

mPOS: The secret to success

Nigel Dean, Marketing Director of Spire Payments explains how an industry-leading API has accelerated mPOS adoption

SPIRE PAYMENTS IN BRIEF

Spire Payments has over 30 years of experience and expertise in bringing to market a vast range of payment solutions: traditional POS terminals, mPOS devices, PIN pads, payment operating systems software, payment applications, terminal management systems, network access controllers, managed services, and a variety of other POS-related solutions. With in excess of 1.3 million POS terminals deployed globally, Spire Payments is recognised by the Nilson Report as both a European (third largest) and world ranked organisation in the field of point of sale solutions.

With offices located in Dubai, Jordan, Spain, United Kingdom, Luxembourg, Russia, Hong Kong, France and the Czech Republic, Spire Payments has grown rapidly thanks to its wealth of expertise in this arena. The company has delivered innovative and highly secure payment solutions to more than 20 markets, which are not only future-proof, but promote secure and seamless payment transactions to all types of end point, around which the user experience is both interactive and rewarding.

SPIRE PAYMENTS AND MPOS

In addition to its traditional POS expertise Spire Payments is also recognised as one of the world's leading chip and PIN mPOS providers. This has been built on the unprecedented success of the PosMate™ Smart and further strengthened by the launch of the SPm20 and SPm2 (both of which offer contactless / NFC capabilities). mPOS is the most significant and innovative development in card payments technology and has brought a wealth of opportunity to Spire Payments' customers (banks, payment service providers, application developers and, of course, merchants).

Spire Payments has embraced this opportunity and has shipped in excess of 100,000 mPOS devices. The net result is over 20 active mPOS deployments across the globe (India, UK, Germany, Poland, France, Belgium, Greece, Finland and more), interfacing with some dozen payment gateways.

THE SECRET TO RAPID MPOS SOLUTION DEVELOPMENT

Much focus is placed on the design of mPOS hardware, which is, of course, of paramount importance when it comes to security and robustness. However, it is the speed

at which a user-friendly, feature-rich (yet secure) solution can be brought to market that is the true differentiator when it comes to the development and deployment of a successful mPOS project. The key to this capability is a powerful API (Application Programming Interface), such as that at the heart of Spire Payments' mPOS proposition.

APIS IN GENERAL

The advent of powerful general purpose computing platforms (as exemplified by the expansion of the Internet of Things) has made APIs (local and remote) a necessity in order to leverage technical knowledge and reduce time to market.

Typically, a POS device has a layered architecture. At the lowest level there is an operating system, complemented with cryptographic/functional libraries, and, finally, a financial application. Operating systems usually offer their own low-level API which comprises of software libraries, device drivers, etc. This basic structure requires developers to have an in-depth knowledge of the underlying platform. The consequence of this is the requirement for highly skilled

developers who in turn require access to restricted drivers and operating system functions. This in turn could:

- Create security holes.
- Negatively affect the portability of an application.
- Put the application in the scope of the device (PCI-PTS) security evaluation, adding costs and delays on the development and update cycle.

A higher level API (as implemented on all Spire Payments' mPOS platforms) provides an environment which promotes rapid, yet structured application development. The side effect of this is the reassurance that the resulting solution is secure and can be seamlessly ported to any platform supporting the same API. In Spire Payments' case, once developed, the same mobile payment application can interface with the entire mPOS range: PosMate™ Smart, SPm20 and SPm2.

THE SECRET TO A STRONG API

A strong API must meet core requirements, some of which are listed below. They must:

- Be comprehensive: provide a feature-rich environment to allow the developer to deliver a rich end user experience.
- Be easy to learn and use: simple, training programme and detailed documentation.
- Be flexible: do not restrict application development by forcing the developer's hand, e.g. by providing non-blocking access mechanisms to slow interfaces.
- Deliver rapid development: provide common functions to the developer to accelerate development time.
- Support multiple platforms: the same API is supported on multiple platforms, allowing applications to be written once and shared across multiple devices.

- Be openly available: allow any third party access to the API to encourage unrestricted development by external developers.
- Be secure: misuse does not affect security/stability/integrity or reveal sensitive information or functions to the application.
- If an API meets all the above criteria the foundations are in place for development success.

THE COMMERCIAL PROPOSITION

A strong API will clearly be beneficial to an engineering team as it will simplify the entire development process. However, it is critical these advantages are also fully understood at a commercial level since the consequences of opting for substandard development interface can be significant: extended development times, redevelopment of applications for every device variant, complex bug-fixing processes, increased need for approvals, and, in the worst case, security breaches.

SECURITY IS FUNDAMENTAL

To date, the focus of security for POIs (Points of Interaction) has been given by PCI PTS, which focuses on PIN entry and processing but still allows the application to have unaudited

carte blanche access to card data. PCI PTS devices should provide a secure foundation upon which applications can be built, hence the importance of a flexible and secure API.

Additional standards have been created to deal with account data (PA-DSS and Domain 2 in P2PE), demonstrating that security must start at the POI level.

The threat of attack on cardholder information is ever-present and such breaches of POS and mPOS devices have been well publicised. The implementation of a powerful and secure API will not only make such attacks extremely difficult, but also provide a feature-rich environment to meet the increasing demand for multiple applications residing on a single POI.

INTERESTED IN LEARNING MORE ABOUT SPIRE PAYMENTS AND MPOS?

If you are interested to learn more about Spire Payments and mPOS please visit stand D40 at Cards and Payments Middle East. In addition, Nigel Dean, Spire Payments Marketing Director will be presenting 'Facing the Elements: mPOS and the Cloud' on day one in the M-Payments Seminar Theatre at 12:00. We look forward to seeing you. **C&P**

