

*Softpay.io*

# Softpay Secures Mobile Payments for Retailers with Zimperium MAPS



 **ZIMPERIUM**<sup>®</sup>

 **MAPS**<sup>™</sup>

# About Softpay

[Softpay](#) is a payment company based in Denmark that has developed a new SoftPOS or Tap-to-Phone solution where contactless cards and mobile wallets can be accepted for payment without any dedicated hardware. Using the embedded NFC chip, the solution turns any Android mobile phone into a contactless payment terminal.

Within the last year, Softpay has deployed the solution with several large retailers and was recently in the news when their solution helped 7-Eleven circumvent a cyberattack that could have closed all their Danish stores for weeks.

## The Challenge & Result

In August of 2022, all 176 Danish 7-Eleven stores were forced to close temporarily when a ransomware attack targeted the chain's payment and checkout systems.

Softpay swooped in to save the day, providing all the Danish 7-Eleven stores with emergency Tap-to-Phone kits the day after the attack. The kits, which contained a Samsung Android phone and the Softpay App, allowed the 7-Eleven clerks to accept international and local card scheme payments, including Apple Pay and Google Pay, with a minimum of introduction.

*"The benefits of having a hardware independent payment solution — as the primary solution or as a backup during emergencies — are clear in this case,"* said Ivan Sandqvist, CEO of Softpay. *"I am very proud of the Softpay team's dedication and team effort that has allowed us successfully to support 7-Eleven in this challenging situation."*

## The Solution

Because Softpay does not require dedicated payment terminals, it was a quick, seamless transition and allowed 7-Eleven to thwart the attack, but it would not have been possible without Softpay's foresight or its partnership with Zimperium. Although mobile payment solutions are rapidly becoming mainstream as an alternative to dedicated hardware, they also need to be secure against attackers.

With a modern and flexible payment solution relying on software to protect the consumers' card data and PIN, extra effort has been put into securing it with state-of-the-art technologies. As a result, the Payment Card Industry (PCI) has extensive requirements for checking the integrity of mobile devices and the application in a Tap-to-Phone solution. Consumers' card and PIN data are handled separately and never stored in the mobile client. In addition, the back end is designed and certified according to PCI information security standards for handling payment data.

Softpay partnered with Zimperium to harden their SoftPOS app, using three solutions from Zimperium's [Mobile Application Protection Suite](#) (MAPS): zShield, zKeyBox, and zDefend to avoid hacker exploits. These three products keep attackers from compromising the mobile handset undetected, tampering with the SoftPOS app, and getting their hands on Softpay's encryption keys.

Softpay is using zShield for advanced code obfuscation and anti-tampering. Attackers often download and scrutinize apps to find code they can exploit. [zShield](#) doesn't let them do that; it protects the code from being reverse engineered and provides anti-tampering functionality so that criminals can't see or alter an app's source code, including intellectual property (IP), or data.

[zKeybox](#) protects cryptographic keys and secrets so they can't be extracted from an app at any moment and be used by criminals. Using white-box cryptography, zKeybox protects cryptographic algorithms so that keys never appear in the clear and the execution logic is untraceable. Even if the smartphone on which the SoftPOS app is used is compromised, rooted, or jailbroken, the keys and secrets stay safe. As a result, it would take months for cybercriminals to gain access to the app's secrets.

[zDefend](#) is a unique SDK that allows Softpay's application to detect threats on-device and protect itself after the app has been downloaded on a device, even if there is no network connection. zDefend uses machine learning to defend the Softpay app by detecting 0-day attacks, attacker tools, malicious apps, and network-based attacks.

**"The extensive integrity and security that Softpay guarantees through using products from Zimperium ensure that the retailer has full confidence in adopting and rolling out our solution at such a fast pace."**

**-Softpay CEO Ivan Sandqvist**

## About Zimperium

[Zimperium](#) is a global leader in mobile device and app security. The Zimperium Mobile Application Protection Suite (MAPS) helps mobile application developers build secure and robust mobile apps, resistant against expert attacks. These tools are widely used in the financial industry to secure mobile banking, mobile payment, and SoftPOS applications. MAPS is the only unified platform that combines comprehensive in-app protection with centralized threat visibility. The platform provides app shielding, cryptographic key protection, binary app scanning, and runtime protection and attestation capabilities.

To learn more about Softpay or how to secure your SoftPOS application for MPoC with Zimperium MAPS, [contact us](#) today.



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