Tokenization
Transformation to digital payments
MeaWallet is a Norwegian company that was established in 2013. MeaWallet is the centre of excellence within mobile and digital payments and mobile wallets, providing state of the art certified technology in 18 countries. As one of Europe’s leading companies within mobile payments, we provide banks with a short time to market with high-quality products.

In close relationship with Amex, Mastercard, Visa, NXP and other key organizations, we are at the forefront of the mobile payments space. We are an organization with a mix of seasoned and experienced subject matter experts together with young entrepreneurs that constantly challenges the technology. This combination has proven to be unique and given us credit with customers, partners and in the FinTech industry in general.

MeaWallet serves mainly banks and other card issuers, through a proprietary platform-independent product suite, focusing 100% on tokenization technologies, supporting both global and local schemes without any geographical limitations.

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Recent years have shown an increasing shift from traditional card payments to digital payments. A continually growing number of people use mobile phones, wearables, online and in-app payments daily to pay for goods and services. With the huge growth in digital payments, it is essential to have a secure and seamless user experience across device channel and solutions. At the same time, new opportunities for consumers, banks and merchants are introduced and new business models and capabilities enter.

Payment tokenization is a security technology standardized by EMVCo where sensitive card information is replaced with a unique digital identifier called a token. This way, payments can be processed without exposing card data. All the major payment schemes like AmEx, Mastercard and Visa have adopted the technology and developed their own Token Service Provider (TSP) to support card tokenization.

A significant benefit of tokenization is the fact that a token is only valid in a specific context. This may be a mobile device, a smartwatch or a particular merchant. Outside the specific area, the token is useless and cannot be misused. In practice, this means that a card account can have multiple tokens used for different purposes e.g. one token for your mobile wallet, one token used in your smartwatch and one token for streaming service or travel ticket app.

The illustrations above:
One physical card can have multiple tokens connected with different use

The payment schemes have indicated that all cards shall be eligible for tokenization by 2020.
Tokenization has become a standardized technology to secure mobile payments. Many consumers are already using tokenized payments daily through mobile wallets and wearables. The purpose with tokenization has been to protect consumers, merchants, and financial institutions from fraud by replacing sensitive card information with a token on payment transactions initiated from a token requestor like a mobile device or wearable.

Tokenization 1.0
Increased Transaction Security

Internet of Things has become a reality and there has been a growth in connected devices and IoT payments. IoT payments are not only transforming the way we perform payments but also creating new business models and payment capabilities when a car or a fridge initiates the payment. For IoT, payment security is one of the fundamentals for success, and tokenization as a prerequisite holds the same high security as other payment situations.

Tokenization 2.0
Securing eCommerce

Tokenization has primarily been used to secure mobile wallet and in-store payments. But tokenization is moving towards a new phase and together with Secure Remote Commerce (SRC) framework, the focus now is to secure and simplify eCommerce payments. The consumers expect the same secure and easy way of performing payments regardless of channel and device. By using tokens for online and in-app payments, security does not have to compromise with the user experience.

The aim is that tokenization and SRC will be a win-win for both consumers and merchants. For consumers, a complex check out processes will be replaced with a smooth and harmonized process across payment scheme, device, and channel. Entering card information and other checkout information will be unnecessary as it can be reused in a safe way. Merchants will have less abandoned checkouts, and at the same time increased security and reduced loss.

EMVCo has published a new standard (SRC) for eCommerce transaction. Mastercard and Visa have both adopted it into their digital commerce program and the goal is to finalize and implement it in 2019.

Tokenization 3.0
Next Generation Payments
How does Tokenization work?

Participating actors

The process of tokenization includes three different actors; the Token Service Providers (TSP), the Issuer and a Token Requestor. TSPs are the entities that generate the token and securely keeps the mapping towards the PAN. Token Requestor is the common name to all wallets that requests payment tokens in return for a payment card. This may be an Issuer app, an online merchant or your TV.

The third actor is the Issuer who plays an essential part in the tokenization process. The Issuer’s responsibility is to make decisions on each tokenization request based on several parameters to ensure that tokenized cards are issued to the rightful owners amongst their customers. As with physical cards, Issuer must also handle life cycle management to existing tokens. To be able to issue these cards and participate in these processes, the Issuer must connect to the Token Service Providers.

Tokenization 1.0
Tokens are stored on mobile phones and smartwatches which can be used at a in-store point of sale.

Tokenization 2.0
Merchants stores tokens-on-file to be used at checkout during online shopping.

Tokenization 3.0
IoT devices with dedicated tokens allowing them to perform invisible payments for services on behalf of the consumer.

Tokenization is the key to enable all these new ways of paying and it is the core of the new digital era for mobile and digital payments. Mea Token Platform provides this through a single interface for all major payment schemes.
Increased Consumer Control

Token Management and Control

The shift to digital payments changes how we pay. Consumers will end up having multiple tokens stored in several different digital wallets, apps and wearables due to tokenization being used in ever more payment situations. How can consumers and issuers keep control of this jungle of tokens? This issue introduces Token Management. Token Management consists of services consumers and issuers can use to control and manage tokens through consumers banking solution or issuers backend system.

Token Management gives the consumer new opportunities, to not only push digitized cards to different merchants (and token requestors) but to customize and add additional protection to each token as well. A specific token can be activated and deactivated with just a few clicks. This gives the consumer flexibility and control.

Push Provisioning to Wallet
By pushing the wallet button or swipe to activate the card, the customer easily can start using the digital wallet.

Push Provisioning to Merchant
A token can be added to an eligible token requestor/merchant to simplify the payment and still keep the high security. Choose merchants and swipe for adding the token.

View and Manage Subscriptions
When every merchant and subscription has its own token, users can easily view and manage all subscriptions.
Increased Consumer Control

**View Transactions**
Shows transaction histories for tokens. There is also a dynamic graph showing your transaction history in a cool and modern way.

**Spend Controls**
By adding spending limits to a token the consumer can strengthen control by managing each token differently. Spending limit can be set on monthly and daily amounts and a number of allowed transactions.

**Transaction Details**
Shows transaction details for a specific token in a modern and informal way.

**Notifications**
For extra control, consumers can choose to receive notifications each time a token is used.

**Delete and Detokenize**
A token can easily be deactivated or deleted.
To learn more about tokenization and Token Management, visit us at www.meawallet.com or get in touch with us at contact@meawallet.com