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Tackling involuntary churn in the subscription economy with EMV tokenization

EMV tokenization offers merchants new opportunities to address some of the key challenges associated with using stored credit and debit card data. This is particularly relevant for subscription-based enterprises: by minimizing the disruption caused by CNP (Card Not Present) payments blocked due to expired, lost or stolen cards, or false-positive fraud alerts, EMV tokenization promises to reduce needless subscriber attrition, improve the customer experience and protect revenue streams.

Executive summary

The subscription business model is booming. Originally limited to relatively straightforward services such as household utilities and mobile phone contracts, consumer enthusiasm for committing to deeper relationships with merchants and other enterprises now encompasses everything from home delivery of specialty foods to gym subscriptions and streaming. And the list continues to grow. But while the subscription sector may be posting some remarkable growth figures, the market is certainly not without its challenges. Above all else, customer retention is key to the sustained profitability of any subscription business. Minimizing churn is critical.

The issues here go well beyond the quality, relevance and competitiveness of the merchant's product or service offer. A significant number of customers are also being lost to what is known as involuntary churn. By far the most common cause is a failure to complete transactions based on stored credit/debit card details. That's often because the card has expired or been lost or stolen, or the card issuer has blocked payment on the basis that fraud is suspected. At best, these problems require the merchant to undertake time-consuming, costly and inconvenient procedures to rectify the situation. At worst, they result in on-going customer attrition, and losses that include the potential long-term business value represented by each individual subscriber.

To date, the options available to enterprises seeking to minimize involuntary churn have proven less than satisfactory. None of them genuinely combine effectiveness, efficiency and a smooth customer experience. That's why major payment networks have been looking to tackle these issues through the development of a new approach, the EMV tokenization standard. Already established as a secure and seamless method of digitizing payment cards on smartphones and other mobile connected devices, EMV tokenization offers subscription-based businesses the benefits of fully automated updating of stored payment card details. It also delivers more robust security foundations, further reducing the risk of transactions being blocked due to suspected fraud. In addition, EMV tokenization facilitates a degree of flexibility simply not possible with the legacy tokenization solutions that currently underpin most payment card storage and CNP transactions. With easy to implement solutions already available to merchants and other stakeholders, EMV tokenization is now poised to bring further value to the fast evolving, fast growing subscription-based market.

1. Signing up for subscription

Over recent years, the consumer marketplace has become increasingly complex and pressurized. For long-established businesses operating in the physical domain, the eCommerce revolution has opened the door to a host of agile and disruptive competitors. Equally, as more and more players enter the digital ecosystem, even this new generation of businesses has often found profitability an elusive target. Against this backdrop, the emergence of the subscription economy has provided welcome opportunities to attract new customers, build market share and create stronger revenue streams.

Of course, the idea of inviting consumers to replace occasional transactions with planned regular payments is nothing new. Initially, companies involved in areas such as household utilities offered it as an alternative to traditional billing arrangements. Growth was further fuelled by the emergence of the mobile comms sector, and the rise of consumer and leisure services such as gym membership. But from the turn of the century, there has been a remarkable proliferation in the sheer range of products and services marketed on a subscription basis, from beauty boxes and razors to lunch boxes and diapers. As yet, consumer appetite shows little sign of easing; on average, companies operating in the subscription economy have grown their revenue by 321% since 2012[1].

The subscription model provides enterprises with compelling commercial benefits. Predictable, recurring income brings with it the ability to plan with a far greater degree of certainty and confidence. Acquiring new subscribers may demand considerable marketing effort, but once customers have opted-in, the supplier is in a much stronger position to retain that business. Primarily that's because the subscription model opens a direct line of communication to the customer, unobstructed by intermediaries, and with it the potential to build a stronger, deeper relationship. That in turn creates opportunities for cross-selling, as well as a platform for complementary activities such as market research.

2. The challenge of involuntary churn

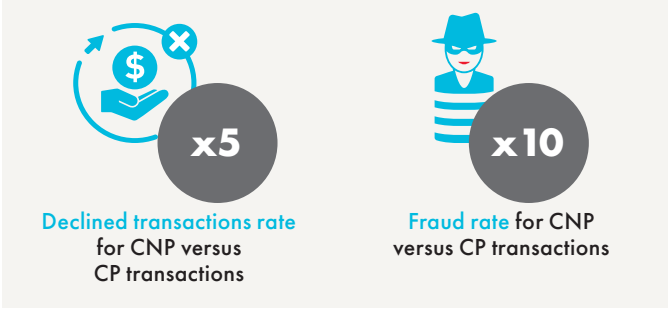
Although the subscription model offers the advantages of direct communication with customers, churn remains a pressing issue. Recent market research offers some revealing insights. According to a report by Forrester, 67% of churn can be described as voluntary[2]. The customer has basically decided that the merchant's offer is no longer relevant or attractive. But that still leaves a significant proportion of subscribers for whom churn is defined as involuntary. For any enterprise operating in the sector, preventing this type of customer attrition should figure high on the list of priorities; it quite simply represents the needless loss of hard-earned subscribers that are still satisfied with the product or service offer.

2.1 Problems in store

Identifying the factors that drive involuntary churn is the obvious starting point for any strategy designed to reduce it. Overwhelmingly, they revolve around the failure of transactions based on cards stored by, or on behalf of, the enterprise concerned. It's worth highlighting here that the rate of declined transactions is five times higher in online commerce than proximity commerce.

Digging deeper, the problems can be broken down into three areas:

- **Card expired.** The average credit card lifespan is three years. That equates to 2.8% of all cards in circulation expiring every month. For any subscription-based enterprise that does not support auto-renewal of stored card details, the consequences are likely to include significant inconvenience to customers, and disruption to revenue streams.
- **Fraud suspected.** With widespread adoption of EMV successfully addressing much of the fraud attempted in the physical domain, criminals have turned their attention to CNP transactions. In response, card issuers are becoming more cautious, preferring to decline transactions rather than risk the wide-reaching negative implications of fraud. Again, that means the potential for interruption to subscription payments.
- **Insufficient funds.** This occurs either when a customer has reached their credit card limit or has insufficient funds in an account linked to a debit card.



The impact of these problems extends well beyond the immediate loss of an individual payment. If the subscription cannot be re-started, the enterprise will have also sacrificed the lifetime value of that customer.

3. Less than perfect: current strategies for addressing involuntary churn

Most enterprises offering products and services on a subscription basis will be aware of the issues surrounding involuntary churn. Prior to the arrival of EMV tokenization, four basic strategies have been open to merchants seeking to address the problem:

- **Dunning.** Numerous solutions are available that enable emails to be sent automatically to customers when a regular card payment is blocked. However, expecting a customer to revisit the notorious pain point of manually entering card details hardly represents an ideal user experience. In addition to simple inertia on the part of time-poor consumers, growing concern over phishing attacks is likely to undermine response rates to this type of approach.
- **Retry.** Where transactions have been declined due to insufficient funds, simply retrying the transaction after a certain period has elapsed may resolve the issue. This strategy does not provide an answer to the more common problems of card expiry, lost or stolen cards, or suspected fraud.
- **Guessing card details.** Given the generally predictable nature of card lifecycles and expiry dates, it may be feasible for enterprises to simply guess the cardholder's new details. This is a labor-intensive approach with no guarantee of success. Furthermore, it is unlikely to be encouraged by card issuers.
- **Auto card update.** Automatic updating of stored payment cards that have expired, or been lost or stolen, is supported by some payment networks. However, this is far from universal, and auto card updating also requires implementation on the part of the issuer. Again, support for this varies greatly from one market to another. Moreover, this entire approach relies on card details being combined in batches; it is not performed in real time. Overall, auto card update cannot be relied upon to provide a comprehensive solution and it does nothing to tackle transactions declined because a threat of fraud has been identified.

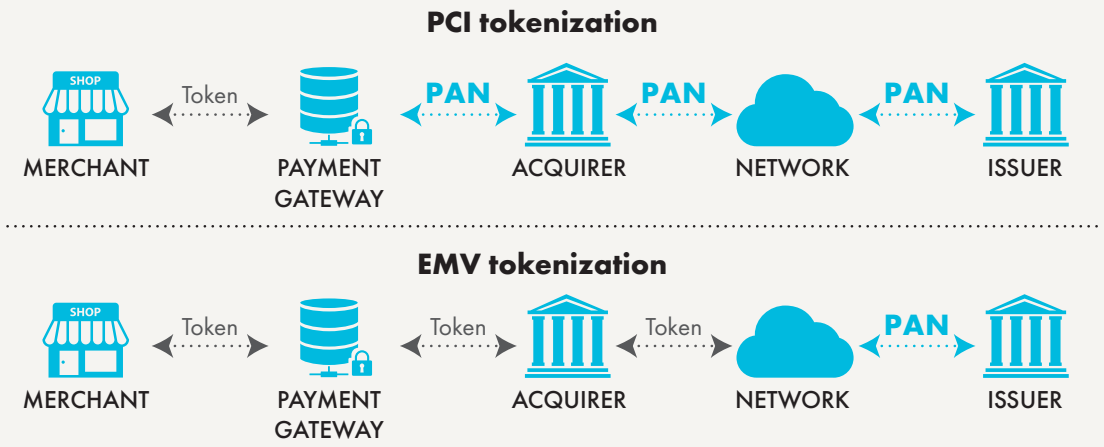
While each of these approaches has its merits, none represents a complete answer. Ultimately, the root of the problem lies in the limitations of using PAN (card data) to process online transactions.

In simple terms, tokenization is the process by which PAN is replaced by an alias or 'token'. It enables to delimit and contain the perimeter of the infrastructure which needs to be PCI DSS (Payment Card Industry Data Security Standard) compliant. Until the arrival of EMV tokenization, there was no specific tokenization standard, and only proprietary solutions offered by payment gateways/PSPs or token platforms.

4. Why EMV tokenization?

Created and supported by EMVCo, the worldwide body dedicated to interoperability and secure payment card transactions, the EMV tokenization standard offers stakeholders an alternative to legacy PCI tokenization solutions. It is based on the fact that PAN is no longer stored by either the merchant or one of its technical providers (a PSP or token provider). Instead, the payment networks are responsible for PAN storage, and for issuing a token that is used in its place. This means that PAN exposure is reduced dramatically. Moreover, token usage is linked to a specific merchant, limiting the potential impact in the unlikely event that data is accessed by a fraudster.

Perimeter of existing token versus EMV token



This technology is already well proven. Significantly, EMV tokenization is providing the foundations for a host of digital wallet schemes, with the world's leading OEM mobile payment solutions (Apple Pay, Google Pay, Samsung Pay) and IoT systems (FitBit, Garmin) using this approach to digitize cards safely for use on devices.

For the enterprise economy, the most obvious advantage of EMV tokenization is the support it provides for automatic real-time renewal of stored payment cards. But that's far from the full story. Because EMV tokenization is inherently more secure, transactions based on this standard enjoy greater trust among card issuers. They are therefore less likely to be declined on the basis that fraud is suspected. In addition, as merchants undertake cardholder ID and verification (ID&V) processes with issuers at the enrollment stage, stolen cards are effectively filtered out.

EMV tokenization is also highly interoperable. Unlike proprietary tokenization solutions, it is therefore straightforward for enterprises to switch between different payment gateways.

PCI TOKENIZATION	NETWORK TOKENIZATION
No automatic card update	Automatic card update mechanism is supported by all major payment networks and issuers
More vulnerable to data breaches as PAN is still employed	Reduces risk of data breach as PAN is no longer used
Does not prevent online storage of a stolen card	Card eligibility check with optional ID and verification is performed by the issuer to block stolen cards
Proprietary tokenization complicates payment gateway migration	Standardized tokenization enables straightforward change of payment gateway

4.1 The payback for subscription-based enterprises

In addressing the root causes of involuntary churn, EMV tokenization delivers clear and quantifiable benefits to subscription-based businesses. Naturally this starts with the immediate value of a processed payment that would otherwise have been blocked. Added to that is the long-term value of a subscriber that might be lost, either because attempts to reprocess the payment fail, or it proves impossible to persuade the customer to resubmit card details. Enterprises are also able to streamline operations, as the need for the strategies outlined in section 2 is reduced or eliminated.

In the first half of 2019, a sample of top US merchants enjoyed a **3.2%** increase in transaction approvals following the introduction of EMV tokenization[4]

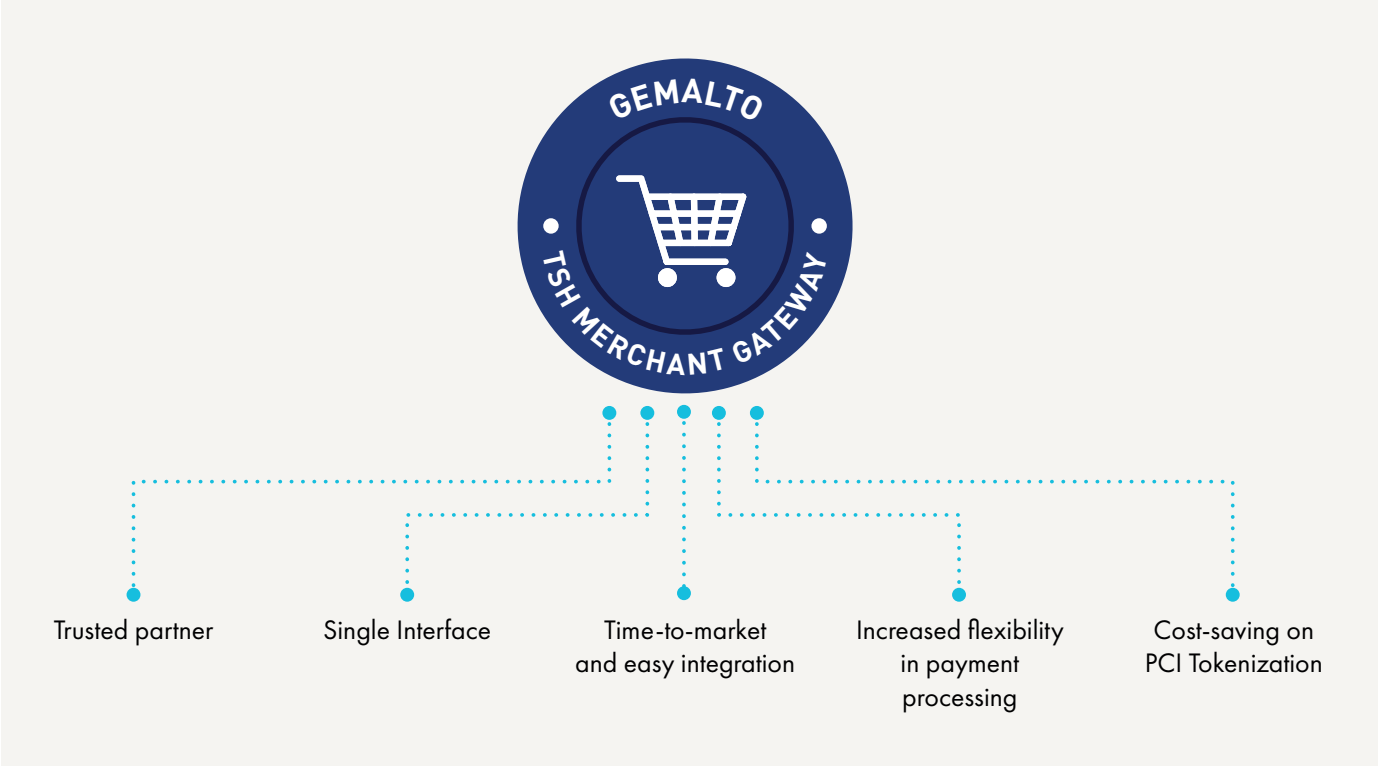
By minimizing the effort expended on such processes, EMV tokenization enables greater focus on core activities such as customer relationship management. Indeed, this is another area where EMV tokenization delivers: it is far less likely that the customer will be inconvenienced by the need to resubmit card details and/or contact their card issuer to facilitate what should be a regular, painless means of payment. EMV tokenization also offers consumers greater transparency and control. Via their banking app, customers can see clearly which subscriptions their tokens are associated with and have the freedom to modify or cancel such arrangements, without reference to the supplier.

Harder to measure, but important to consider, is the ability of EMV tokenization to embed stronger confidence in the subscription payment model and wider eCommerce environment. In a world in which fraud is ever more sophisticated, all stakeholders stand to benefit from a safer, more secure, more trusted digital marketplace. EMV tokenisation will help realize this goal, and encourage continuing investment in, and commitment to, the digital domain.

5. Conclusion: ready to deliver

Momentum behind the subscription economy remains extremely strong. However, in a competitive marketplace, any opportunity to reduce churn needs to be pursued. That's particularly true where it does not reflect a conscious and proactive decision by the customer to cancel their subscription.

Proven solutions are already available that combine the benefits of EMV tokenization with fast, straightforward implementation and low maintenance management. Thales is established as an industry leader in this field, and the company's TSH (Trusted Services Hub) Merchant Gateway establishes a single and highly stable platform that interfaces directly to all the key Token Service Providers (TSPs). Implementation is simplified and accelerated, particularly for merchants and PSPs that might otherwise rate relatively low on the priority list for global payment processors. Moreover, the TSH Merchant Gateway is responsible for responding to the frequent API adjustments that characterize TSPs' implementations. As a result, it represents a significant reduction in the burden on enterprises for whom payment processing is a distraction from the core business activities that ultimately spell the difference between success and failure in subscription-based markets.



Sources:

1. Zuora study
2. Forrester – The Art and Science of Reducing Involuntary Subscriber Churn (2017)
3. Mastercard - 2019
4. VisaNet – Jan – Mar 2019

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