A quarterly executive summary and analysis of industry trends, announcements, and the newest treasury management products.

Quarterly REASURY MANAGEMENT

Product Bulletin

Quarterly Highlights

- Same Day ACH
- Healthcare Banking
- Merchant Services
 Promotions and
 Sweepstakes
- Mobile Banking



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Our research team has scoured many of the nation's leading banks to bring you information on any new and innovative products that have been released throughout the previous quarter. We have also provided information on new campaigns that are currently being promoted throughout the country. At the end of the report, there is a section that touches upon the more important press releases and industry news for the quarter.



Trend of the Quarter

Same Day ACH - New Year Update

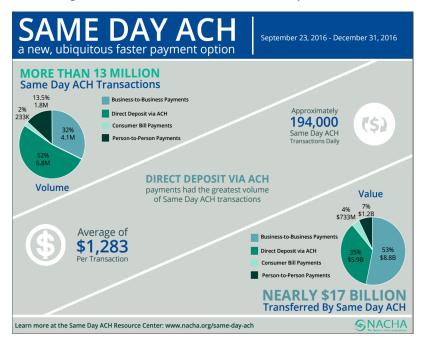
By Zoya Lieberman, CTP

Same Day ACH (SDA) has certainly been a popular topic for most of 2016. As phase one of SDA implementation is behind us, it makes sense to pause and summarize the good, the bad, and the ugly.

To summarize the SDA ACH time line:

- Phase 1 became effective in September of 23, 2016 and focused on ACH Credits
- Phase 2 will become effective in September of 2017 and it will allow for ACH Debits
- Phase 3 will become effective in March of 2018 and it will focus on faster funds availability by 5pm local time

On one hand, data shows that Same Day ACH is serving its purpose. With more than three months since the official roll-out of a ubiquitous industry initiative to allow for faster ACH payments, there have been emergency payroll files, emergency pension payments, vendor payments, and late credit payments to merchants flowing through the ACH Network as same-day payments. Per NACHA, as of December of 2016, nearly \$17 Billion were transferred using the SDA with almost 200,000 daily transaction volume.



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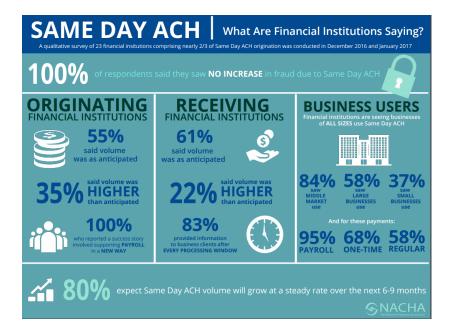
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Trend of the Quarter

On the other hand, there are reports of misuses of the SDA by corporates as well as blunders and mistakes made by the financial institutions. While the volume of SDA transactions continues to grow, there is a lot of uncertainty related to how corporate practitioners understand the service and how it is being used. Some financial instructions are hesitant to offer SDA origination to their clients and they reluctantly agree to discuss this option. While other financial institutions that do offer SDA origination are able to suggest this solution for domestic payments under \$25K instead of sending a wire payment. The SDA service generally is advertised as a premium service where it would cost more to initiate than a standard ACH transaction, but still less then a wire transfer.



Per the data collected by NACHA from the financial institutions, roughly half of the providers on the originating side and slightly higher percentage of banks on the receiving end anticipated the transaction volumes as they are. In addition, despite original predictions that only smaller businesses will use SDA, businesses of all sizes found SDA helpful. Although everyone is aware with \$0.052 cost associated with SDA, the uncertainly on behalf of both financial institutions and business users is related to the actual fees passed on to the businesses.

In December of 2016 Informa conducted its own survey of the top 100 financial institutions. At that time, only approximately one third of the top 100 providers had a clear pricing strategy and specific SDA cost in place.





Trend of the Quarter

The fee structure for SDA follows typical ACH pricing scenarios with one time set up, monthly maintenance, and originated item fees as the front runners. While observing SDA origination fees, it became clear that some financial institutions intended to actively offer this services to their customers, while others are planning to use it as a defensive strategy against competition. For example, the origination fees ranged from \$0.10 per transaction all the way up to \$5 with average floating around \$1.75. When it comes to monthly maintenance and set up costs, most providers closely aligned the SDA with the standard ACH. There were a few exceptions that priced SDA monthly fee higher than standard or created a surcharge on top of the monthly fees already in place. Most commonly seen were the higher per item fees and standard ACH monthly fees that apply.

Although SDA was launched in three phases to allow financial institutions time to internally prepare for the different entry settlement times, some financial institutions decided to work with their business partners to provide same day funds availability. Overall this is one of the greatest changes in ACH history for the past 42 years and is a sign of future changes in faster payments to keep up with consumer demand. Business-to-Business payments still rely on checks and providing alternative, faster, and inexpensive methods of payments will only help the industry moving forward to manage supply chain finance.

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Bank of America Merrill Lynch Extends CashPro® Flow to Bank of America Merchant Services and BofA Merrill Lynch Merchant Services

October 24, 2016 - Bank of America Merrill Lynch announced today that CashPro® Flow, its foreign exchange (FX) rate guarantee product, is now available to clients of leading global payments processor, Bank of America Merchant Services and its European entity, BofA Merrill Lynch Merchant Services. This product will be offered alongside Bank of America Merchant Services' existing multi-currency settlement product — Dynamic Currency Conversion.

Large volumes of local-currency payables and receivables can expose businesses to currency fluctuations, which may impact profits and make it harder to forecast cash flow. CashPro Flow takes an innovative approach to this risk by allowing merchants to lock in FX rates for extended periods of time. This means that they can pay for, price or invoice goods and services in local currency without taking on additional FX risk. The service — which is built to a unique, payment specific risk management model — is available for flexible time frames and supported by a comprehensive series of reports to aid end-to-end reconciliation.

In addition, API connectivity ensures a high level of straight-through processing for the client, reducing the administrative costs usually associated with the management of these types of payment flows.

Mike Robertson, global head of FX Payments Transactions at BofAML, said: "CashPro Flow offers a solution to corporates that are looking to ease the uncertainty created by volatile FX market conditions. The service is an ideal complement to the Bank of America Merchant Services multi-currency settlement product."

Michael Reed, executive vice president and managing director, BofA Merrill Lynch Merchant Services, said: "For businesses that operate in multiple geographies, it's critical to price goods and services as competitively as possible while effectively managing FX risk. CashPro Flow is another solution Bank of America Merchant Services is pleased to offer to these businesses."





BNY Mellon Launches Automated Medical Claims Payment Platform for Property and Casualty Industry Capable of Reducing Paper-Based Payments Significantly

November 17, 2016 - BNY Mellon, a global leader in investment management and investment services, announced the launch of its automated medical claims payment platform for its property and casualty insurance clients. Payments will be generated through electronic funds transfer, virtual payment card or paper check, with the potential of significantly reducing paper-based payments.

The new system uses technology from Jopari Solutions Inc., a healthcare technology company, that has been integrated into BNY Mellon's Treasury Services payments platform and is compatible with medical claim processing systems widely used in the healthcare industry. This technology identifies the preferred method of transaction by health care providers, a feature that helps expedite and automate claim payments.

"Health care providers are driving the growth for modern payments systems," said Anthony F. Brady, head of global product management for BNY Mellon's Treasury Services business. "They are looking for efficient systems that reduce costs and payment times and are compatible with regulations governing property and casualty and worker's compensation businesses and medical claim payments. This fully automated system is now integrated with our global payments platform to deliver standardized property, casualty and workers' compensation payments."

"We expect the automated payments platform that BNY Mellon and Jopari are introducing will integrate seamlessly with payers' existing accounts payable processing workflows, while conforming to individual state medical reimbursement regulatory frameworks," said J.R. "Steve" Stevens, chairman and chief executive officer of Jopari. "Both firms are committed to deploying this state-of-the-art medical claim payments platform that the property and casualty industry sorely needs to stay competitive into the future."

With locations on six continents and an extensive network of correspondent financial institutions, BNY Mellon's Treasury Services group delivers high-quality performance in global payments, trade services and cash management. It helps clients optimize cash flow, manage liquidity and make payments more efficiently around the world in more than 100 countries. Processing payment transactions in over 120 currencies, the company is a top-five participant in both the CHIPS and overall funds transfer markets. The company is also a recognized leader in the delivery of private-label treasury services solutions for banks and other large institutional clients. (Full Article)





New PNC Payment Tool Speeds Up Delivery of Funds From Businesses To Consumers/Clients

October 25, 2016 - In a world where faster and more secure is driving development in the global payment system, PNC Bank, N.A., takes digital payments in a new direction for business-to-consumer payments with ePayments.

As a member of Early Warning's clearXchange network, a financial institution-led digital payments network in the United States, PNC offers businesses an electronic payment solution where an individual's email address or mobile phone number is used to initiate a payment. No account information needs to be shared between the business (payer) and the consumer (payee). Most importantly, the funds may be immediately available upon deposit to the consumer's bank account in real time, no wait.

"Consumers today choose digital payment options to pay friends, relatives or businesses with a couple of clicks on a mobile device of choice. Businesses can now respond in kind, replacing the paper check with a secure, real-time digital option," said Chris Ward, executive vice president of Treasury Management product management.

Businesses can use ePayments solution to pay customers for auto insurance claims, medical insurance claims and consumer refunds, to name a few. Additional benefits of PNC's ePayment include:

- Increased security No bank account information is exchanged; sensitive banking
 information is not stored by the business. The business initiates an electronic payment to a
 consumer with an email or text message alert. Bank account details remain protected by
 sender and receiver bank.
- Faster funds Funds will be deposited into the consumer's account real-time if the
 recipient's bank is a member of the clearXchange network, or next day for non-member
 banks.
- Reduced costs Decreases volume of checks, reducing business costs associated with issuing and mailing paper checks.
- Options for recipient to view/accept payment The consumer may use a tablet, mobile device or computer to view notification of payment and to accept.

Early Warning is creating the future of payments by delivering innovative payment and risk solutions to financial institutions nationwide. For over 25 years, Early Warning has been a leader in financial technology that protects and advances the global financial system. Learn more at earlywarning.com.

Early Warning has announced plans to replace the existing clearXchange system with Zelle in early 2017.



Santander's Business Banking Customers Are Going Mobile

November 3, 2016 - Santander's Business and Retail customers now have access to some of the Bank's recent innovations in the palm of their hands. The Bank today announced the launch of its Business Banking app, a new multi-feature mobile platform specifically created to meet the unique needs of its business banking customers. The app is designed to save business customers time and keep them better informed about their finances. Santander also recently made enhancements to its Consumer Banking app, making it easier to use and adding features, including a fingerprint login option for customers with Touch ID technology on their mobile devices.

"We are investing more resources in our digital platform to accommodate the growing number of customers who prefer to do their banking online or on their mobile devices," said Michael Cleary, Head of Consumer and Business Banking at Santander. "Our customers lead busy lives and part of delivering a great customer experience includes giving them options. These customer-focused innovations ensure that making deposits, checking multiple account balances and managing your business's finances with Santander is quicker and more effortless than ever before."

Using Santander's Business Banking app, business customers can use their mobile devices to deposit up to \$15,000 per day into their accounts without visiting a branch or ATM and they can easily transfer funds between their business and personal accounts. The app's additional features include 'Quick Balance,' which allows customers to check their balances in up to three Santander accounts without signing into mobile banking.

Santander piloted the Business Banking app in July 2016 with nearly 250 business customers. When surveyed, more than 95% of respondents said they were satisfied or very satisfied with the app and more than 90% said they would recommend it to other business owners. Based on the pilot's success, Santander recently rolled out the app to all of its business account holders.

Amir Madjlessi, Santander's Executive Vice President and Managing Director of Business Banking, added, "For business owners, time is money so their banking experiences need to be simple and convenient. As one of the few banks in our Northeast footprint to offer a mobile platform exclusively for business banking customers, we are fulfilling our promise to listen to our customers and give them the banking tools and options that are most useful in their professional and personal lives." (Full Article)





With U.S. Bank APConnector™, More Businesses Can Say "Yes!" to Virtual Pay

October 26, 2016 - A major obstacle keeping organizations from choosing virtual card payments over checks has been the effort and expense of integrating their Enterprise Resource Planning (ERP) software with their bank's payment systems¹. U.S. Bank has a new solution that solves for this business challenge: U.S. Bank APConnector™, a universal adapter that quickly, easily and securely connects most accounting systems to U.S. Bank.

By acting as a translator between the bank's payment systems and an organization's ERP software, APConnector makes the path to payment automation seamless and cost effective. It allows organizations to send payments electronically using secure virtual card accounts that provide enhanced remittance data as well as improved reconciliation. Paying corporate invoices electronically no longer requires a major commitment of information technology (IT) resources. Set-up time for launching a virtual card solution shrinks to as little as a few weeks, versus up to three months in a conventional set up.

"APConnector removes a primary barrier to virtual card adoption: Accounts Payable system integration," said U.S. Bank Virtual Payments General Manager Bob Kaufman. "With APConnector, organizations can realize the increased efficiency and cost savings offered by U.S. Bank Virtual Pay without modifying their ERP systems or undergoing a major IT project. Even if a client changes ERP systems, they can continue to use APConnector. It's the fastest way to get on board and stay on board with virtual payments."

APConnector was developed in partnership with Atlanta-based Regal Software, a leading disbursement automation software provider for accounts payable systems. "The last mile in automating the procure-to-pay process is connecting customers' accounting systems to their financial institution's treasury system," said Regal Software CEO Kofi Conduah. "U.S. Bank turns that final mile into a sprint with its APConnector tool. It makes the whole process very simple and adds a higher level of security at the same time."





Mastercard and Wells Fargo Make Sending and Receiving Money Faster, Easier, and More

December 6, 2016 - Mastercard (NYSE: MA) and Wells Fargo & Co. (NYSE: WFC) announced today that Mastercard SendTM is now speeding payments for Wells Fargo Treasury Management and Wells Fargo Merchant Services customers. MasterCard Send™ is a payments service that sends funds quickly and securely to consumers domestically.

Through an application programming interface (API) connection to the Mastercard Send platform, businesses, merchants, governments, nonprofits, financial institutions, and other senders can send money to consumers and small businesses. By digitizing payments that are typically handled via cash or check, Mastercard provides greater convenience, choice, and security to payment senders and receivers.

"Moving money is one of a treasurer's primary responsibilities, and it's our job as their bank to help them fulfill that responsibility, quickly and safely," said Keith Theisen, executive vice president and head of product management for Wells Fargo's Treasury Management Group. "We're excited to present our customers with Mastercard Send, a product that was designed with and for our customers."

Insurance claims, rebates, e-marketplace payouts, shared economy payouts to sellers, social benefits, and tax refunds can now be sent in real time, which speeds up access to vital funds. Allstate Corporation's QuickCard Pay is among the first to leverage MasterCard Send through Wells Fargo for disbursements.

"Allstate continues to innovate on behalf of our customers and claimants," says Allstate's Chief Claims Officer Glenn Shapiro. "QuickCard Pay gives claimants an immediate and secure payment method and helps us deliver on our promise of a fast, fair, and compassionate claims experience."

Merchants and businesses across a wide array of industries, as well as government and other nonprofit organizations, can also take advantage of the reach, speed, and simplicity of MasterCard Send, while providing a better consumer experience.

"In today's digital world, consumers have come to expect payments and disbursements to be made in real-time," said Matt Barr, senior vice president, Digital Payments and Labs, Mastercard. "Mastercard Send addresses this by enabling businesses, governments, and others to send money instantly and securely, through a robust platform that joins all U.S debit card accounts with one connection."



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Offer expires December 31, 2016.



Industry News



Bank of America Merrill Lynch and Modo Announce Strategic Relationship

October 20, 2016 - Bank of America Merrill Lynch, a global leader in transaction services, and ModoPayments, LLC (Modo), an industry leader in digital payments innovation, today announced a strategic relationship that will give the bank access to Modo's patented COIN® Operated Digital Payments Hub. Through the hub, Bank of America Merrill Lynch clients will have the ability to connect with multiple emerging payment networks. Furthermore, the new global capabilities can extend the reach of the bank's existing digital business-to-consumer offering, Digital Disbursements.

"We're excited to be working with Modo on a truly differentiated offering that will help provide a gateway for clients to reach their increasingly dispersed consumer and employee population with a diversity of payment options," said Ather Williams, head of Global Transaction Services at Bank of America Merrill Lynch. "This strategic relationship signals our commitment to bring leading-edge payment solutions to our clients around the world."



BMO Harris Bank Announces Plans for New Office Tower in the Heart of Downtown Milwaukee

December 8, 2016 - BMO Harris Bank announced today plans for a 360,000-square-foot new office tower in downtown Milwaukee, to be called the BMO Harris Financial Center. The new 25-story building, targeted for completion in late 2019, will be constructed next to BMO Harris Bank's present location at 770 N. Water Street.

"Milwaukee represents a critically important market for us. This new tower - which will add to the beauty of Milwaukee's skyline - exemplifies our commitment to the city, and to the state of Wisconsin," said David Casper, President and CEO, BMO Harris Bank. "2017 marks BMO's bicentennial - two centuries serving the needs of our customers and helping businesses grow - and we're thrilled to mark this significant milestone in our own history with a major investment in the economic development of Milwaukee."

"This announcement is an affirmation of downtown Milwaukee's place at the center of the region's economy. The BMO Harris Financial Center at Market Square is a great addition to the City," Milwaukee Mayor Tom Barrett said. "This new investment by BMO Harris will add vitality and activity, and reflects its commitment to Milwaukee. It also continues the remarkable growth downtown Milwaukee has experienced in recent years."



Industry News



BNY Mellon Appointed as Depositary Bank by Banco Santander S.A.

October 11, 2016 - BNY Mellon, a global leader in investment management and investment services, has been appointed by Banco Santander S.A. as the successor depositary bank for its American depositary receipt (ADR) program. Each ADR represents one ordinary share and trades on the New York Stock Exchange under the symbol, 'SAN.' Banco Santander's ordinary shares trade on the Madrid Stock Exchange under the symbol, 'SAN.'

In 2015, BNY Mellon announced that it had been chosen by Banco Santander Brasil as depositary bank for its ADR program and by Banco Santander Chile as successor depositary for its ADR program.

Based in Spain, Banco Santander is a leading retail and commercial bank with a major presence in Spain, Germany, Poland, Portugal, the United Kingdom, Brazil, Mexico, Chile, Argentina and the United States. It also has significant shares of the Uruguayan and Puerto Rican markets, consumer finance businesses in other European countries, and operations in China through its wholesale and consumer finance business. Founded in 1856, Santander had EUR 1.52 trillion in managed funds, 12,500 branches, and more than 190,000 employees at the close of June 2016.*



BOK Financial Receives Regulatory Approvals to Acquire MBT Bancshares

November 16, 2016 - BOK Financial Corporation (NASDAQ: BOKF) announced today that it has received regulatory approvals to acquire MBT Bancshares ("Mobank"). The transaction is expected to close on or about November 30, 2016.

Mobank operates four banking centers in the Kansas City area and is regularly named one of the strongest midsized banks in Kansas City. BOK Financial currently provides full-service consumer banking in eight states. In Kansas City, it operates under the Bank of Kansas City brand with locations in Overland Park, Kan., and Lee's Summit, Mo. The acquisition will more than double BOK Financial's market share in the area.

Mobank President and CEO Grant Burcham will join BOK Financial as chairman of the Kansas City market. Bank of Kansas City Market President and CEO Michael Viazzoli will partner with Burcham to build BOK Financial's combined operations in the Kansas City market.



Industry News



City National Expands in Downtown Los Angeles

December 13, 2016 - City National Bank, America's Premier Private and Business Bank®, announced today that as part of its growth and commitment to Los Angeles, it has leased nearly 300,000 square feet at the 52-story 2 California Plaza. The site will be renamed CityNational@2Cal.

This significant move will expand City National's already strong presence in downtown Los Angeles. The company will remain headquartered at 555 South Flower Street, called City National Plaza, where it has been based since 2003. Today, the bank also announced it has renewed its lease there through 2031. City National will occupy 11 floors at City National Plaza and plans to upgrade and modernize its offices there beginning in early 2018. In addition, City National has another banking office located across the street from 2 California Plaza.

City National currently employs more than 1,800 colleagues in downtown Los Angeles and the company expects to add several hundred new colleagues there in the next few years. The new space at CityNational@2Cal will ultimately accommodate about 1,500 City National colleagues.



First Tennessee Bank Expands Specialty Finance Businesses

October 10, 2016 - First Tennessee Bank is expanding its focus on businesses with specialized banking needs by hiring bankers with extensive experience in four areas: franchise finance, healthcare finance, music industry banking and structured equipment finance. By attracting experienced bankers with established relationships to lead these specialty areas, First Tennessee will expand its expertise and grow its business throughout Tennessee and with selected customers across the country.

The new specialty areas and executives who will lead the teams:

Franchise Finance

First Tennessee has hired Todd Jones, former senior managing director for brand management for General Electric Capital Corp., to lead the franchise finance team. With the hiring of Jones and expansion of the team of bankers experienced in meeting the unique needs of franchise finance customers, First Tennessee is significantly expanding its franchise finance business following the acquisition of approximately \$537 million in restaurant franchise finance loans from GE Capital



Executive Changes



<u>Christopher Mager Named Head of New Global Innovation Group for BNY Mellon's Treasury</u> Services Business

November 29, 2016 - BNY Mellon, a global leader in investment management and investment services, announced today that Christopher Mager has been named to lead the newly created Global Innovation Group in the company's Treasury Services business. The innovation group was launched to secure BNY Mellon's position as a leader in incorporating new ideas and technologies that bring the best possible service to BNY Mellon's clients.

"It's clear that the global payments industry is undergoing a dramatic change as new technologies are being introduced, global payments are rapidly increasing, and banks are under unprecedented pressure to improve the payments experience they deliver to their clients," said lan Stewart, executive vice president of BNY Mellon and chief executive officer of the Treasury Services business. "The Global Innovation Group was created to help us meet the challenges of this period of transformation."

Mager, a managing director, is responsible for driving Treasury Services' global innovation process which includes management of strategic innovation projects, identifying and screening promising business concepts, evaluating and implementing new technology, assessing financial technology firms (fintechs), and developing and guiding the group's thought leadership around emerging payment technologies such as blockchain and distributed ledgers.



Citizens Financial Group Names John F. Woods of MUFG as Chief Financial Officer

December 14, 2016 - Citizens Financial Group, Inc. (NYSE: CFG or "Citizens") today announced the appointment of John F. Woods as Executive Vice President and Chief Financial Officer. He will serve on the company's Executive Committee and report to Chairman and CEO Bruce Van Saun. Woods joins Citizens from Mitsubishi UFJ Financial Group, Inc. (MUFG), where he has served as CFO of the Americas since 2013. Prior to that, he served as Vice Chairman and CFO for the predecessor company of MUFG Union Bank, N.A., a wholly owned subsidiary of MUFG. Woods also has held senior finance leadership roles at JPMorgan Chase and the Federal Home Loan Mortgage Corporation (Freddie Mac).

Woods will join Citizens on Feb.13, 2017, and will succeed interim CFO John Fawcett effective March 4, 2017. As previously announced, Fawcett will assume the interim CFO role on Dec. 17, 2016, following the departure of current Citizens CFO Eric Aboaf.

Chairman and CEO Bruce Van Saun commented: "We are extremely pleased to welcome John to the leadership team as our new CFO. He has a broad background in financial services, including experience in regional banking with MUFG Union Bank. John will hit the ground running in terms of contributing to our strategy, balance sheet management, efficiency initiatives and business partnership, as well as providing experienced leadership to our Finance function."

Executive Changes



Deutsche Bank Strengthens Innovation Team

December 5, 2016 - Deutsche Bank today announced that it has strengthened its innovation team with two new appointments. Elly Hardwick will become Head of Innovation and Philip Milne has been appointed as Chief Technology Officer (CTO) for Innovation.

Hardwick will join the bank in early December to lead the bank's innovation activities and manage the Deutsche Bank Labs globally. She will work closely with fintechs and the bank's business divisions to drive the adoption of new technology solutions.

A fintech entrepreneur and former CEO of Credit Benchmark, an independent source of consensus credit risk information, she was previously Global Head of Strategy, Investment and Advisory at Thomson Reuters. Prior to that, she worked for Morgan Stanley. Hardwick holds an MBA from Harvard Business School.

Milne joined Deutsche Bank in early November and will act as an interface between the Deutsche Bank Labs and the bank's wider Technology organization.

He has worked extensively in both the financial and technology sectors in London and California, most recently as CEO and Founder of a virtual reality start-up in Silicon Valley. He was a member of the founding teams that created the Android platform at Google and the Java platform at Sun Microsystems. Earlier in his career, he served as the Global CTO at Dresdner Kleinwort. Milne holds a master's degree in Computer Science from the University of Cambridge and a Ph.D. in Mathematics/Computer Science from Bath University in the UK.

Hardwick will be based in London and Milne in Palo Alto. Both will report to JP Rangaswami, Chief Data Officer, Head of Strategy and Innovation for the Chief Operating Office.

"Close collaboration with the innovation community is a priority for Deutsche Bank," said Kim Hammonds, Member of the Management Board for Deutsche Bank and Group Chief Operating Officer. "These appointments will help accelerate the adoption of emerging technologies to enhance our service to clients and internal processes."

