Blockchain, mobile payment and digital security: future trends revealed at the Swiss Payment Forum

Leading IT hubs of the world, including Ukraine, have been very active in fintech and blockchain apps. In order to succeed in this highly competitive market, it is crucial to be fully aware of new trends and approaches. One of the best opportunities to learn about them is the Vereon’s Swiss Payment Forum in Zurich, the heart of the banking industry.

The annual Swiss Payment Forum is a conference where top bankers, payment industry leaders, IT experts and other stakeholders meet to discuss innovative payment models and trends, mobile payments, commerce and banking. On 6-7 November 2017, UkraineIS Chairman Sergiy Vakarin attended the Forum at Hotel Marriott in Zurich to get an insight into the newest developments and trends from the opinion leaders of the Swiss payment industry. The Forum featured the largest Swiss banks, stock exchanges, international payment systems and fintechs. Presentations were made in English or in German with excellent simultaneous translation into English.

Sandro Graf, Senior Lecturer and Head of Swiss Payment Research Center, ZHAW School of Management and Law opened the Forum. He showed a number of diagrams illustrating growth of mobile payment market in Switzerland and quoted Steve Jobs: “You’ve got to start with customer experience and work back toward the technology”. Another famous thought quoted was the one of Jeff Bezos: “Invention is not disruptive. Only customer adoption is disruptive.”

Blockchain the Game Changer

Discussion of blockchain was the most intriguing part of the Forum. The UK is known for its lead in digital banking, so the participants were genuinely interested in the keynote presentation by David Birch, Consult Hyperion. Blockchain is the current big trend, and there are many useful applications of it. In particular, applications for money transactions, including bitcoin, are already widely used. However, many people believe that blockchain is a new panacea for the fragile world economy. Too many authors write about blockchain without even knowing the basics of it. To avoid disappointment, it is important to have clear understanding of the blockchain and distinguish the general concept from particular implementations, e.g. bitcoin. Blockchain may also be used in a different way. For example, there is a widespread belief that absolutely everyone can use the same blockchain ledger (or its copies). However, in practice this may not be the case.

Otto Sven-Joachim, PwC Legal described many useful applications of blockchain technology. For example, blockchain-based Smart Contracts eliminate trust problems with advance payment and facilitate automated contract execution and control. Development of completely new business models using blockchain is emerging in areas such as utility 4.0 energy services, decentralization and infrastructure. At the same time, there are potential privacy and
IT security problems. Real names are not used in blockchain transactions, and for safe operation they require secure power supply and protection against threats to telecommunication and electronic data processing systems. Another issue is complete decentralization of blockchain technology – so who is liable for system failures? For these reasons, the need for restrictions and regulatory institutions are widely discussed.

In March 2018, another Vereon’s International Conference, Open Banking & Blockchain will provide a new insight into blockchain technology and its implications for banking.

Mobile payment: banking is still needed. What about the banks?

In Europe, online payments have become an integral part of people’s daily life. Not surprisingly, this topic was widely discussed at the Forum.

Thomas Fromherz, Netcetera noted that many new trends and topics emerged in the two years after the last Forum. The “War of Wallet” affects mobile payment but there is a visible trend of customers increasingly using apps instead of the cards. Large global players, Apple Pay and Samsung Pay, have entered many European markets, including Switzerland. This caused a slowdown for local competitors, however the saturation point is still very far away.

Christian Baumann, SIX emphasized that customers need more than just an effective payment mechanism – additional services matter as well. So payment service providers need to use the accumulated customer data in such a way that brings immediate advantages to the customers. Data protection is an important aspect that technology can solve. But it would be a mistake to rely on technology alone. Convenience is another aspect that customers expect, for example many are willing to pay a higher price for the additional service that makes digital submission and adjustment of documents easy. In the future account-based payments will be increasingly replacing card-based payments. Cardholders want less cards in their wallets, control over their data and easy ways to spend their benefits. Therefore, merchants will need to introduce convenient loyalty programs and efficient marketing processes with personalized targeting possibility.

Thierry Kneissler, TWINT told about the new TWINT app that was launched in 2017. According to him, TWINT is the mobile payment market leader in Switzerland. The biggest challenge for the app was the direct bank account connection. Currently such an interface is provided with 10 banks. Kneissler believes that only value added services, such as connection to bonus programs etc, can encourage customers to change their payment behavior and use mobile payments on the smartphone instead of traditional cash and cards. The biggest future challenge for the providers of mobile payment apps will be to retain the customers, so the key is to keep them happy.

Kurt Schmid, Digital Payments described the current trends in the payment marketplace. Most important trends include digitization, tokenization and contactless transactions. These trends will have a long-term effect, and to be competitive it is advised to use the power of mobile, real-time, social and behavioral IT. Finding the right partner on the digital journey is the key to success.

Tokenization: a new buzzword

Hans-Jörg Widiger and Stephan Lindecker, Swiss Bankers Prepaid Services focused on Apple Pay and Samsung Pay launch in Switzerland. Customers like them for simplicity and safety, but it will take time before their use by wide public becomes regular. Mobile payment is
frequently used for 'low value' transactions. Introduction of new mobile payment services went smoothly – no negative feedback was reported. As for the future trends, Internet of Things will radically change payment methods. IoT Payment can make the classic POS payment efficient and cost-effective, and retailers will save billions in POS infrastructure costs. IoT Payment Services are an ideal complement to Crypto Finance business models (including replacement of bank guarantees). Moreover, for the "things" with a constant supply of energy, MasterCard and VISA offer IoT capable solutions. MDES and VDEP provide a simple tokenization standard for financial institutions and OEMs. There is also high interest in bridging technologies for payment functions on "passive things" (like smart semiconductors or barcodes) that do not have constant energy supply.

**Guido Mueller**, MasterCard described MDES (MasterCard Digital Enablement Solution) in more detail. MDES tokenizes card credentials and digitizes them for use with card-on-file, and on wallets and mobile devices. Tokenization enables new devices and platforms for secure and safe commerce, including customer interaction with the Internet of Things.

**Banks and fintechs: competition or synergy?**

The EU’s new Payment Service Directive 2 (PSD2) and country initiatives open the market for the new players.

**Armin Schmid**, SIX quoted Deutsche Bank President Christian Sewing: “It is not about digitization of the banking business anymore, it is about the future of banking in a digitized world”. Main interest for merchants is to pay lower fees, and account based payment might be an option. So banks are introducing or adopting new digital services like SOFORT and iDEAL, and SIX is becoming aPSD2 and instant payment provider.

**Carsten Miehling**, PPI Switzerland mentioned the EU SEPA Instant initiative, a response of the traditional banks to fintech and blockchain apps: any transaction within Europe should take 10 seconds or less. Only open APIs will make it possible, and in accordance with PSD2 all banks in the EU will soon have to provide open interfaces for third-party providers. Swiss banks are not directly affected but will not be able to lock themselves against Open APIs, so it is better for them to start preparing for the inevitable.

**Gian Reto à Porta**, Contovista pointed that the PSD2 provides access to bank data to third parties including Google, Amazon and other big data collectors. This means that banks will have to compete for the customers with companies specializing in big data analysis. The customers will prefer the provider with better value added services. So if Swiss banks want to retain leadership in the financial sector they must develop new business models in advance.

**Markus Lachnit**, Capco told that the Competition and Markets Authority (CMA) pushed an Open Banking API standard in the UK. The CMA have mandated that the business banking sector needs to be more innovative. A competition for fintechs will be conducted to create innovative banking products and services. Next generation services, apps and tools will be developed for UK small businesses.

**Fabian Meyer**, COREtransform pointed that banks have strengths e.g. in terms of regulation, risk and payment processing but weaknesses in context of technological expertise and consumer product design. So their best strategies are to increase margins of products by enhancing efficiency and to utilize existing USPs to realize benefits in new ecosystems. In the
arising “Gold Rush” of payment market, only two feasible options are available for banks: aim to become platform provider and initiate smart cooperation. Banks should become enablers of new technologies.

Authentication and biometry

How will biometry affect the way we pay? This intriguing topic was explored by Beat Burkhalter and Julien Lacombe, Gemalto. The payment landscape is changing in all aspects - what people sell, how to sell it, how to pay for it and how to authenticate oneself for the payment. Customers’ behavior is also changing – they want a digital payment option. They expect digital payments to be secure, fast and easy to use.

As crimes become more sophisticated, traditional passwords provide only a limited security. One answer to this challenge is biometry – an important trend in payments. Two-thirds of consumers want to use biometrics when making payments, and billions of biometrically authenticated transactions are expected by 2019. Among the biometric methods currently in use are fingerprints, face and voice recognition, iris scan and behavioral analysis. Fingerprint is the most popular biometric authentication method in the market. However, many new methods are expected in the future, including vein pattern image, facial thermography, heartbeat pattern, infrared fingertip imaging, gait and body odor recognition, DNA check and even brainwave biometrics.

Peter Frick, Netcetera mentioned that average failure rate for people using a static password as means of authentication is 45%. So users should be allowed to switch between authentication methods at their convenience. This is how 3Dsecure works and why it is popular in Germany and Switzerland.

Tourism, retail banking and future solutions

David Kauer, PostFinance characterized implementation of innovations in retail banking. In the field of digital marketplaces, innovations are mainly summarized under the term “crowdfunding”. At the same time, there is demand for mobile payment solutions that unite the needs of private and business customers. As an example, PostFinance offers marketing strategy and performance control for business customers and suitable e-finance offers for customers.

Roger Niederer, SIX noted that tourism is one of the fastest growing industries in Switzerland and worldwide, with China being the worldwide leader in tourist spending. A lot of Chinese tourists shop overseas because some goods are more expensive or not available in China. Among the popular goods they buy overseas are baby care, beauty and fashion goods. Also, they continue to play their favorite games and watch e-Sports while being abroad. Mobile payment is highly developed in China, with Alipay being the most regularly used app, so there is a clear market opportunity to offer Alipay to Chinese tourists. SIX enables the access to Alipay marketing platform which gives merchants best targeting of Chinese consumers.
In fact, the Forum has significantly expanded in terms of topics and geography. In particular, Eastern Europe, which is famous as a software powerhouse, was represented at the Forum. Ukraine has a mature yet affordable IT sector and useful experience in successful mitigation of massive cyberattacks. This experience can be invaluable for Swiss and international fintechs. According to David Birch’s guess, new disruptive payment apps will come from computer games. Noteworthy, UkraineIS and 2Bytes team won the People’s Choice Award at the Media Hack Weekend, the largest Eastern European hackathon, with their game/VR project. Now Sergiy Vakarin and Oleksiy Planida use their computer games and VR experience to launch new digital security and digital payments projects.

**Conclusion**

So if you are into the payment market, blockchain is a powerful technology but you should be practical rather than euphoric about it. You can get a safety degree by using blockchain but keep in mind that secure transactions is only one aspect. Overall system security is not less important, and in the post-password world you need to use biometry, behavioral and other innovative methods.

Customers increasingly adopt mobile payment instead of cards. Moreover, the new EU directive requires the banks to use open APIs, and this decision will also have an impact on the banks outside the EU. But traditional banks and the new payment paradigm are not necessarily antagonists – the banks have significant competitive advantage and can retain customers if they find good IT partners.

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Switzerland Global Enterprise and Swiss Cooperation Office Ukraine make important efforts to promote cooperation opportunities with Switzerland.