

Contactless ATM Transactions

AT A GLANCE



In cashless branches, the supply of cash will become part of a circular cash economy.



Contactless technologies such as QR code and NFC play a key role in this transformation and are growing rapidly throughout the world.



Which solution participating banks prefer for their offering is heavily dependent on the use cases. Here, we must have an active discussion jointly to define the best possible shared journey for the Swiss financial center.

Contactless ATM Transactions Are Increasing Rapidly

Contactless payment processes at the point of sale are becoming increasingly popular. Covid-19 is an additional catalyst driving this trend. Contactless transactions at ATMs are also increasing rapidly – even before the pandemic: in 2019, cardless cash withdrawals at ATMs increased by 26% worldwide.¹ Here, the shift in transactions from the counter to ATMs undoubtedly plays a key role (cashless branch) but also changes in customer behavior resulting from the introduction of new technologies. Even though we can see a significant reduction in the number of ATM transactions, cash is “here to stay” (cf. [SIX White Paper “Future of Money”](#)). The question as to how the supply and collection of cash can be guaranteed in future also acquires a new dimension through the introduction of contactless technologies.

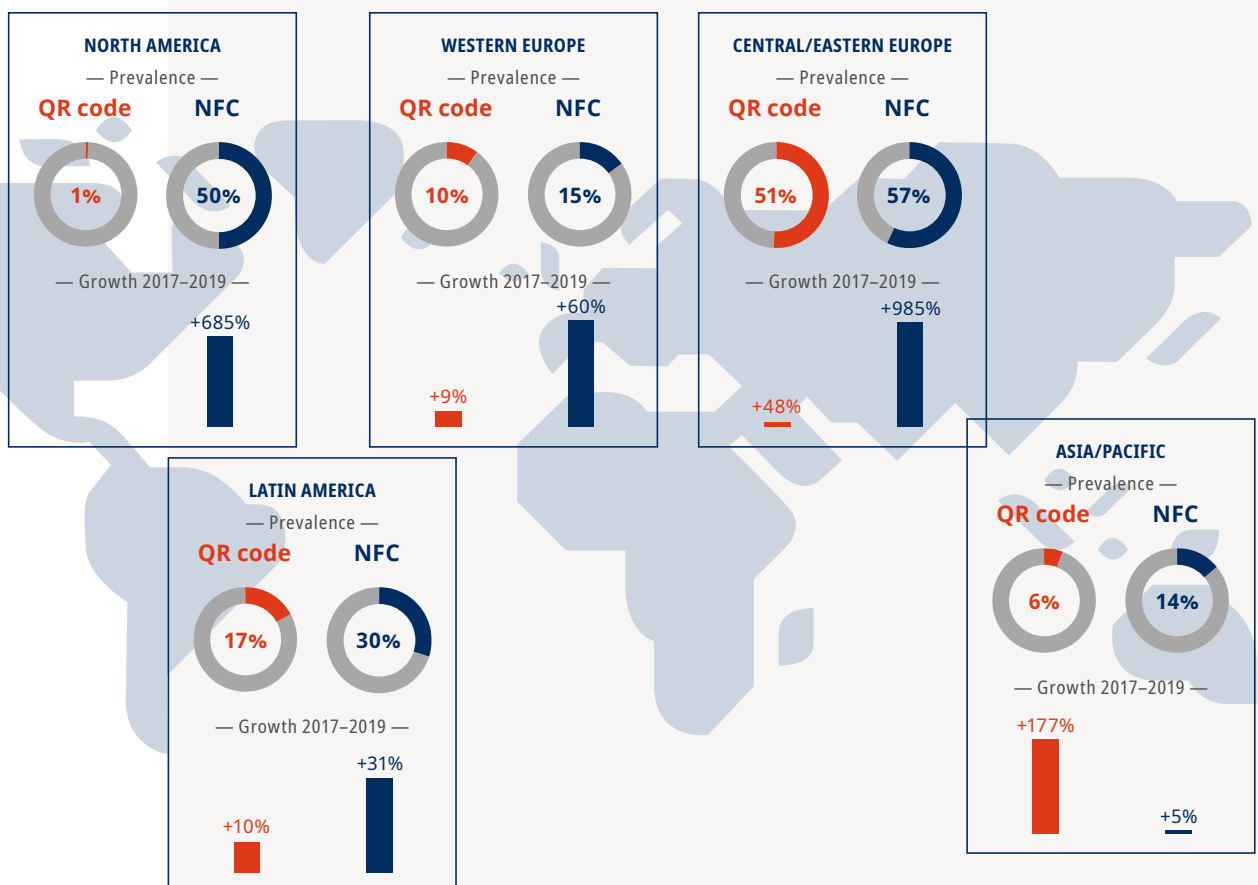
¹ RBR London: Global ATM Market and Forecasts to 2025.



Global Trend

Considered globally, two technologies are of relevance for contactless ATM transactions: transactions via QR code and by means of Near Field Communication (NFC). More and more ATMs are equipped with one of these technologies or both (see chart). This is evident from the “Global ATM Market and Forecasts to 2025” report produced by the research and consulting service provider RBR. The number of ATMs equipped with NFC sensors alone increased by 83% throughout the world in 2019. However, there are significant differences in the speed at which the respective technologies are growing in the regions of the world. While the number of ATMs with NFC technology rose very rapidly in North America, QR code technology is gaining ground in the Asia-Pacific economic area (see chart).

The number of ATMs equipped with QR code and NFC technology is also increasing noticeably in Switzerland. In November 2020, 36% were equipped with QR code readers and 20% with NFC readers. Even more, various participating banks have already implemented the QR code solution so that this is available for their end customers. With regard to NFC functionality, the participating banks have started an implementation project at Bancomats.



Dissemination and growth of QR code and NFC technologies worldwide.



QR Code – Benefits for Participating Banks and Customers

Contactless cash withdrawals and deposits by QR code offer both participating banks and their customers a wide range of benefits. SIX also enables cash services operated with the QR code in cashless branches. No scheme fees are incurred with this technology either when used at bank-owned ATMs and transactions that exceed the normal card limits can be covered, too. The low costs of implementation also militates in favor of QR code technology: ATMs with QR code readers use the existing interfaces in the SIX solution and build on these.

For corporate and private customers, the transferability of the QR code to third parties – whether in printed or digital form – is practical and advantageous. Since customer authentication is only required when the QR code is created, it is not needed when it is passed onto third parties. This opens up numerous uses: corporate customers can, for example, store a QR code in the checkout without any security concerns so that staff can pay in daily receipts at the ATM. Private customers can send QR codes to friends and family or get immediate access to cash via QR code if they lose a card.

In future, QR codes can serve as the basis for a peer-to-peer platform in which cash is obtained from other users and credited.



NFC – Impressive in Connection with Mobile Card Solutions

The advantage of NFC technology at ATMs is that it simplifies handling for private customers. This is why the technology is already widely disseminated in the retail area. For participating banks, the full benefits are seen if NFC is expanded with mobile card solutions. In this scenario, the problems resulting from scripting, i.e., the subsequent amendment or updating of data on the card chip at payment terminals or ATMs, which is not possible for contactless card transactions without mobile payment solutions, no longer apply. Since physical cards are no longer needed if NFC technology is combined with mobile payment services, this increases security among other factors, since skimming – i.e., the illegal reading of card data – is prevented per se. End customers also view the option of obtaining cash from ATMs via Smartphone as a major advantage. This is evidenced by a current [report produced by the market research company infas quo](#) on behalf of EURO Card Systems.

	QR CODE	NFC	
		Contactless Card Transactions	Mobile Card Solutions
PRIVATE CUSTOMERS	<ul style="list-style-type: none"> + Transferable and can be sent + Form-independent, does not need a smartphone - Scarcely available on mobile 	<ul style="list-style-type: none"> + Cannot forget card + No traditional skimming possible - Multiple tapping may be required 	<ul style="list-style-type: none"> + Physical card no longer needed + Cannot forget card + No traditional skimming possible - Multiple tapping may be required
BUSINESS CUSTOMERS	<ul style="list-style-type: none"> + Payment codes can be stored securely and transferred 		
ISSUER	<ul style="list-style-type: none"> + Rapid assistance if card is lost 	<ul style="list-style-type: none"> - Scripting at ATMs is no longer possible (NFC transaction) 	<ul style="list-style-type: none"> + No traditional skimming possible
SITE BANK	<ul style="list-style-type: none"> + Expansion of the cashless branch + Less susceptible to outages than card readers - Additional hardware is required 	<ul style="list-style-type: none"> + Less susceptible to outages than card readers - Additional hardware is required 	<ul style="list-style-type: none"> + Less susceptible to outages than card readers - Additional hardware is required



Shaping the Cash Ecosystem in Concert

For those responsible for ATMs in Switzerland, the time has come to shape the future cash ecosystem in concert. ATMs will play a significant role in the circular cash economy in future too. Coexistence of both contactless technologies offers the ideal solution for the use cases, which the participating banks would like to cover to create additional benefits for their customers. Only the precise implementation of NFC still has to be determined. The Swiss financial center must therefore have an active discussion to define the best possible shared journey. SIX supports this process and will play a coordinating role to successfully assist the unprecedented transformation of the cash economy to an ecosystem offering an open architecture and increasingly user-centered digitized cash services.

