

**AURIGA PERSPECTIVE**

# Evolution of ATM acquiring SW

By Mark Aldred, Head of International Sales, Auriga

Traditional ATM acquiring architecture, on which most of the world's 3 million ATMs still operate, needs upgrading in order to remain relevant within the context of an increasingly wide range of digital channels and changing customer behaviour. In considering the possibilities and roles for future standards, it is instructive to learn from the past, particularly the reasons behind the creation of de-facto standards in hardware vendor-defined protocols, such as NDC (NCR Direct Connect), DDC (Diebold Direct Connect) and the CEN/XFS standard.

In many institutions, the self-service channel has become isolated from mainstream digital investments as a result of the proprietary ATM infrastructure that grew around NDC/DDC.

## Hardware vendor-centric model

Many current deployments are still based on the decades-old legacy NDC/DDC architecture designed when only the hardware vendors had access to the API. The only layer where it is possible to define any standardisation is in between the ATM with its vendor-specific application and the terminal handler. Such an architecture limits the pace of evolution in line with market needs. Furthermore, it forces financial institutions trying to benefit from competition between hardware providers, to deploy an ATM application from each vendor, causing operational complexity and compatibility issues.

## XFS model

The CEN/XFS standard was introduced as an interface between the ATM hardware and its application software to allow a single application to be used for all ATMs – a step towards 'multi-vendor' software. RBR's report *ATM Software 2018* distinguishes between applications just making use of XFS and real multi-vendor applications that actually run and are certified on ATMs from different vendors. The latter, which enables deployers to break free of vendor strongholds, still represents only 40% of the market.

Although XFS, coupled with real multi-vendor applications, allows for more freedom for vendors, the ATM channel itself remains siloed and unlike any other digital channel in the way it is managed.

Restrictions derived from the use of the de-facto standard message protocol have delayed time to market for new functionality, limited channel integration, and created a dependency on hardware providers to produce and publish new standard versions.

Furthermore, there are still a number of infrastructural obstacles to introducing new technologies, integrating with other channels, and maintaining flexibility to implement new functionalities and mandates. Despite this, XFS has prepared the road to a more flexible and cost effective channel integration model.

## Channel integration model

In this architecture, the hardware is isolated through XFS, and the software stack can be more logically structured into an integrated ATM solution (ATM software and terminal handler). This connects more effectively with external entities such as other channels and transaction processing layers. In addition, the layers are now clearly separated by proper international standards (XFS, ISO 8583, ISO 20022) into: ATM hardware, Integrated ATM Solution and Switch/Business Services.

There are many benefits to be gained from this model, including a much simpler, cost effective, standardised and generally accepted interface, increased availability, and enhanced customer experience and personalisation. It can also lower TCO, accelerate time-to-market, provide cross-channel capabilities and handle modular vs disparate products. This is not to forget the benefits deriving from a real multi-vendor application such as increased choice and reduced cost of hardware.

The ATM should behave like any other digital channel. It is vital to be able to offer expanded services across self-service and other channels using a framework that was built for that purpose. Auriga's WWS solution is a leading multi-vendor channel integrated solution (ATM application, terminal handler, monitoring, marketing, etc.). It has been designed to align advanced functionalities such as deposit and recycling, local and remote video assistance, as well as mobile integration.

Having an ATM integrated solution means that the ATM is no longer a distinct silo and can perform other functions linked to other channels, bypassing the structural restrictions of NDC/DDC. ■



Mark Aldred  
Auriga

**It is vital to be able to offer expanded services across self-service and other channels using a framework that was built for that purpose**