

## D Mobile payment ecosystem

### Market development

Since the launch of the first mobile payment service in 2000, the market has seen many new entrants coming and going, which is a sign of market consolidation. Reasons for terminating the payment services include strong competition and a lack of growth on the customer side. An analysis of the failed mobile payment procedures shows that all of them offered apps or wallets that focused mostly or solely on mobile payment.

On the other hand, the market has also seen the launch of innovative solutions. The payment services launched more recently distinguish themselves from earlier mobile payment apps and offerings in that the payment function is embedded in a comprehensive service offering that is not focused on the payment itself, but on mobility services, financial services or customer loyalty, for example.

### Market participants

The participants on the mobile payment market can be grouped as follows:

#### a) Providers

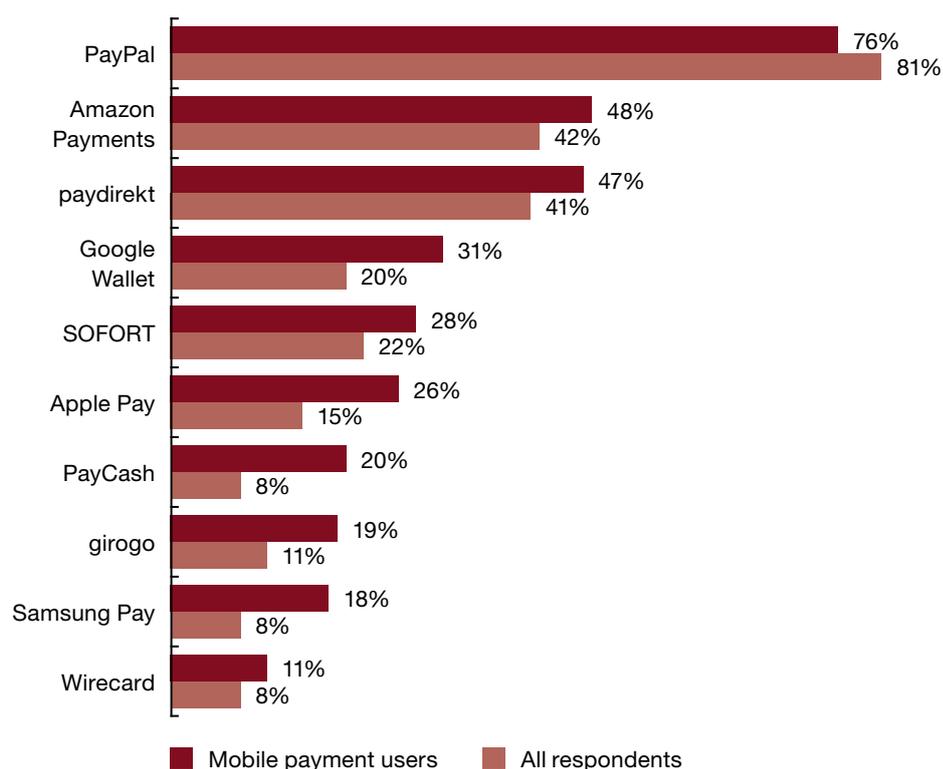
On the provider side, there are:

- mobile network operators
- smartphone manufacturers
- credit card organizations
- banks
- online payment providers
- specialised payment providers
- internet companies
- manufacturers of POS terminals and
- basically any company offering products or services via mobile commerce and embedded payment.

Figure 8 shows the respondents' awareness of some of the mobile and online payment providers.

**Fig. 8 Awareness of mobile and online payment providers**

Which of the following payment providers do you know, and even if it is only the name?  
n = 1,015 (all respondents); n = 135 (mobile payment users)



#### b) Merchants

Merchants can offer the technology as key enablers of mobile payment. However, this technology offering is also fragmented as different merchants often accept different mobile payment methods and technologies. This stands in marked contrast to the wide and standardized acceptance of girocards and credit cards. Girocards, for example, are issued by all banks for use at the 800,000 POS terminals in Germany.

Merchant acceptance of mobile payment also manifests itself in the number of payment terminals at the POS and their performance. Near-field communication (NFC) is a key technology for mobile

payment. Approximately 80,000 terminals were NFC ready at the end of 2015, which corresponds to about 10% of all terminals in Germany. The number of NFC-ready cashiers is growing<sup>1</sup>. However, for mass adoption of mobile payment, 10% is too little. To further increase NFC penetration, merchants that accept certain credit cards are required to have terminals using NFC technology by 2020. This requirement can help promote mobile payment usage in Germany, but NFC is no standard for in-store payments. Other technologies available for consumers include, for example, QR codes, Infrared (IR) or Bluetooth Low Energy (BLE).

<sup>1</sup> Cf. Bitkom (2016): Bezahlen mit dem Smartphone funktioniert, aber kaum jemand weiß wie.