

Welcome to the **February** edition of ACT News – Driving Insights. This complimentary service is provided by ACT Canada. Please feel free to forward this to your colleagues.

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ACT Canada Partners

INGENICO - Point of Sale Equipment Partner

Ingenico Group is the global leader in seamless payment, providing smart, trusted and secure payment solutions to empower commerce across all channels, in-store, online and mobile. With the world's largest payment acceptance network, we deliver secure solutions with a local, national and international scope in 125 countries. For over 30 years, we have been the trusted world-class partner for financial institutions and for retailers, ranging in size from small merchants to several of the world's best known global brands. Our smart terminal and mobile solutions enable merchants to simplify payment and deliver their brand promise.

INTERAC - Payment Network Partner

Interac Association is a recognized world leader in debit card services. Interac Association is responsible for the development and operations of the Interac network, a national payment network that allows Canadians to access their money through Interac Cash at 60,000 Automated Banking Machines and Interac Debit at 766,000 point-of-sale terminals across Canada. Interac Flash, a secure contactless enhancement of Interac Debit allows Canadians to pay for items instantly with their Interac chip debit card at a reader that supports Interac Flash.

New and Renewing Members

Principal Member Desjardins ~ member since 2012 RBC Royal Bank of Canada ~ member since 2014

General Member

American Banknote Corporation ~ new member



Amex Bank of Canada ~ member since 2008 Dream Payments Corporation ~ member since 2015 FIME sa ~ member since 2006 Kohl's Department Stores ~ new member Oberthur Technologies ~ member since 2005 UL ~ member since 2015

Career Opportunities

Visit our career opportunities section for the latest opportunities - http://www.actcda.com/information/careers/

Looking for good people?

There is a lot of movement in the market, so if you are looking for new employees, we are always aware of some great people. Please contact ACT Canada for more details - postings@actcda.com

Calendar of Events

Payments Summit

Mar 27-30, 2017 Orlando, FL, USA www.scapayments.com *ACT Canada members receive discounts*

ACTive Networking

April 4, 2017 Toronto, ON, Canada www.actcda.com/calendar ACT Canada members receive discounts

Cardware 2017

May 1-3, 2017 Niagara Falls, ON, Canada www.cardware.ca ACT Canada members receive discounts

Card Forum

May 8-10, 2017 Austin, TX, USA www.cardforum.com ACT Canada members receive discounts

Money2020 Europe

Jun 26-28, 2017 Copenhagen, Denmark www.money2020europe.com ACT Canada members receive discounts

Money2020

Oct 22-25 Las Vegas, NV, USA www.money2020.com

IVIE Awards Gala

Nov 8, 2017 Toronto, ON, Canada Help us celebrate the best in innovation in payments and digital identity! Nominations now open at www.actcda.com/ivies.html



Articles

1. EDITORIAL - DIGITAL ID: TECHNOLOGY LOOKING FOR A PROBLEM TO SOLVE OR A SOLID BUSINESS STRATEGY? *Source: Catherine Johnston, CEO, ACT Canada (02/28)*

There is no question as to whether there is a need for better online transaction authentication. There is also no question that numerous technologies exist that could address the problem, but can they do it without creating other problems? Have Iceland and Estonia found the answer? It appears that they have. Julian Ranger, Executive Chairman and Founder of digi.me spoke to me in December about how Iceland solved their digital identity problem and I am pleased to say that he has agreed to join us at Cardware to talk about it. He will be joined by Almis Ledas of Enstream and Paul Deveraux of TransUnion Canada, both of whom have proposals that could help us course correct.

It is said that competency, reliability, professionalism, a positive attitude and respect for others are qualities that will help you be a leader, but course corrections are what help you own the outcome of your career and the success of your projects.

I hope you will join me at Cardware as we look at all the areas of payment that will require course corrections in the coming 12 to 18 months.

2. ATB FIRST FULL-SERVICE FI IN NORTH AMERICA TO OFFER CHATBOT BANKING ON FACEBOOK MESSENGER *Source: CNW (02/22)*

After months of extensive development and testing with Fintech start-up Finn.ai, ATB Financial has become the first full-service financial institution in North America to successfully facilitate payments using chatbot technology on Facebook Messenger. ATB will make chatbot banking available to a test group of customers in March, 2017.

"We are transforming banking by bringing personalized chat services to our customers that will not only simplify their day-to-day banking, but also actively support their savings goals and improve their overall financial well-being as a concierge service," said Wellington Holbrook, ATB's Chief Transformation Officer. "We want our customers to be able to make transactions on their terms, the way they want to bank. The days of banks dictating to customers how and when they can do business are behind us."

How does banking with a chatbot work, exactly? Essentially, it's the same as chatting with your Facebook friends. ATB customers will be empowered to



easily check account balances and make transactions on Messenger by asking questions or giving commands, such as: "How much money do I have in my savings account?" or, "Please pay my cable bill."

Customers will also be able to ask customer service queries to, for example, find out the fee for an e-transfer or locate their nearest bank machine. In future, ATB will be adding personal financial management capability on Facebook Messenger. Customers will be able to check with the bot to see how much they've spent on gas this month, or find out what's left in their clothing budget. And Facebook Messenger is just the beginning. ATB and Finn.ai are collaborating to make conversational banking available on other platforms as well, for example SMS and Whatsapp.

"We're proud to partner with forward-thinking banks like ATB Financial. ATB's commitment to improving the financial lives of their customers with innovation and technology is something we are thrilled be a part of," said Finn.ai co-founder and COO, Nat Cartwright. "The future of banking is conversational, with customers interacting with intelligent bots to support their banking needs. Finn.ai is working hand-in-hand with ATB to ensure customers receive these benefits quickly and seamlessly." This isn't the first time ATB has invested in artificial intelligence innovation. In January, ATB Investor Services launched ATB Prosper, a completely digital online investing platform aimed at younger, novice investors.

"ATB is serious about developing cutting-edge technology and we'll continue working with leading Fintechs to enhance our customer experience," said Holbrook. "Savings combined with accessible service are the cornerstones of financial health and freedom. We're committed to offering banking solutions that will make our customers' lives easier."

ATB Financial will be speaking at Cardware – visit www.cardware.ca for more details.

3. IBM AND VISA TURN CONNECTED DEVICES INTO POS Source: Visa (02/16)

IBM and Visa Inc. announced the industry's first collaboration that brings the point of sale everywhere Visa is accepted, by allowing businesses to quickly introduce secure payment experiences for any device connected to the Internet of Things (IoT). The collaboration brings together IBM's Watson IoT platform and cognitive capabilities, with Visa's global payments services that are used by more than 3 billion consumers globally. IBM's Watson IoT Platform allows businesses to connect to billions of connected devices, sensors and systems around the world and then draw actionable insights. Today the platform is used by more than 6,000 IBM clients that are helping customers connect to millions of devices.



IBM and Visa share a vision and commitment to embed payments and commerce into any device - from a watch, to a ring, an appliance or a car. Under this collaboration, companies can infuse secure payments across their entire product lines using the Visa Token Service, a new security technology that replaces sensitive payment account information found on payment cards with a unique digital identifier, via IBM's Watson IoT platform. As a result, IBM and Visa could support payments and commerce on many of the 20 billion connected devices estimated to be in the global economy by 2020.

"IoT is literally changing the world around us, whether it's allowing businesses to achieve unimaginable levels of efficiency or enabling a washing machine to ensure we never run out of detergent. And behind this transformation are companies like Visa and technologies like IBM's Watson IoT platform," said Harriet Green, general manager, IBM Watson IoT. "This combination of IBM's industry leading IoT technologies with Visa payment services, signifies the next defining moment in commerce by allowing payments on any connected object, with new levels of simplicity and convenience for everyone."

Examples of Commerce-based IoT:

Consider the consumer's car. Experts estimate there will be 380 million connected cars by 2021. As the car ecosystem connects to the Watson IoT Platform, a driver would be alerted when the car's warranty or certification is about to expire or if specific car parts need replacing. With this information, the driver can order parts with the push of a button, or schedule a service appointment at their preferred local garage. The driver could even pay for gas through a direct interaction between the car and the gas pump.

Similarly, with a fitness device, an avid runner with a wireless running chip, could receive a digital alert when it's time to replace her running shoes, including a recommendation of the best model, at the best price, from a preferred retailer. Additional relevant and tailored recommendations could be offered, including nutrition and equipment recommendations, based on individual performance, local climates and shopping preferences.

"The Internet of Things is not only driving a more connected world, it's changing the way we live, shop and pay, by moving data and the point-of-sale to wherever the consumer wants it to be," said Jim McCarthy, executive vice president, innovation and strategic partnerships, Visa Inc. "With the power of Watson's cognitive technologies and IBM's leadership in IoT and security, they are the ideal partner to help us deliver secure payments to 'virtually anywhere' and on the enormous scale of the IoT."



How it Works:

In the future with this collaboration, all of IBM's Watson IoT Platform customers will have access to Visa payment services via the IBM Cloud. As a result, rather than approaching businesses on a one-by-one basis, IBM and Visa will provide all customers with access to these capabilities, so they can begin to build personalized commerce experiences and proactively make recommendations based on consumers' unique needs.

As part of this collaboration, the companies will also ensure that all consumer information remains secure by leveraging Visa's Token Service, which replaces sensitive account information found on payment cards, such as the 16-digit account number, expiration date and security code, with a unique digital identifier that can be used to process payments without exposing actual account details. The Visa Token Service is accessible through a network of token service providers (TSPs) as part of the Visa Ready partnership program, which certifies the next generation of third-party payment solutions to ensure they meet Visa's security standards and specifications, and will have seamless and secure global acceptance.

Today IBM is working with more than 6,000 clients, around the globe and across industries, to help them truly realize the benefits of IoT. Many of these innovations are on display at IBM's Watson IoT headquarters in Munich where today IBM, customers, partners and influencers are gathering for the first ever Genius of Things Summit. At Genius of Things, attendees will examine how Watson IoT clients are implementing IoT solutions to drive exceptional outcomes.

Visa is a member of ACT Canada and a speaker at Cardware; please visit www.visa.ca.

4. INTERAC DEBIT CARD FRAUD LOSSES AT THEIR LOWEST LEVEL EVER Source: CNW (02/27)

For the seventh year in a row, Interac Debit losses due to skimming have declined, reaching a record low of just \$11.4 million. Latest fraud figures released by Interac Association show that only \$1.5 million of that fraud occurred in Canada, thanks in large part to the completion of the transition to chip technology that began in 2008.

Despite these record-low fraud numbers, however, a recent survey for Interac Association/Acxsys Corporation (Interac) found Canadians are increasingly concerned about fraudulent activities such as skimming and electronic pickpocketing. For example, 75 per cent of debit cardholders said they were somewhat or very concerned about skimming, up from the 49 per cent of cardholders who expressed similar concerns in 2015, while 71 per cent were



somewhat or very concerned about electronic pickpocketing, up from 40 per cent the year before. Joanna Schoneveld, Senior Manager of Fraud Programs at Interac, says these findings suggest a misperception among Canadians about the risk of debit card fraud in Canada.

"According to our survey, 3 out of 4 Canadians are worried about payment card 'skimming', and 36 per cent have used their payment card less due to this worry – but Interac Debit remains one of the safest ways to pay," she said. "Our secure chip processing makes fraud due to skimming extremely difficult, and that's only one of our anti-fraud measures. In fact, out of the \$351 billion dollars that went across the Interac Debit network in 2016, only 0.003 per cent – was fraudulent, with just 0.0004 per cent occurring in Canada."

The total number of debit cards reimbursed for fraud in 2016 was also down to a record low of just 19,000, a 23 per-cent drop from 2015 and down more than 90 per cent from the 238,000 cards reimbursed in 2009, when fraud losses totaled more than \$140 million. Usage of the service has grown by 72 per cent since 2009.

"The Interac network is extremely safe thanks to the fraud prevention efforts and investments we make in collaboration nationally and internationally with financial institutions, acquirers, merchants and law enforcement," said Mark Sullivan, Head, Client and Fraud Management, Interac Association/Acxsys Corporation. "Cardholders are seeing the tangible benefits of these collective actions with record low fraud numbers, affecting fewer and fewer cardholders every year, something we expect to continue in the years to come now that the move to chip technology is complete."

Sullivan notes that all ABMs and debit cards in Canada were fully converted to chip technology in 2012 and all point-of-sale terminals became chip-enabled as of October 2016. As a result, it appears that criminals are migrating their fraud outside Canada to non-chip environments and card-not-present transactions such as over the Internet and by telephone, which aren't permitted by Interac in Canada. He says Interac rules offer account holders the added protections by not allowing card-not-present, offline and signature transactions.

In addition to chip technology, the Interac network uses sophisticated monitoring and detection systems to detect fraud even before consumers realize there might be an issue. Sullivan adds that Interac Flash, the contactless enhancement of Interac Debit, has all of the same security features as Interac Debit, such as EMV-based secure chip processing, which protects against skimming, counterfeiting and electronic pick-pocketing. Interac Flash transactions are also subject to transaction limits that, when exceeded, require the payer to insert their cards and enter their PINs for verification in the event a card is lost or stolen. Finally, these security measures are further backed by the Interac Zero Liability policy, under which cardholders are reimbursed 100 per cent should any type of unauthorized transaction occur.



Thanks to these security measures, Interac Flash and Interac Debit are the safest way to pay in Canada when using a payment card.

Interac Association is a member of ACT Canada and a Cardware sponsor; please visit www.interac.ca. Interac will be speaking at Cardware on the API Economy and the Convergence of Platforms.

5. HOW BLOCKCHAIN WILL EVOLVE IN 2017

Source: Forbes, by Chalmers Brown (02/16)

In the past, blockchain -- which is known as a distributed ledger technology for both financial and non-financial transactions -- seemed like a mysterious concept that only technologists could understand. However, the various advancements in blockchain applications in 2016 helped more people and more businesses see its potential. For others in the business environment, blockchain is something they're still just exploring. But as we get further into 2017, there are a few trends that I think will be interesting to trace as the year progresses.

In working with blockchain myself as part of the payments industry, where most applications are tied to some type of banking or financial application, I see some of these trends already in progress. However, some of them go beyond payments and may offer application for other business segments, helping startups and established businesses address a particular need.

Growth In Applications

With ongoing research and greater understanding of how the blockchain works, one of the biggest trends I predict in 2017 is the use of this technology in new application areas across industries. I see this happening especially in business segments that have always had a middleman as part of the transaction. This means that many service-oriented businesses decentralize. For example, ride sharing transactions could be handled directly by drivers and passengers using the blockchain, which could then give once-disruptive companies like Uber and Lyft a run for its' money.

Other applications include streaming services. We could let artists decide how their music is sold and shared, and everyone -- from the writer to the producer to the singer -- could receive a payment immediately through the blockchain when a song is downloaded, rather than getting their share later on. Rather than waiting for royalty checks to arrive that are processed by a publishing company, the artist can take greater control over their process from publication to payment through blockchain applications.



Regulatory Frameworks

One of the most challenging aspects of giving blockchain the space to grow into what it is capable of becoming is the lack of a regulatory environment that would help countries feel more comfortable about its use. Recently, countries like Japan have gone as far as to create legislation that would regulate bitcoin in their country, while other countries have formed task forces to research what's involved in the use of bitcoin and blockchain. These are both major first steps toward a larger global framework.

Since everything to date has been fragmented in terms of a standardized regulatory framework to allow blockchain to work across geographical borders, blockchain has been slow to catch on. However, there are signs that greater progress will be made across multiple countries to determine some type of regulatory process that will increase use.

An Urban Solution To Manage Future Smart Cities

One of the coolest applications I see for blockchain is its use in the development of internet of things "smart cities" as the solution for many of the issues plaguing today's urban areas. An article for BTCManager.com noted how this new version of urban infrastructure connectivity would work in physical infrastructure, including various types of devices, vehicles and utility stations, and how it would capture and exchange data to manage the specific systems used to run these cities.

Across neighborhoods and commercial districts, this physical infrastructure could use blockchain to oversee the data exchange and ensure a secure and efficient process for these interconnected networks. In 2017, there will be more urban projects in various cities set to test the data integrity of this type of blockchain-managed information. This will help us better understand how it could improve urban areas in the future. For example, Australia is currently examining the potential of blockchain for applications from improving coordination among government departments, to food security, to transportation and logistics across the country.

New Levels of Security And Privacy

With issues related to online security, blockchain will gain greater general interest in relation to its security and privacy capabilities. This applies to everything from payments, where hacking and data breaches have plagued online retailers, to companies that provide contracts, agreement forms and data storage.

Once blockchain is tested it could grow rapidly. So 2017 will be a real test in terms of what blockchain can do to tighten existing security and privacy protocols. Scientific American published its research on blockchain and concluded



that using it as the framework for a "digital infrastructure could improve society's public records repository and reinforce representative and participatory legal and governance systems," as well as provide for enhanced security and privacy during data transfer.

Global Involvement

While much of the blockchain research has occurred in the western world, I've seen interest in what it can do from countries throughout Asia, especially from China where developers and companies have sought out blockchain experts in other countries for advice and insights. The fact that major world powers are now advancing their interest is a good sign for blockchain, as it means that it's really starting to catch on and could become a more mainstream – albeit still exciting – technology in 2017.

6. INTUIT QUICKBOOKS CANADA AND DREAM PAYMENTS LAUNCH NEW INTEGRATION TO HELP ENTREPRENEURS GET PAID FASTER Source: Dream Payments (02/23)

QuickBooks launched an integration with Dream Payments. QuickBooks Online customers can now sync with the Dream Payments app to seamlessly accept Chip and PIN payments like Interac, Visa, and MasterCard, mobile wallets like Samsung Pay, and cash payment methods. For Canadian small business owners, cash flow remains the number-one stressor, with 32 per cent citing it as their primary concern. This new integration powered with the Dream Payments app and Mobile POS device can help small businesses get paid faster, improve their access to capital, and better manage their cash flow.

"The new Dream Payments-QuickBooks Online partnership is designed to meet two critical customer needs; a point of sale solution that offers small businesses the flexibility to accept Interac Debit, credit card or cash payments from anywhere, and the power to access real-time business insights by directly syncing these sales in QuickBooks," said Jeff Cates, president, Intuit Canada. "I'm thrilled that this integration was developed by Canadian entrepreneurs for Canadian entrepreneurs to fuel small business success nationwide."

"Together Dream and QuickBooks are simplifying some of the most complex aspects of running a successful business," said Brent Ho-Young, CEO, Dream Payments. "Dream's seamless integration with QuickBooks Online enables users to automatically reconcile all sales transactions instantly within QuickBooks, including taxes, fees and inventory, as well as collect and close open invoices. Together we're providing a complete cloud based solution that enables businesses to accept payments and get up to date performance metrics anytime, anyplace."



With 1.3 million payment terminals in Canada and growing, there has been a gap in the market for an affordable and comprehensive mobile point of sale solution to replace legacy countertop payment terminals. Canadian businesses are looking for secure, low cost, and mobile payment solutions. Through this partnership, businesses benefit from an affordable cloud based solution that allows them to be paid faster, gather valuable analytics, and manage their business on the go.

With half of all new businesses in Canada failing before their fifth year, Intuit has made a long-lasting commitment to providing an ecosystem of innovative products and services that will help Canadian entrepreneurs build a solid foundation. The integration of Dream Payments is the latest in a strong list of incredible Canadian startups that Intuit has partnered with to help better serve small businesses. In addition to Dream Payments, the Canadian startup ecosystem has produced several of Intuit's best-in-class app partners, including Shopify, HubDoc and Jobber, who help us to collectively enable the success of entrepreneurs.

Dream Payments, Interac, MasterCard and Visa are members of ACT Canada; please visit www.dreampayments.com, www.interac.ca, www.mastercard.ca and www.visa.ca. Interac, MasterCard and Visa will be speaking at Cardware.

7. GEMALTO AND MICROSOFT JOIN FORCES TO PROVIDE SEAMLESS CONNECTIVITY FOR WINDOWS 10 DEVICES Source: Gemalto (02/21)

Gemalto is presenting the newest release of its On Demand Connectivity and eSIM technology for Windows 10 devices, in connection with Microsoft. Gemalto's release is compliant with the latest specifications and guidelines for remote SIM provisioning as laid out by the GSM Association (GSMA), a global association of mobile device makers and mobile network operators.

Gemalto and Microsoft have teamed up to make this advance a reality for end users to have a secure and ubiquitous connectivity experience. Gemalto's On-Demand Connectivity subscription management solution, together with Windows 10 native eSIM support enable consumers to seamlessly manage the connectivity experience of their devices.

The eSIM is designed to be remotely provisioned by mobile network operators with subscription information and is globally interoperable across all carriers, device makers and technology providers implementing the specification. This technology will serve as the framework devices of all shapes and sizes use to connect to operator networks. The first wave of devices with this technology is expected to be available to consumers this holiday 2017.



"eSIM technology remains an important investment for Microsoft as we look to create even more mobile computing opportunities," said Roanne Sones, General Manager, Strategy and Ecosystem for Windows and Devices, Microsoft."As a key component for the Always Connected Windows experience, we worked closely with Gemalto to develop a solution that meets the new GSMA guidelines."

"Gemalto has created a complete range of subscription management software and services to manage the eSIM life cycle in mobile devices," said Rodrigo Serna, Senior Vice President of Mobile Services and IoT Americas at Gemalto. "We will continue to work closely with Microsoft and the GSMA to further these advancements while protecting the security of end users, who rely on their mobile devices to make everyday life easier."

Gemalto is a member of ACT Canada, as well as a Cardware speaker and sponsor; please visit www.gemalto.com.

8. FIME EXPANDS CLOUD-BASED PAYMENT TESTING PORTFOLIO WITH AMEX QUALIFICATION *Source: FIME (02/27)*

FIME is pleased to announce that its Global test tool has achieved AMEX Enabled accreditation for cloud-based payment mobile application testing. This news expands FIME's extensive portfolio of laboratory services and test tools for AMEX issuers and payment solution providers. FIME's Global tool is now available to mobile payment solution providers and payment issuers for use during the development phase of an ExpressPay host card emulation (HCE) application. This enables them to validate that an application is performing in line with AMEX's Specifications prior to official certification. The tool is also used by FIME in its role as an accredited AMEX testing laboratory.

"FIME has a long history with AMEX and we're excited to be the first tool available to test ExpressPay HCE apps. Our labs and tools are already approved to test AMEX secure element-based implementations, cards and terminals. This makes us the only comprehensive partner for AMEX application developers and banks. These tools and services, combined with our consultancy offering, accelerate product time to market by enabling the efficient design, development and launch of mobile payments products and services," comments Christian Raccuglia, Product and Services Marketing Manager – Mobile Payments, at FIME.

American Express & FIME are members of ACT Canada; American Express will be speaking at Cardware and FIME is a Cardware exhibitor. Please visit www.americanexpress.ca and www.fime.com.



9. CENTRAL 1 PARTNERS WITH BACKBASE TO DEVELOP ITS NEW MEMBER PLATFORM Source: Central1 (02/06)

Central 1 Credit Union (Central 1), the primary digital banking and payments provider for credit unions in Canada, has selected Backbase, the omni-channel digital banking market leader, to revamp its MemberDirect platform and assist Canadian credit unions in staying at the forefront of innovation by deploying technology at an accelerated rate.

Backbase will play an instrumental role in helping to deliver an improved user experience across digital solutions through constant modernization, all while impacting the highly competitive Canadian market. After a competitive selection process, Central 1's main driver behind selecting Backbase was its expertise in delivering an omni-channel customer experience, as well as the flexibility of the Backbase platform which could integrate into Central 1's existing architecture. The launch of this collaboration will not only upgrade the user experience for Central 1's clients but will drastically accelerate its roadmap for opening up the platform and giving direct control to clients. The new platform will enable Central 1 to unify its management system on an open, flexible platform that provides greater agility to integrate with existing and future solutions.

Customer user experience being its key focus, Central 1 was keen to provide credit unions with a new modernized platform that will support their digital banking needs, offering more control of their websites and the potential for future integration with other third parties. Jouk Pleiter, CEO of Backbase said: "Having the opportunity to partner with Central 1 provides a great inroad to the Canadian market. This partnership combines the best of both worlds; a strong operational excellence and local market expertise from Central 1 combined with the leading digital banking technology from Backbase. We are delighted that Central 1 has entrusted the Backbase Platform as the foundation of its new digital member experience and we are looking forward to a rapid roll-out of the platform to all its members".

"Our partnership with BackBase, a global leader in digital omni-channel banking solutions, accelerates Canadian credit unions towards a leadership position in the digital space," said Oscar van der Meer, Chief Technology Officer at Central 1. "Through our cooperative model for economies of scale, we will be able to provide a leading-edge omni-channel solution to credit unions and their partners that ultimately will build a stronger digital banking eco-system for Canadian credit unions."

Central 1 is a member of ACT Canada; please visit www.central1.com.



10. AS RETAILERS RAMP UP THEIR MOBILE WALLETS, ANDROID PAY ALSO EXPANDS ITS REACH Source: Digital Transactions (02/21)

As retailers such as Wal-Mart Stores Inc. and Kohl's Corp. ramp up their mobile wallets, the tech companies that offer general-purpose mobile wallets aren't sitting still. In particular, Alphabet Inc.'s Android Pay is adding capabilities and expanding abroad, an Alphabet executive tells Digital Transactions News.

"There are now millions of locations across the nine countries where Android Pay has been launched that already accept tap and pay," Gerardo Capiel, Android Pay product manager, says by email. "And our in-app service has hundreds of merchants, with more being added every day." Android Pay's newest country is Japan, where it rolled out in December. In addition to that country and the United States, the service operates in the United Kingdom, Singapore, Australia, Hong Kong, Poland, New Zealand, and Ireland. Android Pay added inapp payments in 2015.

Originally known as Google Wallet, which is now a person-to-person payments service, Android Pay is distinct from rivals such as Apple Inc.'s Apple Pay in that it uses host card emulation. HCE technology leverages near-field communication and allows contactless payment transactions to occur between NFC-capable smart phones and point-of-sale terminals without requiring access to the secure element in the mobile device, either as a SIM card or an embedded chip. By bypassing a mobile phone's secure element and emulating in the cloud the hardware that holds payment credentials, HCE frees mobile-wallet providers from the fees and terms the mobile network operators or phone manufacturers that control the secure element can impose. A small, Austin, Texas-based startup called SimplyTapp Inc. developed the original HCE technology. Google, now the main subsidiary of Mountain View, Calif.-based Alphabet, included HCE in late 2013 in Android 4.4, also known as KitKat, at the time of the latest update of its mobile operating system.

"[HCE] allows developers to create mobile apps that communicate with NFC readers in the same way that a plastic contactless card tapped against an NFC reader would," says Capiel. "Unlike other services, HCE enables Google to offer Android Pay on hundreds of different supported Android devices, and for us that is important."

HCE also makes it possible for Google to take the wallet beyond pure payments. "We've launched new HCE-based protocols for transmitting loyalty cards and offers to merchants at the [POS] terminal," says Capiel, adding that the wallet is "creating a more engaging experience for shoppers and merchants alike." Richard K. Crone of San Carlos, Calif.-based Crone Consulting LLC, who works closely with mobile-payments clients, says that "if you want to append value-added services that distinguish Android applications from iOS [Apple's mobile operating



system], you're going to use host card emulation. You have the power of the cloud behind every transaction."

Crone adds that with HCE, wallet providers can provide "an infinite number of new services, loyalty, and offers. There's no better place in the promotional stream to link an offer and motivate someone to buy than right before or after payment." Google enabled Android Pay to work on the mobile Web last September, and in October it linked the service with Visa Checkout and Masterpass, the online and mobile-payment services from Visa Inc. and MasterCard Inc.

MasterCard, Visa and Walmart are members of ACT Canada; please visit www.mastercard.ca, www.visa.ca and www.walmart.ca. MasterCard and Visa will be speaking at Cardware.

How Issuers and Merchants Can Combine Forces to Authorize More Orders? As eCommerce and mCommerce grow, how can issuers and merchants balance the fine line between knowing which orders are fraudulent and which are legitimate? Join us at Cardware where our speakers will show how issuers and merchants can use the data points each has to authenticate their mutual consumers, for a win-win-win scenario.

Register now at www.cardware.ca/register

11. NTT DOCOMO USES AIRON ESIM MANAGEMENT SOLUTION FROM GIESECKE & DEVRIENT FOR ITS IOT SERVICES DRIVING IOT DEPLOYMENTS Source: Giosecke & Devrient (02/27)

Source: Giesecke & Devrient (02/27)

Giesecke & Devrient is supplying NTT DOCOMO, INC. with its AirOn eSIM management solution for IoT applications. AirOn v3 is based on the latest GSMA v3.1 specification and allows carriers to deploy new and highly secure IoT applications for various IoT verticals. With the interoperable global solution NTT DOCOMO can connect to multiple systems to transfer or assign subscriptions.

Market researchers from IHS forecast that the IoT market will grow from an installed base of 15.4 billion connected devices in 2015 to 30.7 billion devices in 2020 and 75.4 billion in 2025. The rapid development of today's connected society requires globally accepted specifications for the industry – this meant covering interoperability and security solutions, to further drive the market penetration. The G&D GSMA-compliant eSIM solutions, AirOn enable global mobile operators, service providers and OEMs to accelerate new device onboarding and service rollout while reducing costs, increasing revenue and security for IoT solutions. AirOn v3 is focusing on efficient and secure eSIM management for IoT use cases.



With the AirOn platform NTT DOCOMO gets a scalable performance to serve millions of customers during peak times, allowing to remain flexible, connect to any enterprise network, and stay competitive. Using AirOn v3 NTT DOCOMO can manage subscription from any type of customers (OEM, enterprise, etc.) "on the fly" and develop IoT services fast and simply.

"NTT DOCOMO is an innovative Communications Service Provider and provides IoT services on 3G and 4G technologies. Our IoT vertical markets focus are automotive, security, construction machinery, remote monitoring, agriculture," said Naoki Tani Vice President from NTT DOCOMO IoT Business Department. "G&D`s AirOn eSIM solution based on GSMA v3.1 provides an ideal solution to help us sustain dynamic growth in our digital transformation from mobile operator to mobility service provider and to realize interoperability with other partners."

"This announcement underlines the long-term partnership with NTT DOCOMO. The agreement is an important next step of our joint eSIM management services for IoT, which started some years ago with the GSMA-based AirOn v1 solution," stated Carsten Ahrens, Group Senior Vice President Global Marketing and Sales, Mobile Security at G&D.. "We have more than 50 live systems, more than 150 OTA deployments and a comprehensive IoT and eSIM end-to-end solution. This will allow operators to provide new IoT services and scale them more quickly with the new platform, which is part of our network of hundreds more around the world."

G&D has gathered huge expertise in serving the MNOs needs as a trusted partner. The company is actively driving GSMA specifications and implementing it in its products. G&D is market leader within eSIM management and has with the NTT DOCOMO project again received the confidence of one of the globally leading MNOs for an eSIM management solution. In the long partnership with NTT DOCOMO in the IoT market segment G&D acts as a trusted patner for IoT strategy. Introducing the new services NTT DOCOMO is leading the eSIM management in the countries and regions where customers need.

Giesecke & Devrient is a member of ACT Canada and a Cardware exhibitor and sponsor; please visit www.gi-de.com.

12. SURVEY: YOUNGER CONSUMERS USING ALTERNATIVE PAYMENT TOOLS MORE AND WOULD RATHER USE BANK ACCOUNT LESS Source: Canadian Prepaid Providers Organization (02/06)

A recent study has found that while 99 per cent of Canadians have a bank account there is a growing interest, especially amongst younger Canadians, to adopt alternative payment tools that they view as more convenient. Prepaid cards continue to grow in both usage and popularity. At the same time, 13 per cent of consumers are using bank accounts less.



The annual How Canadians Pay Today Survey of 1,006 Canadian consumers was conducted by Leger and commissioned by the Canadian Prepaid Providers Organization (CPPO), the voice of the rapidly growing prepaid payments industry in Canada. Prepaid cards issued by American Express, MasterCard and Visa reached \$3.1 billion dollars in loads onto open-loop prepaid cards of all types in Canada in 2015.

"Canada has both a highly-banked population and many consumers with a strong willingness to try new financial services products," said David Eason, CPPO co-founder and Chairman of the Board. "This year's survey revealed that younger Canadians in particular are adopting emerging payment tools that are more convenient and secure. Prepaid cards topped the list as the fastest-growing payment product and boasted the highest level of satisfaction among payments tools."

Other findings from the How Canadians Pay Today Survey include:

Canadians still use bank accounts and credit cards, but emerging payment tools are growing in adoption. Ninety-nine per cent have bank accounts, but 13 per cent are using their bank accounts less. Ninety-two per cent have credit cards, but 31 per cent do not want to have one. Eighty per cent do not like to carry a lot of cash, and 58 per cent are making fewer cash purchases than last year.

The majority of Canadians (59 per cent) have used alternative payment tools citing convenience as the main reason (70 per cent). Thirty-three per cent of Canadians do not want to use traditional banks because alternative providers and new tools are cheaper and more convenient. Twenty-six percent of consumers want to move to more digital payment tools such as Apple Pay.

Eight percent more consumers are seeking out American Express, MasterCard and Visa prepaid cards compared to 2015. Nearly half of these consumers make less than \$40,000 per year, and over half (57 per cent) are under the age of 45, with a third being under 35. Overall, an American Express, MasterCard and Visa prepaid card user is more likely to be: male, between the ages of 18 and 44, and a user of an alternative payment method. Prepaid cards have the highest levels of growth of all payment tools. Satisfaction with reloadable prepaid cards is 95 per cent, up 22 per cent from 2015. Satisfaction with singleuse prepaid cards is 89 per cent, up 14 per cent from last year. Sixty per cent of consumers find it appealing to use prepaid cards to help their children manage their money. Forty-seven per cent of those with kids under 18 at home would consider doing this.

Canadians are concerned about the security of their debit and credit cards. They have fewer concerns about prepaid. Sixty-six per cent are concerned about the security of their credit and debit cards for online purchases. Nearly half of



Canadians (47 per cent) worry about the safety of funds for any purchase on credit and debit cards. Most Canadians (around 55 per cent) express additional concerns about security and identity theft when using debt and credit abroad, but are significantly less concerned about security and identity theft when using an American Express, MasterCard, or Visa prepaid card (28 per cent). The majority find it appealing that a prepaid card could make travel easier.

Canadians still struggle with budgeting. Nearly half (44 per cent) per cent of Canadians have struggled to stick to a budget in the last year. Twenty-six per cent often keep a running balance on their credit card, and 25 per cent have struggled with their credit score. Forty per cent have usually had credit card debt.

The American Express, Canadian Prepaid Providers Organization MasterCard and Visa are members of ACT Canada; please visit www.americanexpress.ca, www.cppo.ca, www.mastercard.ca and www.visa.ca. American Express, MasterCard and Visa will be speaking at Cardware.

13. MASTERCARD AND CANADA POST INTRODUCE MULTI-CURRENCY PREPAID CARD Source: CNW (02/22)

MasterCard and Canada Post, with collaboration from Payment Source Inc. and Peoples Trust Company, announced the launch of Cash Passport, the latest payment solution for smart and simple travel. The contactless (tap) card, which allows you to load up to seven currencies at a time, is a convenient and secure alternative to pockets full of cash or travelers' cheques and can be used at millions of ATMs and merchants worldwide anywhere MasterCard is accepted. Cash Passport can be purchased using debit or cash at 2,600 Canada Post locations and reloaded at 6,000 locations or online.

Take control of your budget

Pre-loading your Cash Passport gives you more control of your travel budget. By locking in foreign currency exchange rates in advance, Canadian travelers need not worry about currency fluctuations during their trips. Fixed ATM fees and no transaction fees on international purchases make it easy to keep track of exactly what you've paid in local currency and how much you have remaining on your card. You can also manage your money online, move money between currencies and check your balance whenever and wherever after registering a card on cashpassport.ca.

"Whether you're a globetrotter, an exchange student, or someone who shops online from international merchants, Cash Passport is the smart and simple solution that allows you to better manage your overseas spending," explains Donna Kinoshita, Senior Vice President, Global Products & Solutions, MasterCard



Canada. "Together MasterCard and Canada Post are making this a winning experience for Canadians by offering cardholders the ability to purchase and reload via Canada's largest retail network."

"Adding to the convenient payment solutions available at our post offices, we are pleased to be working with MasterCard to offer the Cash Passport that will help our customers simplify their shopping at global retailers, whether online or abroad," says John Reis, General Manager of Retail, Canada Post. "We are continually evaluating the changing needs of Canadians to provide them with this kind of relevant and consumer-friendly product that can be accessed at local post offices across Canada."

Travel with confidence

Cash Passport holds up to seven currencies (CAD, USD, EUR, GBP, JPY, AUD and MXN). The flexibility and added functionality of the multi-currency Cash Passport means that as long as you have more than one currency loaded, the card will automatically select the next available currency if you have insufficient funds of the currency you need. And if you do not have the currency of the country you are visiting on your card at all, you can still use Cash Passport to make a payment.

Choose convenience and safety

Cash Passport is not linked to a bank account or a bank card, which means loading and reloading is not confined to a cardholder's banking relationship. Canadians can purchase and reload a Cash Passport by visiting their local Canada Post outlet and the card is ready to use immediately. The card is chip and PIN enabled for added security and can be used at millions of ATMs, points of purchase and online anywhere that accepts MasterCard. If your Cash Passport is lost or stolen, a dedicated team is available 24 hours a day, seven days a week, to help you wherever you are in the world. Cash Passport is made available at Canada Post through collaboration between MasterCard and Payment Source Inc., Canada Post's partner for retail products distribution.

Canada Post and MasterCard are members of ACT Canada and MasterCard will be speaking at Cardware; please visit www.canadapost.ca and www.mastercard.com.

14. WALMART EXPANDS WALMART.CA GROCERY PICKUP TO EDMONTON *Source: CNW (02/23)*

Walmart Canada announced the expansion of its Walmart.ca Grocery Pickup service to six Edmonton area stores. Edmonton residents can now shop for their weekly groceries online, book a time, and pick up their order at their nearest participating Walmart location.



"Life is busy enough and we want to make every day easier for Canadians families," said Daryl Porter, Vice President of Omni-Channel and Online Grocery at Walmart Canada. "With Walmart.ca Grocery Pickup, we help Canadians save both money and time on grocery shopping. By taking grocery shopping off their list, it's obvious why our customers find this service so appealing and why we continue to expand this service to new markets."

The best of fresh

Selecting great produce and meat is essential. Walmart's grocery experts undergo specialized training to pick the best and freshest products. Walmart Supercentres carry top quality Canadian No. 1 grade fruits and vegetables, an expanded selection of organic produce as well as 100% Canadian Angus beef, chicken, pork and salmon available at low prices every day. In addition, all fresh groceries come with a 100% satisfaction, money back guarantee.

To order groceries for pick up, follow these simple three steps:

1. Shop Walmart.ca grocery or via the app: Navigate through Walmart's expansive product selection quickly and easily. When you're done filling your cart, simply pay by credit card.

2. Select a pickup time slot: Choose a store near you that offers grocery pickup and select a time that fits your schedule.

3. Pick up: Simply arrive at the store during your pickup window and park in a designated grocery pickup spot. Call the number listed on the parking sign and your groceries will be brought out and loaded into your car within minutes. If something isn't right, it will be replaced or immediately refunded to your credit card.

The fee for online grocery pickup is \$3 and customers are able to order up to 21 days in advance.

Walmart Canada is a member of ACT Canada; please visit www.walmart.ca.

Payments – the next 12 months is not the year of Anything but it is a year of course corrections that will pivot your organization. To understand what this means for you, join us at Cardware May 1-3 in Niagara Falls, Canada.

Hear about the changes in consumer experience, innovation adoption, regulations and that's just day 1. Day 2 focuses on merchants, fintech and the technology that could actually change the market, not just create buzz.

Connect with key payment stakeholders, join the dialogue and benefit from the insights. *Register now at www.cardware.ca/register*.



15. CONVENIENCE VS. RISK IN A CONNECTED DEVICES WORLD *Source: PYMNTS (02/20)*

In just three years, everything from running shoes to baby monitors could become a point-of-sale device as 30+ billion connected devices are paymentenabled. In this week's Topic TBD, Melissa Townsley, CEO of GIACT, joined Karen Webster to discuss why keeping those transactions safe must accelerate as quickly as those devices get connected to commerce.

Visa and IBM's recent announcement about their "Genius of Things" initiative highlighted their intention to make some 30 billion connected devices a point-of-sale (POS) opportunity over the next three years, while also reminding us of the importance of securing the data and privacy of those transactions for consumers, businesses and other relying parties.

That broad topic — keeping data safe and private — was the topic of last week's PYMNTS Topic TBD, a conversation that Melissa Townsley, CEO of GIACT, described as a "blessing for consumers but potentially a curse for merchants that enable commerce through their app or online."

The Authentication Balancing Act

Just based on the number of breaches in the U.S. in 2015 alone, Townsley said 29 million personal records were breached and approximately 858 breaches were made public. That, she said, means that there are a lot of fraudsters that have consumers' and businesses' personal information and can use that data to create and use synthetic identities in the pursuit of commerce at the legitimate accountholder's expense.

"I think it's really the greatest challenge that's facing our marketplace today, but yet, it's a basic prerequisite for anybody that's doing business via an app or online — being able to recognize a good customer without creating friction and offending that good customer," she said. Townsley went on to say that the challenge for merchants in securing so many distributed devices is knowing both the device and the associated identity, as well as recognizing different events through the lifecycle from the time a person signs on to a website or an app to the time they log out.

"That provides both traditional and non-traditional information that, we like to say, covers the floor with traps so the fraudsters don't know where the real authentication happens," she explained.

More Data, More Problems

As fraudsters continue to gain access to more personally identifiable information, it becomes more complicated to safeguard against account takeovers and synthetic identities, Townsley continued, creating an even bigger challenge



when the right tools aren't in place to keep that data from being breached, stolen and sold.

"I think that it even becomes more complicated, and it really makes the single point of authentication almost obsolete because no longer can you just tie that identity to a device. You're going to have to use alternative data and non-traditional information to stay ahead of the curve of fraud," Townsley said. That is especially true when it comes to using connected devices that are focused on providing a convenient experience — re-authenticating an identity on a device is a friction that merchants can't afford to pass onto their consumers.

"It's more important now than ever to do business online, be competitive and not to lose consumers to your competitor by having a process where the consumer is not even aware that the checks and balances are being done and that the fraud and risk is being controlled," Townsley explained.

In this type of process, a merchant would only issue additional authentications to confirm a consumer's identity if the fraud and risk solution observes several red flags. Townsley noted the importance of a multi-faceted process that looks at multiple points to help a merchant authenticate and build a triangle of trust around that consumer.

"You can't build your solution on a device or a card; you have to build it around that consumer," she pointed out.

Powering Alternative Data

More than one-third of Americans have three or more devices and multiple email addresses that they are tied to, which is why Townsley said building a solution around the customer is key. It allows that customer to seamlessly move from device to device but also seamlessly through different platforms and merchants to do business.

Townsley shared her own first-hand experience of what happens when that is not the case. She was declined while shopping with a merchant on an iPad that is typically used to make purchases by her husband. Despite the fact that the device is registered to her, the retailer didn't use any alternative fact-based information to authenticate that she was tied to the device and issued a false decline. By building out the identification of the device around Townsley's husband's information, the merchant declined her and lost out on what would have been a good transaction.

"You have to be able to bring in other information — alternative and nontraditional data that most people have not used in the past — to really know that a consumer is who they say they are, and you have to build multiple components," she explained.



16. INGENICO READIES ITS POS APP MARKETPLACE FOR U.S. MERCHANTS AND ACQUIRERS *Source: Digital Transactions (02/20)*

Ingenico Group is bringing its POS app store based on its Telium Tetra operating system to the United States this year, company officials tell Digital Transactions News. POS apps enable merchants to load and use business software than can help with employee scheduling, manage loyalty programs, and provide other business functions, using select data from the POS terminal.

The app store, dubbed the Marketplace, works with France-based Ingenico's Telium Tetra line, which includes the Telium Tetra operating system, countertop, mobile and multilane POS terminals, access to more than 2,500 payment applications, and a device-management service. It launched in 2014, and has been available in some international markets. Its U.S. entry was delayed by the migration to EMV acceptance. With that under way, the time is right to bring Telium to the United States, Ben Wagner, director of product solutions for Ingenico Group North America, tells Digital Transactions News. The Telium Tetra components are going through certification programs with all acquirers now, Wagner says. Once the certifications are complete, the devices will be available to independent sales organizations, acquirers, and POS-equipment distributors to offer to merchants, he says.

The Telium Tetra operating system separates the payments application from the operational ones, Wagner says. There is a secure connection between the two to enable the operational app to retrieve the transaction amount to calculate rewards points, for example. But the payment app is wholly controlled by the payments provider and is maintained by it and Ingenico. Telium Tetra has services for the portfolio manager, such as the ISO or acquirer; a developer program; and the Marketplace for merchants to select apps.

For payments providers, the service enables them to manage which devices are eligible for Marketplace apps and to push other software updates to them. The developer program includes access to necessary software to integrate business apps into the Ingenico Telium Tetra devices. Developers submit their apps to a publishing portal where they can retrieve usage analytics, he says. Currently, approximately 150 developers participate in the program, he adds. While some POS software providers use their own branded app store, Ingenico enables payments providers to white-label the Telium Tetra Marketplace, Wagner says. "The estate owner can segment which apps are available to different groups of merchants based on different criteria, like an industry code, ZIP code, or state," Wagner says.

"What we're going to end up seeing is a staple set of standard apps," he says, ones like employee scheduling, that the app developer will try to get into as many app stores as possible. "We will start to see different estate owners building their own app stores that are more exclusive." Ingenico has not yet settled on a



pricing model for the U.S. version of the white-labeled Marketplace, Wagner says. In Europe, a monthly fee based on the number of active merchants is used. "We are exploring our options here." The POS app store concept has caught fire among merchant providers, for a number of reasons. One is the need to compete against cloud-based POS software providers and the other is the potential to aid merchantattrition efforts.

Though Ingenico-specific data on merchant-attrition rates is not yet available, Wagner says the app store is a way to differentiate when selling a commodity product like credit and debit card processing services.

Ingenico is a member of ACT Canada & a Cardware exhibitor and speaker; please visit www.ingenico.com.

17. OT AND ERCOM PARTNER TO INTRODUCE CRYPTOSMART SIM-POWERED, THE BEST SOLUTION TO ENCRYPT MOBILE COMMUNICATIONS ON SAMSUNG CONSUMER DEVICES Source: Oberthur Technologies (02/20)

Oberthur Technologies (OT) announces its international collaboration with Samsung and Ercom, a leading company in the mobile communication security industry, to jointly develop and launch Cryptosmart SIM-powered.

OT and ERCOM have partnered to introduce Cryptosmart SIM-powered relying on an advanced SIM card technology to encrypt mobile communications on Samsung mobile devices. This partnership between OT, Samsung and ERCOM makes Cryptosmart SIM-powered easy to deploy by operators to secure mobile devices as well as data, voice and SMS communications.

The solution will bring both security and usability for customers and end-users:

- Security through end-to-end encryption of voice, data and SMS communications, plus local data protection and possibility to remotely wipe the device.

- Usability through unaltered user experience of Samsung consumer smartphones and tablets, and the ability for customers to manage all system features remotely.

- Cryptosmart is a trusted solution adopted by government authorities and large international organizations with a certified level of security. It is the only restricted French & NATO & UE certified solution.

Thanks to its high level of security and usability, this solution addresses administrations, governments, executives of large companies and employee populations exchanging sensitive information exposed to cyber threats.



The deployment process of Cryptosmart SIM-powered is very convenient, relying on a specific SIM card, a Samsung device with the latest release of KNOX, and the Ercom Cryptosmart mobile application and back-end solution. The solution will be easy to install and use on a large range of Samsung devices, with a simple go-to-market via Mobile Network Operators (MNOs) thanks to the dedicated SIM.

Oberthur Technologies is a member of ACT Canada; please visit www.oberthur.com.

18. SCHOOLS TAKE ON EXPORTING COMPETITION AS STUDENTS PROVE THEY DON'T SHY AWAY FROM A CHALLENGE! *Source: ICC Solutions (02/01)*

On the face of it, exporting doesn't seem like an interest that many young people would share. However, following a unique competition launched in partnership by The Duke of Edinburgh's Award (DofE) North team and ICC Solutions, young people from across the North of England challenged themselves to think outside the box and choose a product or service to export to a country that delivers the DofE.

At the Exporting Excellence Northern Final at the Peace Centre in Warrington, Cheshire, six schools met in the final round of the competition. Supported throughout the competition by both a DofE Operations Officer and an ICC Solutions Export Champion, the young people pitched their ideas using their new-found knowledge of exporting to a panel of judges, including representatives from the Department for International Trade, the Institute of Export & International Trade, ICC Solutions and the DofE.

Congratulations to The Laurence Jackson School from Guisborough, Teesside who won the competition. The Lord Lieutenant of Cheshire (Mr David Briggs M.B.E, K.St.J.) proudly presented them with the £2,500 prize that can be used to develop DofE within their school. The winning idea was to export lifesaving equipment to Uganda along with two people to teach them how to use the equipment.

Walkden High School from Salford, Greater Manchester came second and received £1,500 and in third place was Great Sankey High School from Warrington, Cheshire who received £1,000. The remaining highly commended finalists won £500 each. In addition to the prize fund, all young people participating received a commemorative plaque.

Commenting on the competition Rebecca Lax, DofE Operations Officer, said, "Reflecting on it this morning, it was amazing how well the 6 schools did, I think every school had put in far more the 12 hours! I sat at lunch with the students, which was a great reminder of what it was all about. On each of the table sat



excited but nervous young people ready to do their very best for the school and themselves. After the winners were announced, I saw each school came over and congratulated Laurence Jackson, which shows the maturity of the young people".

Following the presentation of the prizes, the Duke of Edinburgh's Award team announced that exporting would now be included as part of the Skills Section of the DofE Award on a national basis. Young people throughout Britain will now have the opportunity for focussed education, training and mentoring on exporting. This initiative is intended to ignite a passion for export in young people, who could be the international traders of tomorrow – ensuring Britain thrives as a powerful global trading nation.

As a three times Queen's Award for Enterprise winner, two for International Trade and one for Innovation, ICC Solutions is committed to inspiring others to embrace the opportunities offered by international trade. Dave Maisey, Chief Executive of ICC Solutions, stated "The objective of this competition was to make young people aware of the opportunities and excitement of international trade, whilst highlighting some of the considerations that need be applied to be a successful exporter. Our aim was to ignite a passion for export within young people, and inspire them with the confidence that they can embrace opportunities to do business within the global marketplace. These young people could be the successful exporters of the future ensuring that Britain thrives in international trade. Working together, with the youth of today, let's ensure that Britain is clearly seen as excelling in exporting and seize the opportunities offered by Brexit!"

To complete a Duke of Edinburgh's Award, young people volunteer in their communities, learn a skill, get fit and plan and undertake an expedition, fulfilling six to 18 months of challenging activity. Through this sustained, meaningful activity, young people develop key life and employability skills, such as self-management, problem solving, team working, communication and confidence. Speaking about the event and the DofE, Robert Johnston, Director of The North of England said, "This is a unique opportunity for young people in the North of England to develop existing skills and learn new ones whilst equipping them with knowledge for life and work."

To find out more about the DofE Charity and how it enables young people to succeed, please visit www.DofE.org.

ICC Solutions is a member of ACT Canada and a Cardware exhibitor; please visit www.iccsolutions.com.



19. EQUIFAX USES DEEP NEURAL MACHINE LEARNING TO IMPROVE CREDIT SCORING Source: PYMNTS (02/17)

While artificial intelligence, machine learning and other futuristic-seeming technologies have been resigned to the likes of Apple, Google, Microsoft, Amazon and Facebook, traditional companies are also getting in the game, including Equifax and SAS. According to a report, Equifax is using deep-learning tools to enhance its credit scoring system, and SAS is using deep learning to improve its data mining tools and provide deep learning APIs.

In an interview, Peter Maynard, senior vice president of global analytics at Equifax, said the company realized a few years ago that it wasn't getting enough "statistical lift" from its traditional credit scoring methods and thus started to embrace advanced deep-learning technology. The report noted that modern machine-learning technologies, such as deep neural networks, which boast much more accurate results, were perceived to not be interpretable, posing a challenge for any company wanting to use them. The complexity also added another layer of challenge for Equifax.

"My team decided to challenge that and find a way to make neural nets interpretable," said Maynard in the report. "We developed a mathematical proof that shows that we could generate a neural net solution that can be completely interpretable for regulatory purposes. Each of the inputs can map into the hidden layer of the neural network, and we imposed a set of criteria that enable us to interpret the attributes coming into the final model. We stripped apart the black box so we can have an interpretable outcome. That was revolutionary; no one has ever done that before."

The executive noted that the neural net has improved its ability to make predictive models by as much as 15 percent. The more complex the data, the better the improvement. "In credit scoring, we spend a lot of time creating segments to build a model on. Determining the optimal segment could take sometimes 20 percent of the time that it takes to build a model. In the context of neural nets, those segments are the hidden layers — the neural net does it all for you. The machine is figuring out what are the segments and what are the weights in a segment instead of having an analyst do that. I find it really powerful."

20. FLEXITI FINANCIAL NAMED ONE OF THE FINTECH FIVE *Source: techvibes.com (01/31)*

The Fintech Five powered by PayPal profiles five of the hottest and most promising financial technology companies across Canada each month. The list is curated by Techvibes editorial staff and reflects who is making waves in our nation's fintech ecosystem right now.



PayPal gives people better ways to connect to their money and to each other, helping them safely access and move their money and offering a choice of how they would like to pay or be paid. With our 184 million active customer accounts globally and 6.4 million in Canada, we have created an open and secure payments ecosystem that people and businesses choose to securely transact with each other online, in stores and on mobile devices.

Want to be a part of the next Fintech Five? This list isn't something you can apply for, but make a splash and you're certain to get on our radar. Check out the December edition of the Fintech Five below.

<u>Flexiti</u>

Flexiti Financial is a provider of point-of-sale financing and payment technology for retailers. Their platform allows businesses to offer their customers low or no-interest financing, convert large purchases into monthly or deferred payment plans, and establish a dedicated line of credit by creating a virtual private label card.

Flexiti is currently used in over 1,000 merchant locations across Canada and recently announced the closing of a \$5 million investment which includes followon funding by Globalive Capital.

<u>Kooltra</u>

Kooltra is leveling the playing field in foreign exchange, a \$5.4 trillion a day industry dominated by multinationals. Demand for more complex products is driving brokerages, smaller corporations, and individuals to trade larger volumes than ever before. Kooltra's solution is a secure and scalable platform. Combined with plug-and-play applications on a SaaS model, the platform delivers end-to-end functionality and turnkey implementation.

Kooltra processed \$250 billion while running in beta. They currently have customers on three continents, have partnered with industry leaders, and recently closed a round of funding. They are expecting to triple in size in 2017.

LemonStand

LemonStand is a refreshingly customizable cloud based eCommerce platform that helps fast growing retail brands create beautiful online stores that stand out from the crowd and sell more.

Completely customize the entire user experience, including the checkout process, or even A/B test different designs. Sell retail, recurring subscriptions and digital products. Offer volume and wholesale pricing to specific customers or



groups, and forget about limits on product options and variants. Design, create, and publish content to grow organic website traffic, and educate customers using the built-in content management system. And there's no transaction fees or penalties for using your payment processor of choice, plus many more features.

Planswell

Using their patent-pending technology, Planswell creates online financial plans that align investing, borrowing and insuring. Nearing the close of their seed round, Planswell has been flooded with Canadians who are starving for unbiased, quality financial advice driving them to join the wait list to create their custom financial plan. With nearly 30 developers, financial advisors, copywriters, portfolio managers, mortgage brokers, insurance agents and marketing professionals, Planswell has been quietly building their expert financial planning software that will soon launch to all Canadians—starting with the thousands of Canadians that are already waiting in line.

Payment Rails

Payment Rails is a cloud technology platform that enables businesses to send payments to any individual or company anywhere in the world, in any currency, and to all major payment methods. Through their powerful payout API, businesses can access Payment Rails' massive global banking and payments network.

Their mission is to simplify cross-border payouts for online marketplaces, share economy, on-demand and crowd-sourcing platforms, ad networks, affiliate platforms, app stores, and crowdfunding platforms with international payout needs. Payment Rails helps startups and SMEs grow by saving them up to 80% on their international transaction costs.

Flexiti Financial is a member of ACT Canada; please visit www.flexitifinancial.com.

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- Faster Payments
- Alternative to Blockchain for Financial Institutions
- Serverless: IoT Evolution in Cloud Tech
- And many more topics that will help you pivot your organization.

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21. ACCEO AND BDO IT SOLUTIONS TEAM UP TO PROVIDE RETAILERS USING LS RETAIL A SECURE CHOICE FOR ENCRYPTED EMV PAYMENT PROCESSING *Source: CNW (02/22)*

ACCEO Solutions Inc and BDO IT Solutions have partnered to offer North American retailers a payment solution fully compatible with Microsoft Dynamics NAV and the LS NAV point-of-sale (POS) system.

BDO IT Solutions recently completed a successful integration and rollout of LS NAV at Mastermind Toys across 45 stores and 240 lanes nationwide. Mastermind Toys chose the ACCEO Tender Retail payment solution to support their Verifone VX820 PIN pads and route credit, debit, and Apple Pay transactions directly to First Data, their payment processor. This solution included support for point-to-point encryption (P2PE) and EMV.

"Mastermind Toys selected ACCEO Tender Retail middleware because of the overall stability and ease of integration and implementation with virtually any front-end Windows-based point-of-sale application. Furthermore, the ACCEO Tender Retail application supported many of the current PIN pad technologies as well as offering support for ValueLink (gift card solution), making it relatively straight forward to integrate into the Mastermind Toys POS environment. Finally, since Mastermind Toys already had an affiliation with First Data (and ValueLink), the support for Verifone's product line was readily available," said Dave Marien, Vice President, Information Technology at Mastermind Toys.

By providing LS Retail POS retailers a choice of EMV payment processing, ACCEO and BDO IT Solutions give retailers the flexibility to select their preferred device and processor. The ACCEO Tender Retail solution supports contact and contactless EMV payment, provides a fast and secure payment option to merchants, and protects cardholder data with point-to-point encryption (P2PE). Using contactless technology (NFC), the devices will also support digital wallets such as Apple Pay and Samsung Pay. ACCEO's middleware software solution provides a "direct to the processor" approach, giving retailers the flexibility to choose the device and processor of their choice and bypass middlemen gateways for a quicker and more cost-effective method for payment processing.

BDO IT Solutions has extensive experience with Microsoft Dynamics NAV and LS NAV. By leveraging the Tender Retail platform and a proven solution and methodology, retailers get an integrated and secure payment system without introducing additional complexity to PCI compliance and certification.

ACCEO Solutions and Verifone are members of ACT Canada; please visit www.acceo.com, www.tender-retail.com and www.verifone.com.



22. VISA'S LATEST TECH INNOVATION CENTER IN LONDON IS OPEN FOR BUSINESS Source: PYMNTS (02/21)

Visa's newest and largest innovation center in London is now officially open for business in its European headquarters in Paddington Basin. The new space is designed to allow Visa to better work seamlessly with financial institutions, merchants and its various other partners to develop new payment solutions.

"As a successful fintech entrepreneur myself, I understand that quite often businesses need a little bit of help to turn the kernel of a good idea into something truly transformative," noted Rajesh Agrawal, London's deputy mayor for business; he further stated that the new center will bolster the capital's "flourishing global tech and fintech reputation."

The new space will offer visitors a chance to see practical demonstrations in development areas like the internet of things (IoT) in connected car and connected home environments. Visitors will get a glimpse of the future where things like paying for car insurance or placing a grocery order from a refrigerator are both normal parts of day-to-day life. Visitors can also use virtual reality to pick a seat for an upcoming Formula E race and biometric authentication to pay for tickets. Berlin, Dubai, Miami, San Francisco, Singapore, Sao Paulo and Tel Aviv area all also home to Visa Innovation centers. The opening comes concurrent with an announcement from Visa that fintech developers across Europe can use its Visa Developer Platform to create new "secure" ways to pay.

To do so, developers can leverage an initial set of Visa payment APIs, SDKs and documentation to create new commerce applications.

Visa is a member of ACT Canada; please visit www.visa.ca.

23. THE OVERWHELMING SHORT-TERM IMPACT OF AI Source: Let's Talk Payments, by Markus Lampinen (02/23)

Without noticing it, artificial intelligence (AI) already fits in many forms into our daily lives and supports our decision-making. At times, it's discussed a bit like blockchain, which we're being promised will solve things like world hunger and human trafficking. However, artificial intelligence is already prevalent practically everywhere in technology, from cars to Google searches and as this technology is specifically designed for singular tasks, we humans cannot compete with that level of insistent focus.

This relates specifically to what is called Artificial Narrow Intelligence or ANI designed to perform one sole task meticulously. The two next levels of AI



development, specifically Artificial General Intelligence (AGI) and Artificial Super Intelligence (ASI) are still out of our reach, for now.

This post won't debate AI, its existence or its development – instead, I want to discuss how rapidly we could see the emergence and adoption of AI-centric policies that could lead to the disproportionate adoption of AI across market segments. In the context of finance, we're already embracing AI in trading algorithms and complex functions, but the emergence of technologies such as chatbots raking in data from users across the world make implications of this technology and its advancement far-reaching and transformative. I'll also use 'AI' and 'technology' interchangeably at times because with all its fantastic applications, that's all it is at the end of the day.

Safety Administrator Finds AI Reduces Road Accidents

To take a popular anecdote, with Tesla's Autopilot feature being a common headline lately, with its advanced sensors on cars to interpret a barrage of ongoing information in order to assist the driver, emphasis on assist at this stage. In 2016 there were a few accidents involving Tesla's Autopilot feature, which lead to the US Department of Transportations National Highway Traffic Safety Administration (NHTSA) to launch an investigation into these fatal accidents. In reading through these reports and findings, the NHTSA has not found any defect in the Al functionality or its intended use, bar for some notes on proper driver guidance and driver alertness (see https://static.nhtsa.gov/odi/inv/2016/INCLA-PE16007-7876.PDF).

One thing of note in the report is that the NHTSA makes the case that driver assisted tools, such as automatic braking, collision warning and lane assist, could help reduce accidents by 40%[1]. Take a moment to think about that, the NHTSA, whose mission it is to "Save lives, prevent injuries, reduce vehicle-related crashes" has found that driver assisted tools in cars (AI or ANI applications) could improve them meeting their goals by 40%. How long will it be until these types of driver assisted tools are required in all cars, similar to how seat belts exist today?

Further, how long might it be until we ban these dangerous humans from driving who so often rely on their gut and intuition and only follow rules intermittently? While an anecdote, I believe this is a similar case we will see in many sectors and with several applications. There are various organizations whose existence and mandate is predicated on improving the sector's performance, safety and security. When these types of bodies see a clear improvement in meeting their mandate by adopting stronger support for AI systems, won't we see an exponential technical adoption of AI across the board?



How Long Will We Entertain the Too Big to Fail Discussion in Finance?

Let's also be clear, oversight of markets has done for ages and what oversight organizations such as regulators and policy makers are set out to do in the first place. Al exists in all sorts of uses, outside of cars, in aviation control, military use, security applications as well as the financial markets. What is becoming increasingly important is its ability to offer a better quality service than an actual person where the mainstream adoption of a technology-first approach is at the tipping point.

There's often a misconception between humans and technology, where one makes mistakes and one doesn't. Let's be absolutely clear, 1) humans make mistakes, 2) technology does not. Now, it stands to reason that a human can design the technology to perform a function that may contain faults or create a faulty outcome, but the technology will perform in the way it was designed to a fault.

Since the financial crisis, settlements have topped \$200B. That's a monstrous number, but compare it to the estimate by the US Treasury of \$19.2T Lost Household Wealth and it's only a mere 1%.

The financial crash was driven by various factors such as greed, herding mentality, errors of judgment and a lot of conflicting behavior. From a macro perspective, even though some may have made money in their activities, it's clear the market overall paid a steep price all over the world.

Markets Will Disappear and All Markets Will Transform

Various white-collar professions are experiencing pressure to justify their own roles and value add. Many repetitive functions, data entry, data mining and pattern seeking can already be outsourced to technology with better results and entire professional fields are wondering what is next. For all of the work in investment banks, law firms to pick on two, a lot is repetitive process. But down the line, will technology be quicker and better to pick out trends and spot errors to also play an oversight role in spotting errors and conflicts? I believe it will.

I recently had the chance to have a well-spirited argument with the CEO of a multinational bank about the headcount in the future. Their position, knowing their organization far better than I do, was that they would be adding tens of thousands of jobs in the next five years. I respectfully disagreed and further argued that many of their jobs would change from "banking jobs" to more technologycentric, data-driven roles. I think this is true across the board and however we feel, it won't change the direction toward greater efficiency.

How long will it be to this tipping point? I believe we are there, with organizations laying their position in the shift. I fundamentally believe organizations



can leverage data-centered technology for better decision-making and better results. In markets such as financial services, that have been marred by scandals around transparency, lack of accountability and conflicts of interest, we may be leading up to a point where demand builds to enforce technology-based approaches to tackling the most pertinent systemic issues, for example via distributed, immutable ledgers.

A Note on Polarization and Unintended Consequences

If you follow through the trends toward more data-driven decision-making and automated workflows, the assumption is that the data is available for analysis and action. This data society I believe will be polarized. Imagine a world where financial markets function driven fully by algorithms where people play a supporting role. How long until people themselves start standing out like sore thumbs?

The polarization of a data-driven society does worry me, as does the (naive) excitement and en masse adoption of new technologies such as establishing blockchain to end human trafficking, which by the way involves establishing a universal identity, which sounds dangerously dystopian. Through many initiatives, intentions may be admirable, but the consequences may well be vast and dire and likely unpredictable on the scale we are talking about.

Al is invisible and it will continue to exist and play its part beneath the surface in the short term. However, over the course of increasing development and self-development of Al, its fundamental impact will become more and more apparent on industries and markets. I believe these changes are starting to manifest themselves today with significant and dramatic consequences, which we're likely to only fully grasp in hindsight.

(1) Some sites have reported this to be a clear endorsement of Tesla's autopilot, which is clearly misreported and incorrect if you read the actual study.

24. TSYS FINTECH HACKATHON TAKES COMMERCE TO NEW PLACES Source: PYMNTS (02/17)

While it's hard to know where the next big disruptive FinTech idea will come from, a recent hackathon sponsored by TSYS and Worldpay gave innovators the chance to use IoT as a springboard to see where commerce is going next. Scott Carter, group executive of digital innovation at TSYS, joined Karen Webster to discuss the competition and all of the new opportunities that are being created to transform financial products and services.

As the world of payments continues to change and evolve, it's tough to know exactly where new technologies and innovations will take commerce next. But the recent FinTech Hack @ ATDC competition, which was held at the Georgia Institute



of Technology and sponsored by global payments companies TSYS and Worldpay U.S., provided entrepreneurs, developers, designers and innovators with an opportunity to carve out their own path to FinTech innovation.

The competition brought together teams of participants to compete for cash, gadgets and professional-services prizes valued at approximately \$100,000. The theme of the hackathon was the Internet of Things (IoT), but specifically utilizing wearable FinTech to tackle challenges and solve problems in the market today.

Scott Carter, group executive of digital innovation at TSYS, said that participants were also provided with Amazon Echo devices, Raspberry Pi devices and even various types of sensor technology to help support the products and services they created during the two-day competition. In the end, the Carculation team — a connected car financial platform — walked away with the grand prize valued at \$79,000, including \$12,000 cash. Carter said the team created a fleet management solution that provided the ability to track and pay for the use of fleet vehicles daily based on the mileage and usage of that vehicle.

"It's important, too, because it really played into driverless technology and where we think that's going to go over time, specifically with commercial and consumer fleet vehicles," he added. The Carculation team saw the complexities and risk around managing a fleet vehicle. Once a person has taken the vehicle and is using it, there's a challenge in knowing exactly how it's being used, where it is and understanding that it's been used properly. By enabling a person or business to pay for the use of that fleet vehicle along the way while it's being used, versus just at the end of the trip, Carculation's fleet management solution helps to take the risk out of the experience, Carter noted. While the Carculation solution primarily leveraged Worldpay API, there were many teams that used TSYS APIs to build out their solutions.

The team that won the "Best Use Of TSYS APIs Award" was RESTless, which developed a solution based around travel discovery. Carter explained that the team developed a really interesting user interface centered on specific user preferences, specifically targeting the millennial demographic.

"They also did some interesting things around machine learning, and we just thought it played really well into our rewards and financial services travel products that we have here at TSYS," Carter noted. Some of the other clever and creative solutions Carter observed during the competition included a team that built a product that allowed parents to teach financial responsibility to their kids by placing spending limits around their child's financial card or account. The solution used the TSYS card control product to enable parents to turn on/off their child's payment account or card based on whether they had hit their spending limit. Carter mentioned another team that used a facial recognition solution to authorize the use of a payment card during in-store checkout, making it quicker for a sales clerk to



identify who a customer is and get them through the checkout process without any issues.

A number of teams also presented embedded rewards solutions that Carter said were good. One smart merchant solution in particular was popular because it allowed different environmental factors to be tied to the shopping behaviors of customers when they visited a merchant. For example, the solution used sensors to detect how shopping behaviors changed based on what music was playing, the temperature in the store or even if any particular odors were present.

Though not everyone who competed could walk away as a winner, Carter said there are definitely opportunities for participants to take what they have created and continue working on it in hopes of creating a viable business. "We'd love it if some of the people in the contest, whether they won or they didn't win, would approach TSYS and let us know that they've got a great idea and let us help them with it," he added. With IoT taking the driver's seat in commerce, it's clear that the transactions we know today may be taken to a variety of new places and devices tomorrow. Carter said that, looking ahead, the products and services within the payments space are going to have to be exposed to different devices and different environments. Though today the focus is on devices like the phone, wallet and tablet, he said that, from TSYS' perspective, products and services will continue to become more embedded into everyday life.

"One of the ways that we are preparing is by taking our platforms and working to expose those in new ways," he continued. "We are building open APIs across our entire platform to allow them to be exposed and accessible from different types of applications, platforms and products."

Not only will that have a huge impact, Carter noted, but it will enable platforms to be viewed as easier to interoperate with for the developer community.

TSYS is a member of ACT Canada; please visit www.tsys.com.

25. 50 YEARS OF ATMS AND LESSONS IN TECHNOLOGY ADOPTION Source ATMIA (02/22)

This year marks the 50th anniversary of the Automated Teller Machine (ATM). It is held that the first ATM went into operation at a north London branch of Barclays' in June 1967. The first US ATM followed in 1969 at a Chemical Bank branch in suburban New York City. The rest, as they say, is history.

This golden anniversary serves as the theme for the ATM Industry Association's annual US conference, took place February 14-16 in Orlando, Florida. While the program featured a nod to history (including a 50th Anniversary



Panel of industry veterans), the majority of the agenda is forward-looking, in keeping with the industry's bright future.

Paragon leaders play key roles on a content-rich agenda. From 1-4 p.m. on Tuesday, Feb. 14, Deborah Spidle, Director of EMV Solutions, will lead a workshop on Implementing EMV at the ATM. The following afternoon, at 2 p.m. on Wednesday Feb. 15, Harold Pruitt, Solutions Architect, is among the panelists sharing perspectives on EMV – The Past, Present and Future.

Finding the Secret Sauce in the 1980s

The path to mainstream acceptance of ATMs was not a smooth one. Not surprisingly, ATM growth was complicated by its role as a financial product – where evidence shows ingrained behaviors are notoriously difficult to dislodge. Even Chemical Bank executives were reportedly reluctant to fund the initiative, skeptical of whether consumers would trust unattended machines to properly dispense money.

The adoption curve reveals no measurable traction for US ATMs until 1979, at which point the pot finally began to boil. Perhaps not coincidentally, 1979 also saw the introduction of networked ATMs, which allowed withdrawals from machines operated by entities beyond the consumer's own bank. Foreign ATM services soon followed with the associated fees, creating an incentive to install more ATMs – including those managed by non-bank, third party operators who staked out what used to be unconventional turf like convenience stores and restaurants.

Ubiquity soon followed with the vast majority of US ATM adoption growth occurring in the 1980s, and steady gains continuing well into the new millennium. Fifty years later, you'd expect such a technology product to be well into the decline phase of its life cycle. That's hardly the case – while the number of ATM withdrawals in the US has been essentially flat since 2009, the average amount withdrawn has grown over that same period.

After starting as a one trick pony, the ATM continues to evolve into the Swiss Army Knife of financial services devices. There are now 3 million ATMs in operation worldwide, offering varying degrees of functionality. The basic third-party US machines are advanced compared to early bank versions, which accepted limited card types and only dispensed fixed amounts of cash. In markets outside the US, value-added features like bill payment and train and lottery tickets are popular.

Meanwhile, the predictions of a cashless society continue to be resurrected even though cash in circulation and as a percentage of transactions continues to grow. Even Millennials, who were thought to be the most tech-savvy generation in history, appear to have an affection for cash and, by extension, ATMs. It seems



that ATMs, like the majority of channels used for delivering financial services, are likely to remain viable for many more years. Imagine an ATMIA Conference in 2067 hailing the 100th anniversary of the ATM. Seem impossible? No doubt, imagining a 50th anniversary did as well in those early days.

ATMIA is a member of ACT Canada; please visit www.atmia.com.

26. PSD2 SCA: RISK AND REWARD?

Source: Consult Hyperion, by Tim Richards (02/27)

Everyone is still picking over the new PSD2 RTS on strong customer authentication (SCA) from the EBA but the major talking point is around the introduction of an exemption on risk based transaction analysis. One of the major criticisms of the previous RTS was that it would force up to 70% of online transactions through SCA, introduce friction into the payment process and impact overall economic activity.

The new exemption allows banks to avoid the full friction-filled horror of two factor authentication on payments if they can keep fraud levels below certain designated limits. Note, however, that there's no equivalent exemption for any of the non-payment use cases, and it's not clear how edge cases such as electronic direct debit initiation will be treated.

The definition of "fraud" is interesting as well – it's the total value of unauthorised or fraudulent transactions divided by the total value of all remote transactions over that channel. So potentially you could have a lot of small, fraudulent transactions and still meet the exemption: and the exemption for low value payments has been lifted from ≤ 10 to ≤ 30 , and transit transactions are completely exempt.

The fraud limits are different for card-based payments and credit transfer (or PSD2 push payments, if you'd prefer) and are tiered by transaction value – so the lower the fraud rate the higher the transaction value permitted using risk based transaction analysis. The catch is that if these fraud rates are exceeded for two consecutive quarters then the PSP concerned loses the right to the exemption and needs to fall back to full two factor SCA.

Now that, of course, would be a disaster for the institution concerned – if you're the only bank that has to make your customers apply SCA for online transactions then you'll rapidly see them migrating to other banks. So the penalty for losing this exemption is likely to be severe.

The EBA has helpfully supplied a minimum list of things that PSPs have to do in order to meet the requirements for risk based transaction analysis (I quote from the RTS):



- no abnormal spending or behavioural pattern of the payer has been identified;

- no unusual information about the payer's device/software access has been identified;

- no malware infection in any session of the authentication procedure has been identified;

- no known fraud scenario in the provision of payment services has been identified;

- the location of the payer is not abnormal;

- the location of the payee is not identified as high risk.

No doubt risk teams are currently looking at their current solutions and trying to figure out whether they're compliant or not. Which we're quite pleased about, as this type of analysis is a core part of our business. And all of this will need to be audited, which will be a nice new earnings stream for audit firms. Quite how the compliance regime for this will work will no doubt emerge over the next eighteen months or so.

There are lots of other interesting features in the new RTS. It's clarified, for instance, that SCA can be performed by either the payer's PSP or the payee's PSP but not by the merchant. So presumably large on-line retailers will be gearing up to become PSPs themselves. Also PSD2 is now only mandatory for transactions that start and finish in the EEA. Oh, and, apparently, card-on-file transactions are outside of the scope of PSD2. Which is interesting, if a bit head-scratching.

Consult Hyperion is a member of ACT Canada; please visit www.chyp.com.

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27. IDSCAN GETS PATENT IN US FOR TECH TO VERIFY FACES ON DOCUMENTS *Source: PYMNTS (02/21)*

IDscan, the unit of GBG, has been granted a U.S. patent for Visage, which is a way of verifying the facial component of a passport or ID card. GBG said the technology does the checking against a databank of faces that have been rounded up from fake, forged and otherwise compromised documents. The company said that, while documents, names and signatures can be easy to forge, facial documents are much harder to fake.



"The production of fake documents is an industry all of its own now," commented Tamlyn Thompson, MD of IDscan, in the press release announcing the patent. "IDscan has always strived to stay one step ahead of the criminals to ensure that our global customers are properly protected. Our authentication software has removed vast numbers of fake documents from circulation; however, the determined and well-financed fraudster will simply acquire a replacement within days. The fraudster's new document may have completely new credentials, but one element will stay the same: the photograph. That's why we have developed a facial recognition system which catalogues these 'fake faces' and allows the IDscan system to cross-check the new identity document provided against this catalogue. If we find a match, the customer is alerted in less than a second."

IDscan was bought by GBG in June 2016 and provides document authentication and facial recognition solutions to banks, airlines, government departments and retailers across the world. "This patent gives GBG and IDscan the go-ahead to focus on this important area. We need to stop fraudsters from simply moving from one organization to the next simply by creating a new identity document. Document forgery is a sophisticated business. We will be able to extend protection to our customers by recognizing a known fraudster's face wherever they choose to use it," said Nick Brown, group managing director at GBG, in the same press release.



Our members' world is all about the evolution of payments and the ever increasing importance of digital identity. Since 1989, we have attracted new and established players from every corner of the global market: issuers, acquirers, merchants, payment networks, and those who support them with products and services. We bring people together at more than 40 events and meetings annually, including forums where members resolve targeted issues and identify opportunities. In a world awash with information overload, we create clarity by connecting people, enabling dialogue and driving insights. Please visit www.actcda.com or contact our office at 1 (905) 426-6360.

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