WORLDLINE

How SoftPOS can enhance large merchants' customer journeys and experiences across all verticals

White Paper

This document was published before the release of the PCI MPoC standard (released on 16th November 2022)

More information here.

Digital Payments for a Trusted World

Contents

Introduction 3

The inexorable ascent of the smart devices in the payments landscape 4

Payment devices: from hardware to software,
from a single functionality to a world of possibilities... 4

Evolving customers' behaviours implies merchant adaptation 5

SoftPOS, the ultimate solution? 5

Is there still room for the traditional POS? 6

What could be in it for large merchants? 6

Reinventing the payment experience 6

New business opportunities across all verticals 6

Definitions 8

Summary of identified use cases per vertical 9

Example / case study 10

How can Worldline help large merchants develop their business 11

Enhance your customers' journeys with Worldline Tap on Mobile 11

Worldline Tap on Mobile in short 12

Interviews 13



Tap, Tap, Tap...

Tap to Pay[1], Tap to - or "on" - Phone[2], Tap on Mobile[3]... If the wording is not exactly the same, all these - relatively - new marketing names share one thing in common: they all relate to the so called "SoftPOS" topic.

SoftPOS might be a buzzword but it covers many bases. In short, it stands for Software Point Of Sale, a technology allowing to turn any NFC internet connected smart device into a contactless physical and virtual card reader. Any merchant can now accept contactless payments with any smart device, even a Commercial off-the-shelf one (COTS). No additional hardware is required ; it is a fully software-based alternative to traditional payment terminals.

The infographic (see page 5) explains the different technologies and standards, and gives an overview and comparison with the other merchant POS possibilities: traditional, mPOS[4] and smartPOS devices.

In this white paper, we will explore the different market trends that explain potential opportunities brought by the SoftPOS solutions, what technologies or standards are currently available and what is coming next. We will highlight why and how large merchants, and not only individuals (micro) and small business organisations, can benefit from a SoftPOS solution, with some use cases in different market segments and verticals.

1 Apple
2 Respectively Visa & Mastercard
3 Worldline
4 mPOS stands for mobile POS



The inexorable ascent of the smart devices in the payments landscape

It is obvious for everyone that the smartphone is now part of our daily life, as a consumer and as a professional. Global mobile adoption has never been so high, and is still increasing. GSMA states that the worldwide penetration rate will increase from 67 to 78%, and in Europe from 78 to 83%[5]. In a recent survey Klarna claims that 47% of the GenZ use their smartphones when shopping in a store and 35% use phones to make payments[6]. In comparison, in France, the share of smartphone users who use a proximity mobile payment has increased from 15,6% in 2019 to 21.1% in 2021[7], behind UK (24,4%), Italy (25,9%), US (43,2%)... and China (87,3%).

This usage increase is highly supported by the cashless and contactless trend. Oaklen (previously Pwc) states that worldwide cashless transaction volume will more than double by 2030[8]. The global contactless payment market is projected to nearly quadruple in value by 2026. Research and Markets' Contactless Payment Terminals Market[9] report found that the global contactless payment terminals market was valued at $13 billion in 2020 and is expected to reach $51 billion by 2026. This would nearly quadruple the size of the global contactless market in the span of a few years.

On the merchant's side, at its POS location, two major trends are about to revolutionise the existing, traditional, POS infrastructure. Android is most likely to become the next operating system standard, and the mobile POS (mPOS) is leading the growth race, with 56% increase, from 20 million units shipped worldwide in 2021 to 32 million by 2026[10].

Payment devices: from hardware to software, from a single functionality to a world of possibilities...

On the payment side, the evolution from POS - traditional payment terminals which are often called "card reader machines" with card payments as their sole purpose - to mPOS can be summarised by the addition of mobility, a wider and coloured touchscreen display, embedding other services such as an access to the store's data. The term Smart POS suggests a proximity with the smart devices ecosystem development, being easier to integrate with the POS environment, while embedding other functionalities and value-added services.

These "m" and "smart" POS terminals are more and more built based on the Android technology. Why such a trend? Android terminals modernise payments, bringing a range of powerful applications, tools and functionalities to enhance the customer journey, which in turn drives revenue and loyalty for the merchant. In fact, Android brings more than that. The devices are one component of a much larger commerce platform. With the Android platform, endpoint devices get smaller, smarter, as well as more powerful, bringing additional functionalities. Payments are connected seamlessly across the physical POS, software and the cloud.

The Android POS solution provides merchants easy access to vetted, secure third-party applications. These applications can be developed on Android's open APIs, allowing for downloads from the app store or development of personalised applications. In this system, multiple players in the ecosystem, including processors, ISOs, ISVs, gateways, and developers can distribute their apps more widely by taking advantage of conventional and market-specific app stores. This enables an ecosystem that allows for more options, and connects merchants to a wider array of applications, content and media. For merchants, it's an excellent way to provide a personalised, modern checkout experience to customers.

5 GSMA « Mobile Economy 2021 »
6 Klarna survey source
7 Global proximity mobile payments, by country 2021 | Statista eMarketer
8 "Future of payments 2022" by Oaklen (previously Pwc)
9 Research and Markets Contactless Payment Terminals Market
10 Juniper Research May 2021 "POS Terminals ~ Changing the Payments Experience"

Evolving customers' behaviours implies merchant adaptation

These technological innovations and trends have to be put in perspective with customers changing their way to purchase and pay. This brings additional challenges for every merchant. A recent survey from Tribe[11] states that 50% of merchants' biggest concern for the next 12 months is how to compete with large chains which offer innovative customer experience at the checkout. In a more mid/long-term perspective, their two biggest challenges are:

- 84% desire to improve their customers' experience
- 51% demand for digital in-store payment experiences such as kiosks, self-checkouts and more

Improving customers' experience by bringing additional technology in the POS is obviously something any merchant could - technically speaking - easily do. Adding latest mPOS and furthermore smartPOS terminals in the field could bring such innovative solutions, as they allow mobile check-out. But the key challenge merchants and the ecosystem are facing is... cost-effectiveness. In the same report[11], 31% claimed that keeping costs under control was one of their key priorities for the upcoming 12 months. This percentage is in line with Oaklen consultant's white paper[12] about the customer's journey in the retail environment: 30% of retailers think their major concern remains the financial optimisation, an euphemism for cost reduction, as payment's flow and processes are concerned.

SoftPOS, the ultimate solution?

SoftPOS in an innovative way to answer these expectations. By reducing the hardware volume requirements, but increasing the number of payment terminals at the same time, adding extra and evolving functionalities and linking payment flows to core business applications, it is, in theory, the perfect fit. On top of that, maintenance is made a lot easier, and at reduced cost.

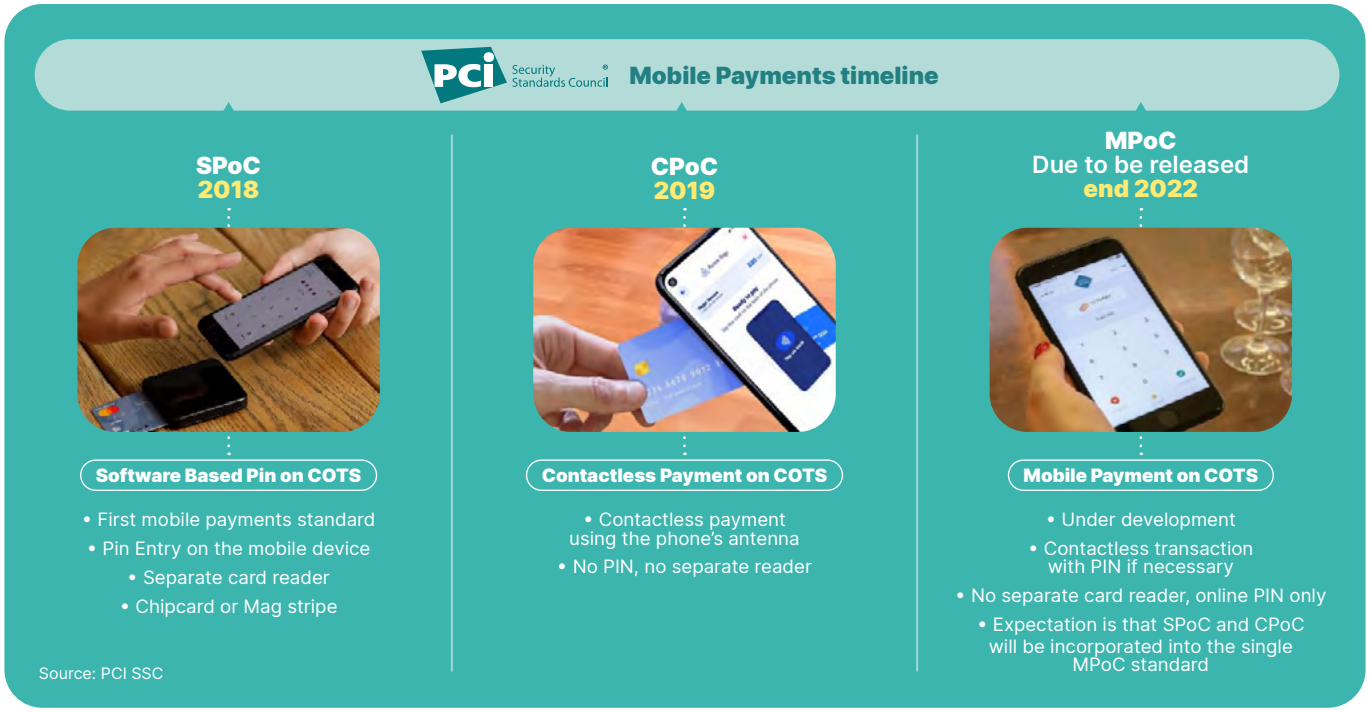
The technology around smart devices – mobiles and tablets – like NFC and biometrics has pushed the boundaries of possibilities further, as these devices can now allow to make and receive payments as additional functionalities.

In its 2021 Global Payments report[13], McKinsey confirms the SoftPOS status: *"payments providers are competing to offer customised solutions like..., "**tap to pay**,"... that make the payment experience seamless, pleasant, and increasingly contactless. Simplification in the merchant onboarding process can also help in attracting more sellers, reducing cost, and elevating the merchant experience"*

Coincidentally, earlier this year Apple announced the launch of its SoftPOS solution called Tap to Pay[14]. If the acquisition of the Canadian company Mobeewave earlier in 2020 by Apple went somehow silent, this announcement is another story. Considering that Apple Pay is one of the key drivers for mobile payments awareness and usage as of today, a lot of experts predict that this could disrupt the payments industry. Whatever the future of payments platform will be, Android, Apple or both, it has given SoftPOS the legitimacy it was probably looking for.

It is also true that SoftPOS is about to become a mature solution. Since 2018 when PCI SSC released the first announcement of the SPoC standard which would allow mobile solution providers to develop products that enable merchants to securely accept PIN-based payments with the PIN entered on a Commercial off-the-shelf (COTS) device[15] to the upcoming MPoC standard, the route has been paved with different steps (see infographic "PCI Standards timeline" below).

According to Juniper Research, the number of merchants worldwide using software Point of Sale solutions to accept contactless payments on an ordinary NFC smartphone or tablet will increase from 6M in 2022 to more than 34.5M by 2027[16] with the rollout of Apple's Tap to Pay being among the key drivers of this growth.



11 "Solving the post pandemic payments puzzle" on www.tribepayments.com, or see MPE2022 Tribe's keynote
12 Découvrez «l'Observatoire Parcours d'achat & Paiement 2022» (oaklen.eu)
13 Global Payments Report, 2021, Mc Kinsey
14 Apple empowers businesses to accept contactless payments through Tap to Pay on iPhone, February 2022
15 What to Know About the PCI Software-Based PIN Entry on COTS Standard (pcisecuritystandards.org)
16 NFCW, August 9th



Is there still room for the traditional POS?

Considering that the total number of merchants accepting cards worldwide would reach 100M by end 2025[17], SoftPOS would represent more than a third of the total global POS fleet. This means that current and legacy POS solutions would still be the vast majority.

Some might say that SoftPOS is purely designed for micro and small merchants, because of low transaction volumes, well known – daily used - devices (personal or professional), fast and easy set up and activation, and low-cost solution. In this case, it could lead to a replacement of the SumUp, Square, Zettle and similar solutions as well as entry m/smart POS devices. However, for large merchants it's another story. The traditional payment terminals have been designed to meet a long list of specific requirements as well as a mandatory reliability: ruggedised form factor, large screen enabling complex interactions, closed Android OS (preventing malwares, hacks, etc.), off-line mode (most of the time a hard prerequisite from retailers or other merchants). In addition, some professional accessories are required or requested: multi-charging docking station, bar code scanner (on top of the camera), tool for visually impaired people.

These devices are less likely to be stolen (contrary to consumer goods), have a decent autonomy - thanks to large batteries -, embed (quasi) all payment methods available - chip & PIN, magstripe, contactless, etc... If needed, a set of API for business application integration can be provided and last but not least, they provide a specific consumer UX, designed for cardholders to be reinsured to do a transaction on a specific/secured device...

Most of these features are not available for the so called "Commercial off-the-shelf" phones, e.g. smartphones and tablets any consumer can purchase in a retail store. Some of these large merchants would neither want to become early-adopters of a brand new way of paying - although very innovative-, but still with some limitations that may not be accepted by the consumers, or even themselves: only accepting contactless payments, uncertain integration capabilities with their own core business software(s), limited card schemes acceptance, lower transaction speed, mandatory internet connectivity, etc.

For all these reasons, we can safely say that the traditional POS remains or will remain very relevant for merchants, however the SoftPOS solution is an additional enhancement to the customer's journey.

17 NFCW, November 2020

What could be in it for large merchants?

Although SoftPOS ticks all boxes for micro and small merchants, medium and large businesses do not want to be left outside the playground.

Whatever the size of the merchant, the challenges are quite similar. If you think of cost reduction for example, why would a large merchant pay for an extra payment device if a payment app can easily be installed on its existing terminals? Why shouldn't a large merchant consider linking the payment process to additional features? Why would a large merchant refuse to pay less for his payment terminals' maintenance? Why would a large merchant refuse to scale up his payment terminals in a very easy and fast way?

Merchants are always looking to reduce investments and cost, while at the same time providing better customer journeys to consumers.

There are some use cases (see page 9) where a large merchant is interested in a light and flexible solution. If this solution can be added to professional device having some of the features listed before, then it's even better.

SoftPOS for large merchants not only procures some immediate benefits such as enhancing their productivity, reducing their costs, but can also help them improve their customers' experience and relationship, while opening new business possibilities.

Reinventing the payment experience

Large merchants need fast payment check-outs, a reliable solution in every kind of situation, accepting all payment means for every type of customer and this is what a specific payment terminal is bringing. But adding more flexibility, more mobility, adding some capacity to deploy a payment solution in a very short time at a POS, being able to equip its sales force with a unique device for several functionalities, that's what a SoftPOS solution is aimed at... Adding such innovative possibilities in addition to a traditional payment terminal fleet is most likely an interesting direction large merchants should investigate.



Herve Thevenin,
Global Marketing Manager Vertical Sales at Worldline - White paper author

"Whilst SoftPOS has been initially thought, designed and implemented for micro & small merchants, it appears to be opening the path for great opportunities for merchants of all sizes and markets. Large enterprises see SoftPOS as a complementary solution for their check-out solutions as it allows them to increase their agility, enhance their customers' experience, while controlling their cost. Currently restricted by the offer of devices embedding NFC & internet connection with Android operating system, as well as security standards related to attended terminals, this solution is still in its infancy. But once these obstacles are overcome, the possibilities provided by SoftPOS will be infinite."



New business opportunities across all verticals

At Worldline, our experts in various verticals such as Grocery & Specialty Retail, QSR & Restaurants, Hospitality, Travel, Petrol & Energy, Transport, Parking… are all of one mind: SoftPOS is not only legitimate for large merchants, but the stepping stone towards new business opportunities.

Several use cases are common across different verticals: grocery or specialty retailers, QSRs, or even theme parks somehow face similar issues: how can they increase the speed and conversion at check-out and add sales opportunities? The answer is simple: *queue busting* and *pop-up stores*! SoftPOS is ideal for these use cases, where flexibility, light and agile solutions are vital.

SoftPOS allows the user to combine the in-store data (stock…), as well as a core business application such as the retail – grocery or specialty - online shop, the payment acceptance capacity in one single smart device. This trio makes the *endless aisle* finally a reality… Transforming an opportunity into a direct sale is no longer a dream, but a possibility. Merchants may add loyalty, or customer's experience rating on top of their sale, at the same time. Right away. In two shakes of a lamb's tail… or in a few taps should we say! Would that not delight any customer?

Since the pandemic and Covid-19 era, deliveries haven't stopped their continuous increase. And no one predicts the end of such a trend. In many verticals, from Retail to Petrol & Energy and QSR, the delivery is a must, and the *Payment on delivery* allows the user to take payment for the exact amount of delivered goods, on the spot. Why should a delivery person get annoyed with two terminals? They already use a smartphone as a GPS, for professional phone calls, stock management or access whatever business data is available on their smart device (phone, phablet or tablet). Adding a payment acceptance solution on such a device would obviously be more efficient and mean no additional device to manage, store, charge, maintain, etc…

The Covid-19 pandemic has also boosted *Payment at table* and helped the QR code to succeed. But again, different verticals such as QSRs, restaurant and hospitality share a common issue: improve their customer experience and staff productivity. Why should a waiter go back to the cash register location to take a specific payment terminal and not use the same device he already uses to take the order to accept payment? In some restaurants, you may also find tablets to order your meal. Why not include payment acceptance on the same device? One device instead of two reduces costs and makes the staff, and the customer, happier!

The last main identified use case that goes across many different verticals are obviously the Kiosk *Self-check-out* and *PED backup*.

SoftPOS makes perfect sense for large merchants that need to add a *complementary solution to their existing POS fleet*. Light, flexible, mobile, cost-efficient and ready to use solution, it allows Point Of Sales and their managers to face any issue they have very rapidly, with their current Pin Entry Device fleet.

Going further, in an ideal world, SoftPOS would also be suitable for *unattended payment terminals* such as those located in vending or parking machines, transport validators, car wash, hub lockers, laundrettes, reverse vending, retail pharmacies dispensers, restaurant Drive-thru's, etc… on top of the kiosks already mentioned. Although that is maybe early stage as there are probably some challenges to overcome, such as the module integration into the machines and kiosks themselves. That would nonetheless be a game changer for the whole unattended terminals ecosystem.

In addition to these cross-vertical use cases, we can mention some more specific ones, where SoftPOS brings efficiency, cost reduction and easy set up:

- Assisted sales (Specialty Retail)
- Taxi payment (Travel)
- Ticketing & control (Transport)
- Temporary parking (Parking)

Use cases definitions

Queue busting: solution that allows merchants to scan/record multiple items with a handheld mobile device and perform a payment transaction for check-out, ultimately saving time for the consumer and increasing throughput for the merchant

Endless aisle: sales technique by which retailers are able to provide in-store customers with the opportunity to order products - and take the customer's payment - that are either not normally sold in the store or that are currently out of stock

Pop-up store: a shop or store that is deliberately temporary. It's a store that "pops-up" for a limited period of time to achieve a particular goal

Payment on delivery: action of delivering goods to the customer's location (people's houses, workplace or any other place) against on site payment

Assisted sales: consists of giving advice and resolving doubts by the store employees, to possible customers, in order to get an immediate sale and payment

Payment at table: technology that allows restaurants' guests to pay for items or meals directly at the table where they sit via a handheld point of sale device used by a server (alternative technology: by scanning a QR code with their own smartphone), ultimately saving time for the consumer and increasing productivity for the server

Self-checkout (SCO): also known as assisted checkout (ACO) or self-service checkout (SSCO). Technology that allows customers to complete their own transaction from a merchant without needing a traditional staffed checkout

Ticketing & Control: process of selling tickets or fines for trips or events

Unattended terminals: self-service payment terminal where the customer will activate the transaction by themselves without any staff help or action. This means that the payment devices need to be securely enclosed and tamper proof for a secure self-service solution

Technical definitions

POS (payment): the Point Of Sale refers to the system to complete a merchant transaction… at a point of sale location

mPOS: mobile POS

SoftPOS: generic and market term for software POS

Pin on Glass: PIN entry capability on a device's touch screen (generic expression)

COTS: Commercial off-the-shelf. Refers to ready-made merchandise – for SoftPOS a smartphone or tablet - that is available for sale

SPoC: PCI standard for "Software-based PIN entry on COTS". A smart device combined with a PCI approved card reader or SCRP (Secure Card Reader for PIN). This reader has no keypad, the smart device touch screen is used to enter the PIN code ("PIN on Mobile")

CPoC: PCI standard for "Contactless Payment on COTS"[18]. This is the true SoftPOS solution. It only allows EMV contactless transaction, on a merchant smartphone or tablet with built-in NFC

MPoC: Latest PCI standard for "Mobile Payments on COTS" (working title"). The purpose of MPoC is to provide a modular, objective-based, security standard that will support various types of payment acceptance channels and consumer verification methods on COTS devices. The goal is to create a flexible mobile standard and program for payment solution development, allowing for both PIN entry and contactless payments through the COTS-native interfaces. The second RFC (Request for Comments) ended July 15th this year, and the release of the standard is planned towards the end of 2022[19]

18 Just Published: PCI Contactless Payments on COTS (pcisecuritystandards.org
19 Request for Comments: New Mobile Payments on COTS (MPoC) Standard (pcisecuritystandards.org)





Summary of identified use cases per vertical

Grocery Retail	Specialty Retail	QSR & Restaurant	Hospitality	Travel	Petrol & Energy	Transport	Parking
Pop-up Store Queue busting	Pop-up Store Queue busting	Pop-up Store Queue busting	Pop-up Store Queue busting (Theme Parks)				Temporary parking
Endless aisle	Endless aisle			Taxi		Ticketing & Control	
	Assisted sales	Payment at Table	Payment at Table				
Payment on delivery	Payment on delivery	Payment on delivery			Payment on delivery		
Kiosk - Self check-out	Kiosk - Self check-out	Kiosk - Self check-out	Kiosk - Self check-out				
PED (Pin Entry Device) back up							

Example / case study

LODZ METROPOLITAN RAIL

Polish Lodz Metropolitan Rail adds payment in their inspectors' devices





Łódzka Kolej Aglomeracyjna (Lodz Metropolitan Rail) is a commuter rail service operating between the Polish city of Łódź and surrounding towns in the Łódź Voivodeship (province). The company was founded in 2010. It is fully owned by the Łódź Voivodeship government.

Challenges

- Allow controllers to easily accept payments - eliminate unnecessary additional HW
- Win the public RFP against tough competition
- 1st SoftPOS integration based on API

Solution

- Crew equipped with Point Mobile PM85 devices distributed by SSK Rail
- Developed specific API to fulfill the requirements for this solution and future integrations
- Full integration with Lodz Metropolitan Rail application

Benefits

- Ticket sales process is easier, more comfortable
- It is safer as contact with cash is eliminated
- 1 device (Point Mobile PM85) for control and payment acceptance makes life easier for them

How can Worldline help large merchants develop their business

Worldline is a global leader in the payments industry and the technology partner of choice for merchants, banks and acquirers. Worldline is at the forefront of the digital revolution that is shaping new payment methods. As such, from the very beginning of the SoftPOS development up until today, from the first PCI PTS approved Android terminals with PIN entry capabilities, Worldline has teamed up with end-to-end payment experts, engineers and security specialists - including from former companies such as Ingenico or SIX Payment services to develop a strong expertise on the topic. More recently, Worldline announced the closing of the acquisition of 55% stake of SoftPos.eu, a Warsaw-based fintech. This acquisition fully embeds Worldline's objective to provide payment solutions that are adapted to all forms of commerce and serve the business ambitions of its clients. Together with SoftPos.eu, several partnerships with substantial value creation have been created.

As mentioned earlier, one of the key benefits of the SoftPOS solution is to be operable on enterprise devices as they bring additional benefits over COTS. Worldline has established strong partnerships with key players in this field, such as Zebra, Toshiba, or Diebold Nixdorf (DN).

Diebold Nixdorf's Storevolution consultative philosophy ensures the right combination of hardware and software solutions, operationalised in the right way. The DN approach enables merchants to pick and choose the right combination of self-service technology for each one of their stores, to suit their individual customers and associates' needs. With the DN Vynamic™ Software Suite, DN offers open mobile software that allows a smooth integration of Worldline Tap on Mobile. Its modular, flexible architecture meets a wide variety of current and future mobile scenarios, and fulfills market requirements for Open Retailing via open APIs.

Zebra Technologies is a global leader in enterprise asset intelligence and provides customers with a solutions portfolio which includes handheld devices for a large variety of verticals. The Tap on Mobile payment application achieved validation in Zebra's Enterprise Testing Program. Through this validation, integrators and partners in all segments can add payment to their customers' offer directly on their Zebra Android devices. "This assures retailers, merchants and integrators that our application meets their needs and reduces risk and deployment time." explains Karel-Lodewyck Lefere, Global Strategic Partnerships at Worldline.



James Poulton,
Vice President, EMC Product Management

ZEBRA

"Zebra is very excited that Worldline is supporting their next generation "Tap on Mobile" solution on our family of Android mobile devices and tablets". Our world-class combo of enterprise HW and Android OS, offers the ideal Commercial off-the-shelf (COTS) platform for merchants to speed up checkouts, increase satisfaction, and ultimately, increase revenue, based on Worldline's "Tap on Mobile""

"As a PayTech, Worldline values partnerships throughout our ecosystem. Establishing this validation with a trusted, innovative and leading brand like Zebra technologies is very important for us."

"The partnership also offers Zebra and Worldline vendors and customers tremendous added-value across different market segments like retail, transportation, logistics, hospitality and many more. We believe Tap on Mobile will enhance the experience on mobile devices."

Worldline is committed to delivering transactions that create a network of trust that can be passed on. We invest extensively in delivering innovative solutions for payments, including card transactions, enabling our clients to transform their business models, manage risks and fraud, and anticipate regulatory changes anywhere in the world.

Leveraging our scale and our complete service portfolio, we work closely with our customers to help them anticipate the future, and make the most of the opportunities it offers. This is how we created Worldline Tap on Mobile.

Enhance your customers' journey with Worldline Tap on Mobile

Worldline Tap on Mobile is a full SoftPOS unique end to end solution based on an Android application, that allows all merchants of all sizes – from micro to large – to accept payments using a smartphone (COTS), a tablet or an enterprise device. Worldline has designed the Worldline Tap on Mobile solution to meet specific requirements from micro to medium merchants, as well as for large merchants.

The package includes acceptance, acquiring, transactions and devices dashboards and management, as well as onboarding and support. Worldline provides the necessary content to support app-to-app integration if required. The solution is already available in some European countries, and the rollout to cover all major European countries has already begun.

For more information, please
contact your usual Worldline representative



Julien Decoster,
Head of new instore eXperience
at Worldline

"For over 40 years, we've been continuously improving the products and the payment services we deliver to our merchants. A few years ago, the payment industry began a true revolution, and the traditional payment terminal is a big part of it. This device that was originally – and for a long time - dedicated to one single usage is now evolving into a multi services enabler, mostly because of the rise of Android as an operating system. But with the SoftPOS technology we can already see the next step coming: the dedicated hardware part of the payment chain is being replaced, at the benefit of already installed devices: smartphones, tablets or even enterprise devices. The advantages of this solution are too many to list, but in my opinion the main one is one smart device, known by everyone, for everything!"



Grzegorz Nowakowski,
CEO and co-founder
at SoftPos.eu (Worldline group)

"Worldline was the first major player to believe in SoftPOS, its team and its product. Back in 2020 when we were launching our co-operation, the market for app-based terminals was much smaller than it is now. From the very first day we felt that only with support from a strong strategic partner we will seize the full opportunity to grow. Now we can clearly see that we were right. We are extremely happy that the appreciation was mutual, and we have come to this investment stage. SoftPos.eu has built an advanced but easy-to-use technology already actively used by multiple merchants of all sizes across Europe. Having Worldline as our strategic investor means strong support both in further product development as well as sales to other markets and merchants"

Worldline Tap on Mobile in short

Android application

Physical & virtual Visa & Mastercard cards accepted

Built-in security level procedures (PCI certified)

One service contract for the full solution/package

Works on any Android smart device with touch screen, NFC and Internet connection

Contactless payments only, under or above CVM limit with Pin entry on glass

Digital receipt, by email and/or QR code

Interview



Alexandre Tissier

Product Owner – in-store payment solutions at Auchan Retail France

From your point of view, should large merchants tackle the SoftPOS opportunity? Why?

Yes, I'm convinced large merchants now need to move towards SoftPOS solutions. Even if the electronic payment ecosystem is evolving fast on this particular topic, upfront SoftPOS solutions are now mature enough to be deployed in stores and proposed to our clients. For a few years, we put aside many mobile POS projects because we weren't able to build single device solutions. The solutions we could have proposed were multi-device and caused ergonomic difficulties for our colleagues in the field. Most of the solutions we currently design are based on Android devices; the increased use of SoftPOS solutions allows us to imagine a one device solution with a clean POS integration without having to think about device to device communication. Its more robust and ergonomic problems are now far away...

What would be their biggest challenge when implementing it?

For me, the biggest challenge is to be able to handle large retail group complexity. Two aspects need to be taken into account: (1) user account administration and (2) activity management. This kind of solution will allow merchants to deploy payment solutions widely in the blink of an eye, without having to manage specific "physical" payment terminals. Nevertheless, it remains a payment solution and needs to be managed with precision, according to our security standards. A given colleague needs to have a user session with the appropriate user rights and security level to be able to do his or her job properly. This session will also be attached to an activity, which leads to my second point. The payments that will be approved with that given device must be linked to the activity, the point of sale, the operating company, etc.

On which device (COTs, Tablet, Enterprise) should large merchants install SoftPOS and why?

I cannot give a definite answer for this question, this clearly depends on the needs of the merchant. If you want to use it as a back-up solution without retail solution integration, a co-worker's smartphone will do the job. On the other hand, if you want to build a persistent integrated solution, a professional hardened device would be more appropriate. On top of being more resistant, you can choose devices that have a more powerful NFC antenna, positioned on the front side (screen side) and eventually with a compact printer. These details can make a huge difference for the end-user.

Will SoftPOS replace all specific payment terminals at some point?

I think it's more complex than just this. I believe the time of integrated hardware+software payment terminals is declining. I anticipate that the market will be structured around two streams: SoftPOS solutions & agnostic terminals. Speaking of hardware, for me, the need for a chip reader remains the key unknown. Will all cases be covered via NFC? Only time will tell.

Interview



Jerome Guibal

Director Global Acceptance at Mastercard

Jerome Guibal has been working at Mastercard for over 6 years and in the payment industry for over 11 years. He has been focusing on innovations for the past 21 years.

From your POV, should large merchants tackle the SoftPOS opportunity? Why?

The checkout experience has changed and we don't see it going back to how it was before. With the rapid acceleration to contactless payments, Mastercard is encouraging large merchants – if they haven't already – to adopt Tap on Phone solutions mainly to improve the consumer payment experience. Mastercard has been spearheading the transition to contactless over the past 15 years, retail merchants in order to reduce waiting time can add payment checkout options in store – not only at checkout with existing staff. We've seen payments transformed in the travel industry through our use case, LA's Flyaway Airport Bus Service, where we leveraged Mastercard's own Tap on Phone solution powered by Mastercard's Cloud Commerce technology and we've watched the hospitality industry speed up their checkout experience at restaurants and bars by enabling all wait staff to accept payments via their mobile phone or tablet.

What would be their biggest challenge when implementing it?

The biggest challenge I see is to educate merchants and consumers about new payment methods. How we pay, where we pay is changing. Some consumers may be reluctant to tap their payment methods on a phone. It is time to show up and serve our customers and partners now more than ever by creating strategic and innovative solutions. Tap on Phone allows businesses to accept contactless payments without the need for additional equipment or peripherals, addressing the common barriers of cost and complexity for card acceptance.

In addition, each Tap on Phone transaction is protected through the same technology as dipped card transactions but provides a faster more pleasant checkout customer experience as well. Mastercard has been partnering with fintechs, payment facilitators and acquirers globally to deploy Tap on Phone solutions and lower barriers to adoption. Moreover, with the growing number of solutions being installed, Tap on Phone has been developed to create a more inclusive and digital economy that works for all, globally.

What will be the impact of the upcoming MPoC PCI standard?

As a global technology company in the payments industry, our mission is simple: to make the ever-expanding universe of digital transactions safe, smart and accessible. I believe that the newest standard will be one of the major drivers for accelerating Tap on Phone scale. By creating a flexible mobile standard for new acceptance channels, the new standard will enable commercial launches for any transactions including those that require PIN validation, for instance, transactions above Card Verification Method (CVM). This will help to continue improving consumer choice and deliver more seamless experiences, anywhere.

Will SoftPOS replace all specific payment terminals at some point?

Due to the cost of standard payment devices as well as their maintenance and repair fees, Tap on Phone provides countless opportunities. We are engaging merchants to push past common barriers to accept payments, anywhere at any time It will take time, but we are already seeing shifted behavior as we power the evolution of POS by software-led technologies.

Interview



Dries De Beul

Vice-President of Solutions, Europe at Toshiba Global Commerce Solutions

TOSHIBA

Dries De Beul is a retail automation expert with more than 20 years of experience in the retail industry. He has held multiple roles both nationally and internationally in pre-sales, sales, professional services and solution development. In his current position as Vice President of Solutions for Europe, Dries leads the Toshiba Global Commerce Solutions portfolio strategy and development in Europe, focusing on unified commerce and frictionless retail to support the digital transformation journey of retailers. Dries is based in Belgium and holds a master's degree in business administration and information technology from Leuven University.

From your point of view, should large retailers tackle the SoftPOS opportunity? Why?

Absolutely! Retailer investments in staff and customer mobility are growing rapidly, and we see 'one device per store staff member' scenario's coming up more and more often. Being able to add payment functionality to these devices, without requiring additional hardware, provides fantastic opportunities to turn every Personal Digital Assistant (PDA) or tablet into a point-of-sale and point-of-payment touchpoint. In fact, Toshiba Global Commerce Solutions has already integrated SoftPOS with our ELERA Commerce Platform using its Device Agent component, which enables device agnostic integration of applications such as SoftPOS, speeding up testing and store level proof of concepts. For retailers, this makes it much easier to create exciting new customer experiences and engagement opportunities, and also has a positive impact on store efficiency and return on investment decisions.

What would be their biggest challenge when implementing it?

A SoftPOS implementation on enterprise mobile devices in a retail environment should not be underestimated as it requires integration with existing applications, infrastructure changes and deployment of app upgrades to the mobile devices.

Once deployed, a 'command center' approach is typically required to manage the activation and deactivation of the SoftPOS application, and to ensure that all devices are running the latest software versions and have the most recent Android security patches installed.

As an early SoftPOS integrator working in close partnership with Worldline, Toshiba Global Commerce Solutions is very well positioned to help retailers address the challenges of deploying new and exciting SoftPOS-driven use cases and customer journeys.

What will be the impact of the upcoming MPoC PCI standard?

A Payment Card Industry (PCI) standard will clearly provide the green light for retailers to go further than a lab test or store proof of concept and can only positively impact the number of larger-scale SoftPOS deployments.

The new PCI Mobile Payments on COTS (Commercial off-the-shelf) devices (MPoC) standard is also likely to push a Europe-wide implementation of SoftPOS, especially in countries like France and United Kingdom that are not currently supporting online PIN authentication today.

Will SoftPOS replace dedicated payment terminals at some point?

My expectation is that we will move towards a hybrid 'payment transformation' model of traditional pin entry devices, mobile point of sale (mPOS) devices, Android-based mobile payment terminals, SoftPOS implementations, eCommerce payments and Fintech innovations, comparable to the 'front-end transformation' trend that we continue to see accelerate in physical stores where customers can select various ways to check-out – traditional POS, self-service kiosks, self-checkout, Scan & Go apps, etc. At Toshiba Global Commerce Solutions, our approach is to be retail's strategic partner to innovate at their speed and leverage the technology that best supports their shoppers' habits and business goals.

About Worldline

Worldline [Euronext: WLN] is a global leader in the payments industry and the technology partner of choice for merchants, banks and acquirers. Powered by 20,000 employees in more than 50 countries, Worldline provides its clients with sustainable, trusted and innovative solutions fostering their growth. Services offered by Worldline include instore and online commercial acquiring, highly secure payment transaction processing and numerous digital services. In 2021 Worldline generated a proforma revenue close to 4 billion euros. worldline.com

Worldline's corporate purpose ("raison d'être") is to design and operate leading digital payment and transactional solutions that enable sustainable economic growth and reinforce trust and security in our societies. Worldline makes them environmentally friendly, widely accessible, and supports social transformation.



Get in touch with our experts

Acknowledgement to PCI SSC
for providing Mobile Payments standards' timeline,
images & diagram.
November 2022



Worldline is a registered trademark
of Worldline SA. November 2022
© 2022 Worldline.