PAYSYS REPORT

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In this issue:

A new payment scheme in Switzerland - hype or hope?

We invited the Swiss card payment expert Constantin Bregulla to comment the just launched Swiss m-payment scheme Twint.

After graduating as a business manager (BA), Constantin Bregulla began his professional career as a product manager for payment cards at the Swiss banking association in Basel. After a short time, he took over responsibility for the credit card section and from 1995 onwards the overall management of the card area (customer, debit and credit cards) at the bank. In the course of the merger of the banking association with the banking company to form UBS AG in 1998, Constantin was appointed head of the bank's card business in Zurich.

He remained here as managing director until October 2016 and was responsible for the Card & POS-Solutions division, all payment card products and the ATM business of the bank. He also had a seat on various national and international boards within the card industry. Since 2017, Constantin Bregulla has been working as a project manager and, in particular, as a consultant for strategic issues in the field of payments.

Our Comment:

(written by our guest author Constantin Bregulla)

Prospects for payments in Switzerland

In the complex, multifaceted and dynamic "Payment" market, there have been repeated efforts international- ly – and also in Switzerland – for more than ten years to establish mobile payment, i.e. paying at the POS with a mobile device.

In Switzerland, there are two new, competing initia- tives:

- Apple Pay. This payment solution is based on NFC technology and is offered by Cornèrcard, Bonus- Card and American Express/Swisscard.
- Twint. This is a new payment app that enables mobile payments by smartphone at the POS and P2P transactions. Twint is offered by Credit Suisse, UBS, Raiffeisen, ZKB, PostFinance and SIX. The app is free for customers, and Bluetooth is used as the technology.

Remarks

A few brief comments on Apple Pay first of all: This system is based on international card schemes and so benefits from worldwide acceptance and huge brand awareness. In addition, Apple Pay uses NFC technolo- gy, which has become a worldwide standard for con- tactless payments. The onboarding process, for ex- ample at Cornèr Bank (a very innovative card issuer in Switzerland that offers Apple Pay) is very simple and customer-friendly; payment at the POS functions ex- cellently and is very easy. For banks offering the sys- tem in Switzerland, Apple Pay therefore clearly has the potential to gain considerable market share and offer customers genuine added value. Apple Pay's econom- ic attractiveness for the issuer naturally depends on the terms agreed with Apple.

The situation is completely different for the product Twint:

1. Its acceptance and usability are currently marginal. Twint can only be used for payment in Switzerland – and even then at a very modest number of retail- ers so far. Moreover, the Twint brand is (still) not very well-known. Two things are needed if Twint's operators want to catch up with international card

systems: a lot of time and a lot of money. By com- parison: Building the European acceptance net- work for V PAY took more than ten years; VISA had to invest substantial sums to create awareness of and establish the brand, as well as to make the ac- ceptance network what it is today.

2. In addition, Twint cannot be used to withdraw cash from ATMs. That means the product lacks a fur- ther, very important benefit compared to the tradi- tional payment card. It is therefore very unlikely that Twint can fully replace the card in customers' wallets or purses in the future – even though that claim is repeatedly voiced.

3. Twint cannot be used internationally. That means it lacks a very key function and major customer benefit compared to international payment cards. Especially in view of the fact that customers are making more and more private and business trips abroad, it's vital for them to have a means of pay- ment they can use internationally. That's why the European card industry dropped purely national, proprietary solutions for debit cards years ago and enabled them to be used internationally. In that re- spect, every national solution is a step backwards.

4. Twint scores well with its P2P function (i.e. trans- fer of cash from person to person), which works pretty easily in practice. However, it should also be mentioned in this regard that system operators do not earn any money with a P2P transaction – and that there has already been a wide range of differ- ent P2P initiatives in Europe, such as by the leading card schemes. This feature has not become estab- lished on a broad scale to date – so that raises the question as to whether there is really a substantial need for it among customers.

5. Availability, security and stability of the system: the performance of the international payment systems can certainly be regarded as a benchmark here. 99.999% availability and handling of several thou- sand transactions a second are impressive figures. A new system must achieve a similar perfor- mance. Basically speaking, that is possible from a technological point of view; however, it's an ambi- tious challenge and very cost-intensive.

6. The challenge for onboarding: customer convenience. The process must be simple, quick and very convenient. As with traditional card payments or Apple Pay, transactions must be handled smoothly, correctly and in a matter of seconds. Consumers must judge Twint's performance in this regard through their own experience in using it. One disadvantage from the customer's perspective – compared to the debit or credit card – is that you first have to top up your Twint account and the annual amount you can pay with it is capped.

7. Basically, the technology it uses – Bluetooth – works. However, it is not supported by the international card schemes. They are committed to global standardization and have been able to achieve that in relation to the technologies used on the card and its acceptance at POS terminals or online: embossing of the card number, card holder and expiry date, magnetic stripe, EMV chip technology, NFC technology, CVV on the card's rear and 3-D Secure. As a result, Bluetooth remains a technology for local, regional or national solutions; Bluetooth will never achieve the degree of acceptance enjoyed by international payment cards.

8. The card business is a standardized bulk business; the margins (for interchanges, use abroad, credit option, etc.) and volumes (card holders, transactions) are key factors for generating income in this business. At the same time, processing costs and marketing costs in this handling-oriented business must be optimized by continuously improving products and processes. That's the only way to keep on operating profitably in this business, which is under heavy pressure as a result of regulatory requirements, intense competition, changing customer demands and technological change.

The current volumes and revenue components for Twint are very modest. The mainstays of revenue (such as annual fees, credit option, charges for use abroad) are completely lacking. At the same time, huge sums are needed to establish acceptance, grow awareness of the brand and develop the system further. In view of that, Twint will probably not be profitable for its operators in the coming years and will necessitate investments running into several millions.

"Standing up to rival products from abroad" – the objective with which Twint was launched on the market.

The payment sector has become more and more digitized and internationalized throughout Europe in the past years: Payment by paper, i.e. traditional checks, has largely been substituted by payment by card; checks are still used only in a few countries and to a dwindling extent. National payment solutions have been replaced by payment cards that can be used internationally (buzzword: SEPA). VISA, MasterCard and American Express – credit cards that can be used internationally – have become established throughout Europe (there are now 800 million of them) and offer customers impressive benefits: acceptance at POSs and ATMs worldwide and simple, convenient and secure processing there.

There's absolutely no rationale or logic to all these arguments in favor of a national solution.

So why should a Swiss solution now seek to compete against these totally established solutions? Just why is a national product being launched again, now that the national debit solution "ec-Direkt" has been replaced by the international solutions Maestro and V PAY? Why should a national solution suddenly be necessary and better, whereas the other payment cards set store by international solutions? Do we really need a Swiss solution for payments all of a sudden? Hello!? There aren't any Swiss cars, either! There's absolutely no rationale or logic to all these arguments in favor of a national solution. It's not apparent where the benefits for consumers are and how the operator can establish a business that is and remains profitable using this approach.

Twint in its current form simply does not deliver any substantial customer benefit or added value compared to existing payment card solutions,

You can wait until the cows come home before Twint earns any money!

"Can customers also use Twint to pay in China? That's certainly what we want!"
(Zeitung "BLICK", December 2016)

Establishing acceptance, i.e. commercial acquiring business, is a very tough challenge. The acquirers for the leading brands VISA and MasterCard have created a network of around 40 million acceptance points over more than 50 years. A provider from Switzerland aiming to create an acceptance network for Twint extending as far as China faces what seems like a Herculean task – one that can probably be assessed as very, very ambitious. If there really are plans to use Twint internationally, the clear recommendation should be – in the interests of shareholders – to leave the plans where they now are: in the drawer.

Twint in 2025?

To sum up the verdict on Twint: Customers' payment needs are basically catered for by traditional card solutions, Twint in its current form simply does not deliver any substantial customer benefit or added value compared to existing payment card solutions, cash cannot be withdrawn at ATMs, it uses Bluetooth, a technology that will not become established for payment in international markets; creating, running, maintaining and further developing the system is very cost-intensive, while the revenue structure is very narrow; all in all, there is no chance of operating the system profitably in the medium to long term. To put it more bluntly: as it stands today, you can wait until the cows come home before Twint earns any money!

That means there are essentially two scenarios for Twint in 2025: a) Twint is still on the market and has marginal relevance with a negligible market share; the system is not profitable – that specifically means: money will go up in smoke for years to come! b) End of the adventure and withdrawal of Twint; that requires – and the earlier, the better –, a bold decision by the parties responsible (as with CASH, the Swiss banks' electronic purse, a product that was taken off the market due to a lack of customer acceptance and transaction volumes).

How can something like Twint come about?

Its failure has been caused by various factors:

- The enormity of creating a new (worldwide) POS payment system with the infrastructure to match, high investments and the time and money that inevitably requires is completely underestimated. A sober look at the trends at the physical POS reveals: Apart from advances in technology and security, V PAY has been the only new product and additional brand to become established on the European market. Initiatives to launch a new debit system, such as PayFair, MONNET and EAPS, failed. And V PAY was a formidable effort involving huge investments in the system and brand and a project with a timeline of over 10 years.

- There is too little respect and recognition for the value proposition of traditional card solutions. The needs of market players are catered for well and so new initiatives in the payment sector often try to solve a problem that is not perceived as existing in the eyes of customers. Bringing about a change in customer behavior (away from the card and to a new system) is an enormous challenge – especially since payment is a low involvement process for customers. Moreover, new solutions are often not necessarily better than existing card solutions when it comes to convenience and important processes (e.g. onboarding, chargeback, etc.).

- The activity should not be motivated by fear. Hand in hand with buzz phrases such as "digital transformation" and "disruptive changes" in the payment industry, the following hypotheses and scenarios are repeatedly put forward: "Everyone will pay by smartphone in the future" and "the smartphone will replace the physical wallet and card." Although there are no hard-and-fast facts to back that up, projects like Twint are launched on the basis of these scenarios – strongly driven by the fear of perhaps "missing out on the future" by clearly focusing on and further developing the existing solution. A similar system, YAPITAL, was launched in Germany, for example. After running for a few years, YAPITAL was discontinued in 2016 – not enough active customers were acquired and the necessary usage figures – the "critical mass" – was not reached. Investments in the triple-digit million range could not be recouped and the system operator decided to pull the plug on the project.

There are great expectations of something, but it simply doesn't occur.

There have already been various initiatives to launch mobile payment in Switzerland: Hermes, Vanilla, Wally, Tapit, SwissAlps and Paymit. These initiatives have one thing in common: They were a massive flop. None of the systems was able to become established in the market, acquire a sufficient number of active users (critical mass!) and turn into a successful (i.e. profitable!) system; all in all, handsome sums of money also went up in smoke here. The most recent example was Paymit, an app for P2P transactions that was issued by UBS and was intended to enable POS transactions. Large investments were made in the system and brand and, after a short time, the product was taken off the market and integrated in the Twint solution – a dreadful example of how money is burned irresponsibly.

All these hypotheses about mobile payments are more likely a form or variant of N.N. Taleb's "The Black Swan": There are great expectations of something, but it simply doesn't occur. To cite D. Kahnemann ("Thinking fast, thinking slow"): *The combination of affect heuristic, availability cascade and probability neglect results in the final analysis in a clear over-assessment of what tends to be a very unlikely scenario.*" Or to put it in a new-fangled way: Decisions are taken on the basis of post-factual analyses.

Payment in 2025

So how we will pay for things in 2025 and beyond? An outlook and hypotheses:

1. We won't pay much differently than we do today: mainly by card and also still by cash. Coins and notes won't disappear. Of course, there are already card-only stores (in Sweden, for example) and card payments will grow steadily. But Europe won't become a "cashless society," but rather a "less cash society." Cash payments will be continuously substituted by card payments. The global brands VISA and MasterCard will remain the clear leaders in Europe with their familiar prepaid, debit and credit products. No further new payment system for the physical POS and enjoying acceptance throughout Europe will become established.

2. Online payments will increase sharply and account for a substantial share in 2025. Customers will shop online and pay online using their smartphone, tablet or PC. As part of that, the credit card will continue to be a key means of payment.

3. From the technological perspective, the leading technologies for use of cards at the physical POS will generally be EMV chip technology and, for contactless payment, NFC technology. Alternative solutions with a QR code, barcode, BLE or beacon will not generate significant transaction volumes, will at best be able to achieve regional importance or will even disappear completely from the market again.

4. Basically, a mobile payment solution, i.e. payment by smartphone at the physical POS, will be able to establish itself on the market if it delivers the customer at least the same benefits and added value as a traditional payment card solution (products like Apple Pay are very well-positioned for that). All in all, however, payment by smartphone at the POS in 2025 will still account for a share below 10% compared to the volume of transactions by payment cards, which will certainly number more than 1 billion in Europe by then.

The wheel does not need to be reinvented

The card payment system – obtaining cash anywhere, simply, conveniently and securely and paying online or at the POS – means worldwide acceptance, high brand recognition and trust, mature security systems and professional risk management, efficient handling and processing capacity, global rules and regulations and international technological standards. This system meets the core needs of consumers, contractual partners and system operators. In the payment market, it is the "wheel" as it were – and it does not need to be reinvented, but steadily and continuously developed further. And you also need to be innovative, not naive. Key aspects in decisions on the future shape and alignment of this business are and will remain: a clearcut, fact-based analysis and economic expertise; professionalism, discipline, focus and endurance in execution, and strategic vision.

The PSD2, the ECB, the EBA and the application of SCA to POS transactions

(mk) In April 2012, The ECB published its "Recommendations for the Security of Internet Payments". One element strongly endorsed by the ECB is "strong customer authentication" (SCA). After public consultation, the ECB published a final version of its recommendations, which were to be implemented by February 2015.[1]

Interestingly, the Draft also contains a "Points to consider" when reviewing the Payment Services Directive (Annex 1). One of the points mentioned: "*An incentive (e.g. liability shift) in the Directive for PSPs and e-merchants to use strong authentication would be welcome.*"

Subsequently, the EBA also became active in the field of internet and mobile payments. After public consultation, in December 2014 it published its "Final guidelines on the security of internet payments". Again, SCA was one important element that was deemed indispensable in order to make internet payments safer.

In the PSD2 the issue of SCA is no longer confined to internet and mobile transactions. Traditional card payments at the POS (contactless or not) seem to be included – much to the surprise of some market participants. In fact, law makers have hardly taken the trouble to explain to the bewildered audience why they think that POS payments should be included.

Our Comment:

Given the regulatory history of SCA quoted above, it may be understandable that the market (or part of the market), did not really look at SCA as an issue that was relevant for POS payments. True, the wording of the EU Commission was fairly broad. But subsequently, that was changed. As we will see, the wording of successive drafts went from "wide" (including POS) to "narrow" (excluding POS) and back to "wide" again. At the end of this process Article 97.1(b) PSD2 emerged, which requires that

"*Member States shall ensure that a payment service provider applies SCA where the payer:*
- initiates an electronic payment transaction;"

With this wording, the final version of the PSD2 comes close to the initial proposal of the EU Commission (2013):

Article 87 "*Member States shall ensure that a payment service provider applies strong customer authentication when the payer initiates an electronic payment transaction;*"

The EU Commission defined the scope for the applicability of SCA fairly broadly and there are no additional clarifications in the Recitals.

The proposal was passed to the European Parliament (EP) and MEPs proposed a huge number of amendments. However, there was only one with regard to Article 87. Jean Paul Gauzès, an experienced MEP, proposed to narrow the scope of Article 87. Instead of "*une operation de paiement électronique*" it should be "**un ordre de paiement à distance**". However, his amendment was not adopted by the EP in the first reading of the draft PSD2. When the EU Council looked at the proposal (June 2014), it also did not change the scope.

However, the presidency compromise agreed in November and published in December 2014, led to a change of scope. Article 87.1(b) read as follows:

"*Member States shall ensure that a payment service provider applies strong customer authentication* **when the payer initiates an electronic remote payment transaction**."

Together with definitions 22b (remote payment transaction) and definition 27 (means of distance communication) this new wording clearly ruled out that POS transactions should be included. Moreover, the newly added recital (51a) lends support to this interpretation:

"*Security of* **internet payments** *is fundamental in order to ensure the protection of users and the development of a sound environment for e-commerce.*

All **payment services offered via internet or via other at-distance channels** *shall be carried out in a secure manner, adopting technologies able to guarantee a safe authentication of the user and to reduce, to the maximum extent possible, the risk of fraud.*

There does not seem to be a need to guarantee this same level of protection to payment transactions initiated and executed with modalities other than the use of electronic platforms or devices, such as paper-based payment transactions, mail orders or telephone orders.

A solid growth of **internet payments and mobile payments** *shall be accompanied by a generalized enhancement of security measures.*"

Clearly, the presidency compromise of late 2014 saw strong customer authentication as an instrument to make internet (and mobile) payments safer. This view was in line with the activities of the ECB and EBA reported above. However, the Trilogue negotiations (between Commission, Parliament and Council) changed the scope back again. The compromise version published in June, Article 87.1(b) reads as follows: "*Member States shall ensure that a payment service provider applies strong customer authentication* **when the payer initiates an electronic payment transaction;**"

Much of the urgency of the argument in favour of SCA comes from the field of online payments.

In addition, a new Article 87.1a was added: "*In the case of paragraph 1(b) for* **electronic remote payment transactions***, Member States shall ensure that payment service providers apply strong customer authentication that shall include elements* **dynamically linking the transaction** *to a specific amount and a specific payee.*" In the recitals (51aa) the wording was changed correspondingly.

That was all. The EP set the numbering straight (Article 87 became Article 97 and Recital 51aa became Recital 95). But with respect to the scope (POS or not) there were no more changes.

It would be interesting to know who brought about the ultimate changes. After all, regulators such as the ECB and the EBA were mainly focussed on the security of internet payments and saw a need for action in this field. In fact, in Recital (95) reference is made to "electronic payments". Yet much of the urgency of the argument in favour of SCA comes from the field of online payments:

*"Security of electronic payments is fundamental for ensuring the protection of users and the development of a **sound environment for e-commerce**. … A solid growth of internet payments and mobile payments should be accompanied by a generalised enhancement of security measures. **Payment services offered via internet or via other at-distance channels**, the functioning of which does not depend on where the device used to initiate the payment transaction or the payment instrument used are physically located, …"*

The same can be observed when reading the "Final Report on Draft RTS" of the EBA. When trying to explain the parts of the PSD2 that address security, the EBA comes up with the *"risk of fraud and theft of con-fidential information"* in the context of an *"**online payment or payment via a mobile device**"*. It claims that fraud has increased *"**in particular for remote … transactions**".*[2] Finally it points out that there is a problem with consumer confidence with respect to *"the security of payment card details when **shopping online**"*. But there is no word about security problems for card payments at the POS.

Somehow the whole thing is reminiscent of the Regulation (EC) No 2560/2001 on cross-border payments in Euro. For much of the debate, everything seemed to evolve around the costs of cross-border credit transfers. But in the end card payments and ATM withdrawals were also included.

Notes

1   In 2013, the ECB also published a draft document with "Recommendations for the Security of Mobile Payments". There was no final paper on this topic, though.
2   Whether or not fraud in remote transactions has really increased, is another matter. At least if one uses the fraud rate as a sensible metric, there does not seem to be an upward trend. See "UK card fraud increases" in the edition 8/9 (2016) and "The EBA's Regulatory Technical Standards: Regulation gone astray" in edition 6 (2016) of this newsletter.

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