superior design and engagement capabilities, as well as the flexibility to meet a merchant's needs across

countertop, mobile, portable, and iPOS use cases," says Hans Petter Hoel, CEO of Retail Payment.

As the Nordic region continues its pursuit of a

cashless society, Retail Payment will play a crucial role in streamlining the process, by assuring that all e-payment types, old and new, are accepted and processed quickly, efficiently, and securely. Verifone will be there every step of the way, providing the products, services, and industry experience to make this cashless dream a reality.

We don't have cash in our wallets anymore, even a pack of gum, we will pay for it with a credit card.

Beyond Demonetization

The demonetization of Indian currency attempted to address two issues plaguing the country: a dependence on cash and the parallel economy. It was a bold step with good intentions, but can India fully free themselves from a cash-based society?

In November 2016, the Indian government declared the use of all INR 500 and INR 1,000 banknotes invalid, and announced the issuance of new INR 500 and INR 2,000 banknotes to replace the discontinued bills. Citizens were left with no other option but to exchange their now invalid banknotes for new bills, and, in doing so, they needed to open a bank account. Making sure all Indians have bank accounts was one giant step toward making money exchanges trackable and quelling the parallel economy of non-accountable, cash-based payments—thereby reducing corruption and encouraging economic growth.

However, the journey to a cashless economy is far from over.

"To eliminate cash or to encourage the usage of digital payments, merchants must see the value in a cashless economy," says Vinayak Prasad, Verifone's Head of India and Subcontinent Product Sales.

Going cashless is a challenge in India, where high taxation rates currently make it more profitable to pay with paper—proving the biggest deterrent to cracking open the parallel economy. It is one of the few larger global economies still highly dependent on cash, which reduces the country's ability to invest in economic growth; as such, India has been seeking a solution to this perennial problem. And while India's dependence on cash has somewhat reduced, from more than 90% in 2005 to slightly below 80% in 2015, there's still room for major improvement. For example, despite increased corporatization of Indian retail, cash is still the preferred payment method of large vendor chains.

"Over the past few years," Prasad explains, "the country has aggressively targeted the unbanked with bank enrollment programs, and today, about 600 million Indians have access to bank accounts. More importantly, each of these customers also has a debit card."

There's only one payment terminal per thousand people in India. Comparatively, Brazil and Russia have approximately 25 and 10 terminals per thousand, respectively, and most Southeast Asian countries have about 20 terminals per thousand. So, while the general population in India has access to cards for making payments, the acceptance infrastructure has just started to bloom.

The Indian government realizes that, in order for it to drive digital payments, reduce cash dependence, and crack down on the parallel economy, initiatives must be put in place, pushing banks to install payment acceptance devices. Banks, in turn, will have to persuade consumers and merchants with value propositions that go beyond convenience, such as consumer rewards, lower merchant discount rates, and access to data that can be used by merchants to drive loyalty programs.

Beyond that, in order to achieve a cashless (or reduced cash) society, merchants must see value in the seamless integration of their billing systems, as well as security, access to financing of receivables, and the ability to deliver deferred payment solutions—propositions that help them grow their businesses.

"India has been known to leapfrog and adopt new technologies and processes in the past," says Prasad. "It went from having only a few million fixed-line phones to over one billion mobile phones in less than 15 years. Similarly, the fact that we have only one payment terminal per thousand in India allows us the possibility to leapfrog beyond cards faster than anywhere else in the world. There is no legacy that we have to deal with."

India is already EMV chip and PIN-compliant for cardpresent transactions, and all card-not-present transactions require two-factor authentication (2FA). India is the first country in the world to move to 2FA for every transaction, and it is also the first to implement Aadhaar, a biometricbased transaction authentication.

There are new methods of accepting payments as well, including digital wallets such as Paytm and Freecharge, which are similar to the digital payment revolution in China with Alipay. These new payment methods are forcing traditional players to reduce merchant discount rates. The monopoly of Visa and MasterCard is being challenged by local schemes—NPCI and RuPay.

India still has a long way to go before achieving its vision of a cashless society, but with the new advancements in payment methods and India's history of surpassing others in terms of technology adoption, it might not be long before India goes from lagging behind to leading the way. ■

in the Time of PCI MANDATES

For merchants in Nordic countries, 2017 will be a year of change. A new mandate requires that the minimum Payment Card Industry Data Security Standard (PCI DSS) be raised, which means that merchants who have devices with a PCI certification of 1.3 or lower will be required by law to purchase newer devices by the end of the year.

PCI DSS is a security scoring system enforced by Visa, MasterCard, American Express, and other credit card companies, and was created to help prevent data breaches. Every few years, as technology becomes more advanced, PCI standards are increased.

So, merchants in the Nordics have a couple problems:

- I. They need to be aware of the new mandate. Not everyone knows about PCI standards, and fewer know that the requirements are changing.
- 2. Not all payment devices are the same in terms of security. Some merchants may not know that they need to purchase an entirely new device.

We decided to approach these issues in a rather unusual way—we told a story. With tongues firmly in cheeks, Verifone produced an ad campaign about a merchant breaking up with her old payment device and finding that she can love again with a new, upgraded device.

A radio advertisement of our merchant breaking up with her POS can be heard here: verifone.dk/PCImandate

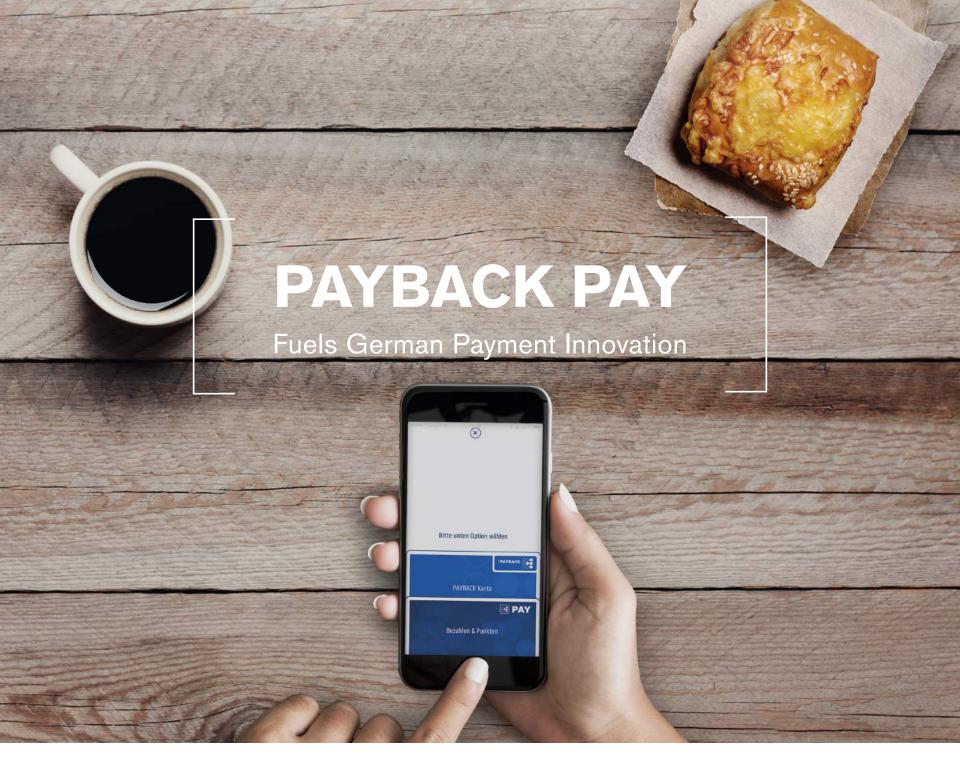
The campaign attempts to solve multiple issues at once. It uses humor and absurdity to grab the attention of passersby and raise awareness of the mandate, and it also articulates the fact that having a new payment device will better a merchant's life—instead of purely being a necessary hassle—by providing increased functionality and greater customer engagement. The use of levity to offset the inherent inconvenience of the mandate is very much intentional.

We also hope that, during this time of transition, merchants will choose Verifone over other brands—the campaign promotes a trade-in discount for people who have out-of-date payment devices.



Ultimately, merchants stand to benefit greatly if they choose a newer Verifone device, because all of our devices have a PCI score of 3.x or higher, effectively ensuring they won't need to go through a tearful, POS breakup any time soon.

We decided to approach these issues in a rather unusual way—we told a story.



shift in payments is occurring right now in Germany, which may result in the obsolescence of cash and cards for a majority of the country. In order to understand why this is happening, we first need to understand the German payment landscape.

First, there's no Apple Pay in Germany and NFC capabilities are still very rare. The Germans have been craving a mobile payment method.

Second, for many years, 50% of Germans carried around a plastic PAYBACK card—essentially a universal loyalty card. It provides customers with an average rebate of 1% in the form of points that they can redeem for various offers on the PAYBACK website.

The next logical step for a company like PAYBACK, with such a dominating market share—today, PAYBACK has over 29 million active customers in Germany alone—was to develop an app; in 2010, it launched the PAYBACK app, allowing users to activate coupons and collect extra points at partnering retailers. In 2016, PAYBACK took the app a step further and, with the help of InterCard and Paymorrow (both powered by Verifone), it provided pay-by-app functionality via a QR code presented to the merchant at checkout. The newly relaunched PAYBACK PAY app gave more value to consumers by combining points collection, coupons, and mobile payment for the first time.

There was just one small problem. In Germany, the direct debit system does not guarantee payment, and with this gradual shift away from cash, merchants would have been forced to take on more and more risk—if it turned out the customer couldn't pay, the merchant would have to eat the cost.

Enter Paymorrow, recently acquired by Verifone. What we were able to bring to the table was the ability to guarantee payment to the merchant. The process works like this:

- I. A customer sets up a PAYBACK PAY account, which links to their bank account.
- 2. The customer then goes to a participating merchant and uses the PAYBACK PAY app to purchase items.
- 3. Paymorrow supplies the payment to the merchant and takes on the risk of the customer not being able to pay.

This shift in payment behavior and processing couldn't have come at a better time, as Alipay launched in Germany earlier this year.

Suddenly, a country that was behind the times for payment innovation has leapt into the not-too-distant future. Should this system grow, the German people may have no use for cards or cash at all. How this will affect German wallet manufacturing, only time will tell.



NON-CENTS

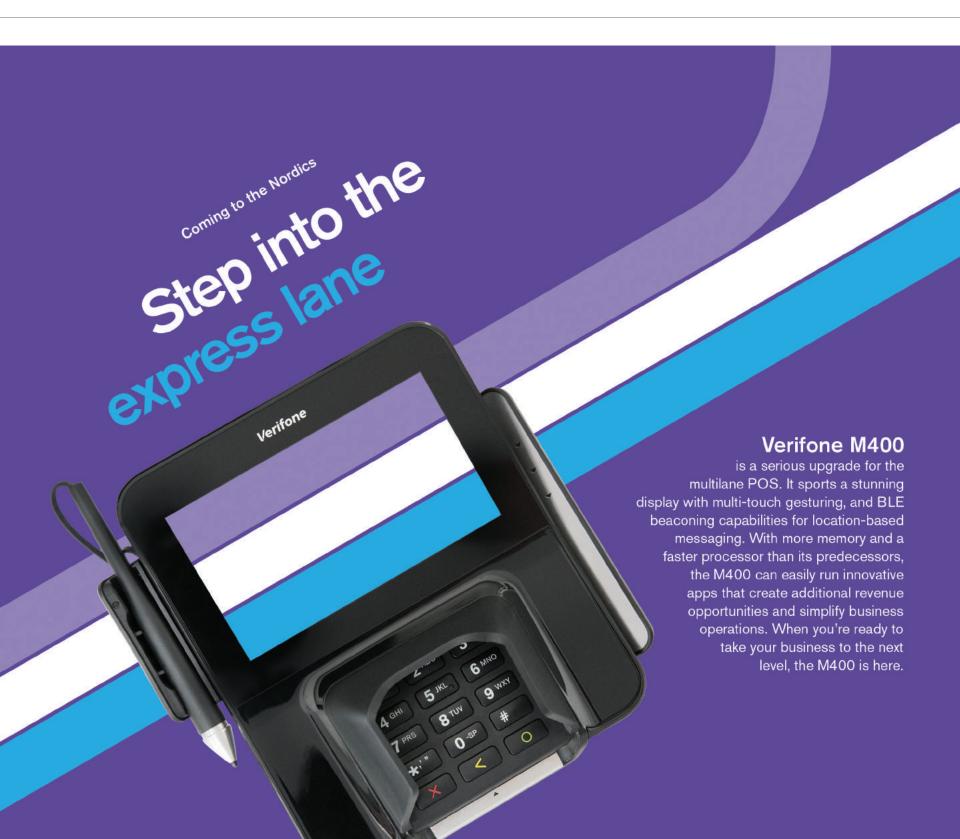
Millennial Pay

MasterCard is launching an app that will allow users to pay by selfie. Let that sink in for a moment.

After downloading the app, the user is asked to send a selfie to provide a basis for facial recognition. When the user wishes to make a payment, they simply hold the phone up to their face (selfie-style) and blink once—the blinking is a security measure to prevent criminals from holding the camera up to a picture of the user's face.

The Selfie Pay app (officially called MasterCard Identity Check) has recently launched in the U.S., Canada, and most of Europe. The app is the latest kind of biometric initiative to emerge in payments.

While we imagine that many people over the age of 30 are somewhat baffled by this millennial encroachment upon the payments space, people under the age of 30 are calling it "Lit AF."



Carbon's Footprint Expands to Israel

Following a successful in-store pilot program, we recently announced a commercial rollout of Verifone Carbon in Israel. Israeli merchants, who operate in a fast-growing financial technology ecosystem, required a payment solution that can keep up with the pace.

"Technology is moving quickly in Israel, and the POS has been ready to evolve on a device platform that can deliver services and enhance sales with interactive and supportive experiences for the consumer," said Dan Soffer, VP Service, EEMEA and GM of Verifone Israel. "With Verifone Carbon, merchants gain a powerful solution to securely accept all types of payments and create programs to build customer loyalty and revenue."

Long regarded as a country that innovates and influences technology, Israel has rapidly grown into a telecommunications hub—a world leader in computer and mobile tech.

In Carbon, these two shop owners found a solution for everything they needed to run their business—specifically, a POS that embraces smart technology. "We accept secure payments and offer our customers a unique experience based on their preferences and buying habits," noted Hershkovitz. Frishberg likes how detaching the device from its base allows her to take the point of sale tableside, streamlining payment acceptance away from the counter.

"It conveys prestige," added Frishberg. "Verifone Carbon

is simply everything we need for interacting with customers, whether on its stand or in our hands."

On the heels of a successful pilot, Carbon is ready to expand

its reach in the region. Merchants in Israel can greatly benefit from POS technology that leads to better business efficiency, functionality, and user experiences-not to mention security features like EMV acceptance.

The deployment of Verifone Carbon in Israel opens the door for launches in other international regions. As the number of countries benefitting from Carbon's advanced capabilities grows, the world of connected commerce grows with it. ■

Our sleekest, most sophisticated payment device is now available to

merchants in Israel—bringing the powerful small business engine to a

region rooted in advanced tech.

UgaUga, a pastry and coffee shop in Tel Aviv, participated in the pilot program, which began on February 6, 2017. Owners Ofir Frishberg and Limor Hershkovitz wanted a POS that could accommodate the changes they saw taking place all around them. They needed a device with enhanced merchant capabilities, but they also understood the importance of offering value-added services to their customers.

"We live in a technological world," said Frishberg. "And I thought it could be very nice if our cash register was also technologically advanced."

To see Verifone Carbon in action at UgaUga,

visit: https://tinyurl.com/carbon-ugauga

