tmi
Issue 281
1992 29 YEARS 2021

Crypto - Can It Ever Be Right for Treasury?

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Published in association with
EACT THE EUROPEAN ASSOCIATION OF CORPORATE TREASURERS

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COVER STORY

The Deputy Editor discusses how treasurers and investors are becoming increasingly involved with digital assets such as Bitcoin and other digital currencies and says that it is clear that treasurers need to do their homework before fully engaging.

SPECIAL FEATURE

In the first of a three-part series on the increasingly important topics of sustainability and environmental, social and governance (ESG) measures, experts from Bank of America offer a new perspective for 2021 and beyond.

INSIGHT

TMI281

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TMI TREASURY MANAGEMENT INTERNATIONAL ISSN 0967-523X is published eight times a year by P4 Publishing Ltd, Waney Edge Barn, Foxhill Lane, Playhatch, Reading RG4 9QF, UK. The 2021 US annual subscription price is $400.00. Airfreight and mailing in the USA by agent named WN Shipp ing USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. US Postmaster: Send address changes to TMI-TREASURY MANAGEMENT INTERNATIONAL, WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA Subscription records are maintained at Waney Edge Barn, Foxhill Lane, Playhatch, Reading RG4 9QF, UK. Air Business Ltd is acting as our mailing agent. While all reasonable care has been taken to ensure the accuracy of the publication, the publishers cannot accept responsibility for any errors or omissions.

> ESG is becoming a serious means of attracting new and different investor flows and ultimately adding value to products and services.

Melissa Moi, Head of Asia Pacific Environment, Social, Governance, Bank of America

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> If taken as a credible asset class, treasurers need to understand Bitcoin at least as well and as thoroughly as any other asset class to which they might invest.

Tim Davis, Principal, Risk and Financial Advisory Practice, Deloitte & Touche

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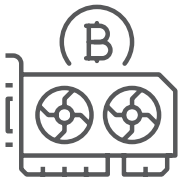

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Paving the Way Towards Instant and Frictionless Payments

By **Bruno Mellado**, Head of International Payments & Collections, BNP Paribas

With SWIFT gpi bringing transparency and speed to the world of instant payments, it is pertinent to examine the difference in take-up between European and Asian banks. Also important is understanding what this level of 'instantaneity' means for the future of corporate treasury management.

Instant payments are a new reality in many countries and their adoption has accelerated over the past few years, particularly in Europe where SEPA Instant Credit Transfers (SCT Inst) already account for 8% of SEPA volumes. In 2020, RT1 recorded almost a doubling of the SCT Inst with an average transaction amount of €576.

This growth is steady and analysts foresee that, within a couple of years, one in two payments in Europe could be instant, with the majority being in the retail environment. In Spain, they already account for about a third of all credit transfers, with 1 million instant payments processed daily. Other leading countries in terms of volumes include Italy, Belgium, where SCT Inst represents almost 15% of volumes, and France, which has a monthly volume of 5m payments. In the Asia-Pacific region, where instant payment methods are also extremely popular, the numbers are even more striking. In India, for example, more than 1 billion instant payments are made a year.

But while adoption of domestic instant payments systems among individuals is increasing at an unprecedented rate, adoption by businesses is far slower and remains limited to specific use cases where employing this payment method is a differentiating factor for a new commercial service.

Reachability among banks, as well as the interoperability of the instant payment schemes, remain important issues, even if there are initiatives leaning towards further harmonisation in the payments landscape. The SCT Inst scheme was designed to be pan-European and many participating banks are now reachable from any SEPA country.

With the deployment of a SEPA Request-to-Pay messaging service in June 2021, standardisation of the SCT Inst is being leveraged. This means a request to pay for a service can be linked to an instant payment. In Nordic countries, Project 27 (P27) promises to be the world's first real-time cross-border payment infrastructure in multiple currencies. This multicurrency aspect is crucial, as capital markets are not open 24/7, making foreign exchange (FX) conversions still far from being instant. This is one of the obstacles that means instant international payments are still an ambitious dream.

For large corporates with a centralised treasury and a payment factory, international payments represent a significant share of their payment workload with the additional tasks of dealing with counterparties globally and managing cross-currency exposure.

Up until recently, international payments were renowned for their opacity and lack of traceability. Today, one can safely say that SWIFT has successfully made SWIFT gpi the 'new normal' for international payments. For a bank, being gpi compliant implies adherence to a set of common rules, which include: guaranteeing payment traceability, transparency on fees, unaltered transmission of remittance information, and same-day processing or crediting of the funds to the beneficiary.

Since November 2020, all banks on the SWIFT network, whether gpi compliant or not, have the obligation to confirm to the gpi tracker the final credit on the beneficiary account. On a global level, the adherence to this set of rules has already reached an impressive threshold of 90%. This new standard has rapidly been adopted by a large number of users and financial institutions around the globe – more than 4,000 banks have signed up to join the initiative, with more than 1,600 currently being live.

Adhering to the SWIFT gpi standards is a step in the right direction and a sound basis for making cross-border payments frictionless. Banks have started equipping their customers with interactive access to the gpi tracking data as part of their standard services for international payments, which has already resulted in halving the number of interbank investigations on payments.

On top of facilitating the execution and the tracking of cross-border payments, this fast-growing adherence to the SWIFT gpi initiative is creating a data goldmine that can be used to analyse the behaviour of international payment flows.

BRUNO MELLADO

Head of International Payments & Collections, BNP Paribas

> *While adoption of domestic instant payments systems among individuals is increasing at an unprecedented rate, adoption by businesses is far slower and remains limited to specific use cases.*

Let's take the Europe-Asia corridor as an example. Commercial exchanges between Europe and Asia have intensified over the past few years. Although the volatility of the Asian market and its specific regulatory context can be a challenge for European banks moving funds across the region, digitisation has started to improve the process, and the number of transactions sent from Europe to Asia has increased by 15% over the past three years.

The gpi-compliancy data is also impressive: in France, 40 financial institutions are live on SWIFT gpi – a number that has doubled over the past year – and send 94% of their international payments through gpi. In terms of speed, 7% of these payments (SWIFT MT103 messages) are processed within 30 minutes, the majority (83%) being credited in 24 hours. The maturity level in China is even higher: 247 Chinese banks are fully gpi compliant and send 99% of their transactions through this system. As for their processing time frame, an astonishing 40% of SWIFT payment messages are processed within 30 minutes, and 98% under 24 hours.

This difference in terms of performance between the regions can be explained by two major factors: the time zone difference and the frequent complementary information or documentation requirements for payments heading towards Asia. By 2025, the migration from MT to MX format for interbank payments – also led by SWIFT – will bring about an enormous improvement to quality of data across the entire cross-border payment ecosystem. Being a much richer format, the implementation of SWIFT ISO 20022 as the new standard for payment infrastructures will enable the transmission of additional payment information, which in turn will help reduce the numbers of payments being blocked or rejected due to incomplete information as a result of lack of space or dedicated fields.

Financial institutions also intend to leverage the instant payment technology to improve the speed of international payments. The long-term aim is to be able to guarantee a valid instant processing for cross-border payments and a 24/7 availability to support trade and e-commerce worldwide. There are still important hurdles to overcome, notably local regulatory compliance, which represents a major challenge for financial actors. At the interbank level, banks such as BNP Paribas collaborate to enable this attractive objective to be met.

The adoption of the ISO 20022 format will, of course, support this long-term aim by rendering the transmission of richer payment data consistent between payer and payee independently if the payment is issued via SWIFT and credited via the local instant clearing. Payments monitoring protocols are also quickly evolving due to technical advances in the adoption of cloud-based databases, adding machine intelligence and communicating on demand based on application programming interfaces (APIs). While APIs are now the norm for integrating real-time payment initiation and reporting for corporates, the multiple standards and limited interoperability between APIs are an obstacle for worldwide adoption.

The payments ecosystem is evolving rapidly on sound foundations and there is no doubt that this instant and frictionless revolution is well underway. However, this will require large investment and co-operation from both the banking community and non-bank payment players to reach a return on investments from developing the new payment rails of tomorrow.

BNP Paribas wants to inspire other banks and corporates to join this effort to create frictionless and efficient cross-border payments. The SWIFT gpi initiative, which BNP Paribas embraces, has shown to the payments community that simplicity and efficiency is possible.

Major investment has been made in the payments landscape in order to adopt new methods. From European instant payments to India, and from the Nordics to the Gulf, the number of new clearing instances continues to grow every year. At the same time, it is of great value for corporate treasury to be supported by fraud detection solutions at transaction level, self-service compliance inquiry modules and the creation of interactive connectivity to adopt the payments of tomorrow.

In this way, treasuries are equipped with a best-in-class payment rails infrastructure to serve their businesses in adapting their ability to pay and to be paid.

The next challenge is to spread this drive within the banking community globally. BNP Paribas has already connected other leading banks through working groups to review and address these barriers with a view to achieving a fast and frictionless reality.

Instantaneity will disrupt traditional corporate treasury management and each corporate treasurer will need to strike the right balance between dealing with the increase of control and efficiency and the ability to manage 24/7 treasury operations. ■

"BNP Paribas wants to inspire other banks and corporates to join this effort to create frictionless and efficient cross-border payments. The SWIFT gpi initiative, which BNP Paribas embraces, has shown to the payments community that simplicity and efficiency is possible."

People in Focus

UniCredit has recently made several key appointments to further strengthen the bank's GTB expertise and client service offering.

SIMONE DEL GUERRA

PIETRO CAMPAGNA

Simone Del Guerra
Global Co-Head of Working Capital Solutions, UniCredit

Simone took up the role of Global Co-Head of Working Capital Solutions jointly with Pietro Campagna on April 1 in addition to his role as CEO of UniCredit Factoring S.p.A. He joined UniCredit Leasing in 2010 as Head of Vendor Italy, later becoming Head of Trade Products Italy. Since 2017 he has been head of the Global Financial Institutions Sales activities, reporting directly to the Co-Heads of GTB. Since April 2020 he has been CEO of UniCredit Factoring S.p.A. Simone had previously worked for IBM Italy, before joining GE Capital, where he held various positions in the commercial area in Italy, France and the UK.

Pietro Campagna
Global Co-Head Working Capital Solutions, UniCredit

Pietro took on the role of Global Co-Head of Working Capital Solutions jointly with Simone Del Guerra on April 1, reporting to GTB Co-Heads. He has left the position of Co-Head GTB Italy, which he had held since 2018.

Pietro joined UniCredit in 2004, working in the HR management of UniCredit Leasing in different roles; in January 2010, he was appointed Head of HR of UniCredit in Kazakhstan; in the summer of 2012, he moved to Vienna for the role of Head of HR CEE CIB. Since 2015, he has been in CIB HR as Head of HR for GTB and International Network, and Head of HR CIB Italy since the beginning of 2017. In his CIB HR capacity, Pietro has had oversight of all Learning and Development activities for the global CIB division.

Daniele Beggiato
Co-Head GTB Italy, UniCredit

Daniele has succeeded Pietro Campagna as Co-Head GTB Italy, jointly with Alfredo Bresciani. He joined UniCredit in 1987 as an Area Manager and worked in the Corporate Banking Sales/Distribution department for more than 15 years in different roles, gaining wide experience in credit risk and underwriting and most recently heading the Centro-Nord Region Credit Hub. ■

MY LIFE IN TREASURY

A Ringside Seat on Change

By **Tom Alford**,
Deputy Editor

Anthony Carfang has a distinguished background in consulting, writing, speaking, thought leadership and advocacy in the areas of treasury management, payments, liquidity and banking. He talks to TMI about his career to date – and why he scorns to-do lists.

"I love this business," declares treasury stalwart, Anthony Carfang. "There's always something happening that has knock-on effects that most people don't have time to think about on a day-to-day basis. But I do."

In 2016, after 34 years at the helm, Carfang sold his Treasury Strategies consultancy. After a couple of years as MD under the new leadership, he decided to set up shop on his own again, and The Carfang Group was born. Although embarking on a new venture, his deep-rooted connections continue to give him one of the most visible presences in the treasury space.

Carfang insists what he does now "is not

a full-time job", but he is far from retirement. Having built over the years a portfolio of no less than four occupations, today he is as busy as ever. In addition to The Carfang Group, he currently runs an organisation called Alpha Phi Delta Foundation, overseeing a national scholarship fund. He is a Director of Pittsburgh's Duquesne University, and also sits on the board of post-treatment networking organisation, SurvivingBreastCancer.org. As a fifth strand, he also exercises his passion for genealogy and his Italian roots, operating since 2003 the largest genealogy website of the Abruzzo region of Italy.

His current level of activity is the result of a lifetime's guiding philosophy. "You can't be narrow in your thinking," he states. "You've got to be part of your community. And as you become more successful in your career and you start moving in a more rarefied professional atmosphere, you begin to discover how so many organisations overlap." Indeed, by maintaining a wide horizon, he's discovered throughout his career that many more opportunities open up as shared connections intersect.

Early days

Starting out at First National Bank of Chicago, Carfang soon realised that while the fundamentals of finance and treasury stay the same, the arena in which they operate shifts constantly. Naturally, he's seen some significant changes, his banking career commencing as new technologies were being launched, including the US Automated Clearing House (ACH) network. "The big difference is that back then, an international wire took around two weeks. Today, if it takes ten minutes it raises eyebrows."

That's progress, and having seen the first balance-reporting system, the first automated lock-box, and the first cross-border money transfers, he proclaims himself lucky. "I got to see how all of these ideas came together, so we were helping banks and corporate customers – some of the world's largest companies – figure out how to use these services for the very first time."

Exposure to the latest techy thinking set him up perfectly for what was to come. But softer skills were also encouraged at First National. "They used to do an outstanding job in training their people," he recalls. "Relationship banking is a contact business, and the best training created the most polished and articulate communicators."

Despite having access to a "phenomenal network", everything he did had a First National bias. By cutting loose from the bank he believed that he could increase his exposure and begin to expand his network without limits. "We were just engaged with a really small slice of the corporate treasury pie. We wanted more," he recalls.

Time to leave

There was an additional reason for Carfang leaving the security of the bank. At age 30 he had been promoted into a vice president role, one of the youngest at the time. "But I said to myself, 'If I don't leave now, I'm going to get really comfortable, and then all of sudden I'm not going to be able to afford to leave.'"

The 'threat' of having it all mapped out for the rest of his professional life didn't sit well with him. He was eager to seize the day but rejected moving from banking to a treasury role. "I couldn't have done that," he maintains. "I need the variety and the broader platform that consultancy offers. But also I never wanted to be bound by the party line of a large organisation; that freedom has made a huge difference to me."

By taking a calculated leap forwards he and his Treasury Strategies partner, fellow First National alumna Cathy Gregg, were quickly exposed to more banks, more companies, more vendors, newer ideas and greater complexity. "We've had a ringside seat on change for four decades now, and the idea of something new is what still keeps me going."

ANTHONY J. CARFANG

Managing Director, The Carfang Group

Change management

While treasurers may be characterised as conservative in their professional approach, Carfang didn't see this as an issue. Quite the opposite; he knew they could not refuse to look at the raft of new services coming on stream.

"With the landscape shifting rapidly, the fact that many [treasurers] were cautious meant that they had to talk to me," he notes. "As part of their prudential responsibility to their shareholders, they had to understand what all these changes meant for their companies, so they could make informed decisions and explain to their boards why they should or should not adopt what was on offer."

Alongside technology, regulation and geopolitics are moving at a hectic pace too. Carfang views these "three legs of the same stool" as having remained constant across the years, despite "the magnitude and relative importance" of each of component continually transforming.

> *"If I don't leave now, I'm going to get really comfortable, and then all of sudden I'm not going to be able to afford to leave."*

"In the early days, regulation was not nearly as prescriptive as it is today," he notes. Under current practice, not only do the regulations state prudentially what their objective is, but they say quite rigidly how it must be implemented. This, he believes, is a "big game-changer" for banks and treasurers "because it is possible to be tripped up on some seemingly insignificant detail", as indeed many have been, with huge fines to prove it.

Carfang likens geopolitics to a double-edged sword. When the politics are favourable it provides harmonisation, which can accelerate the technology trends. But when it breaks down it can create significant barriers to progress.

With clients operating all over the world, keeping abreast of change requires vigilance. Writing articles, conducting seminars and maintaining a presence in the industry "keeps you sharp", he says. But having time out is a vital part of being an effective performer; this is something he admits he has only recently learnt.

"Now that I'm not consulting 24/7 I have a lot more time to think about things. I've developed a macro-framework to view the industry, so that while I see something new every day, I can now compartmentalise these thoughts and have time to reflect on them later."

Improving treasury

It's a way of working that Carfang advocates for all, although he accepts that time pressure does not always permit it. Something that all professionals can do, though, is work on becoming good communicators. "Many people think communication is about expressing an idea forcefully. That's not it at all. It's about understanding your audience and speaking to them in ways that make sense to them. That means learning to listen."

Of course, for treasurers, being listened to is a critical matter, especially in the current environment where cash flow and liquidity are of existential importance. Although it is commonplace in the treasury sphere to talk of having a seat at the table, Carfang makes an important distinction as to what this really means.

"I wrote my first article on treasurers becoming strategically significant in 1985 and have been talking about it ever since. Treasurers are strategic from the standpoint of contributing to shareholder value through financial engineering and risk management and all that that involves. But they are not strategic from the standpoint of running the company's core business," he explains.

Although the profession does not have C-level authority, treasury is clearly vital to a company's survival. If this was ever in doubt, Carfang suggests considering that the only time when the light is likely to be shone on treasury is when something goes wrong. "The job of the treasurer is therefore to make sure the light does not shine on them."

Long-haul view

Carfang's position as a long-haul industry consultant continues to hold sway with those who seek his advice. He concedes that consultants have a reputation for being somewhat brash, "borrowing your clock and telling you what time it is", but the Carfang way has always been to understand "why things are the way they are in any situation".

His clear-eyed view is that anyone calling in a consultant didn't purposefully build a bad system; something happened that made it that way. "Only when you understand why things are as they are can you begin to systematically take the client to a better place with actionable advice."

It is perhaps not surprising that Carfang is a fan of Peter Bernstein's *Against the Gods*, a book that explains what it means to take risks. Describing it as "the most interesting perspective on the development of standards of living in human society", he admits to being fascinated by its central tenet. "At every level at which humans have worked out how to manage a risk – sending a ship full of goods across an ocean to create new markets, or hedging crops to improve dietary conditions – it opens up a whole new level of activity," he reveals.

Carfang is an adherent of Bernstein's view that leaps in the course of civilisation immediately followed leaps in risk management, which immediately followed leaps in mathematics. Indeed, as a fully paid up numericist, it is his gift to see patterns and relationships where others see nothing.

As a former coach to a high school chess team that made the state and national championships every year, he developed a training technique leveraging this gift, teaching students to play matches "entirely in their heads". It is, he explains, not something that can be done by memorising where every piece is on the board. "Instead, you have to memorise every opponent piece that is out of position."

As might be expected, it's a methodology he has used in a treasury context to understand why a process is out of position, and how it can be remedied. "Some people found us very intuitive at Treasury Strategies, but I think it was more about having structured frameworks, and being able to visualise the pieces that don't fit."

With so much going on in treasury, frameworks can bring order. But the nature of the business also demands an open mind. It's an apparent contradiction that sees Carfang scorning to-do lists. "All you'll have at the end of the day is a list reminding you of what you failed to get done," he warns. "Instead, every night before you go to bed, make an 'I did' list. It's a great way to feel good about yourself." It's also a great way to mark the changes in a long career in treasury. ■

"Many people think communication is about expressing an idea forcefully. That's not it at all. It's about understanding your audience and speaking to them in ways that make sense to them. That means learning to listen."

Crypto: Can it Ever Be Right for Treasury?

In an era where arguably even normally dependable gilts have shifted from being 'risk-free returns' to 'return-free risks', have cryptocurrencies such as Bitcoin finally become viable assets? Or has recent market turbulence, coupled with regulatory intervention, put a stop to treasury interest in this space? We explore the options – and take a pragmatic view.

By **Tom Alford**, Deputy Editor

Cash is king. Cash is dead. They can't both be right. The 'cash dead' school of thought is often based on the belief that a digital asset, most commonly Bitcoin, is the best alternative. The investment potential of Bitcoin is well known and often characterised as a rollercoaster ride. In recent months it has certainly attracted attention, not all good.

Up to the end of April 2021, Bitcoin received investment flows of $3.7bn, according to CoinShares. Its appeal appeared to be widening. With huge allocations by high-profile firms such as MicroStrategy, Tesla and Square, which together have bought $3.9bn worth, Bitcoin seemed to be coming of age in early 2021 – even if its most notable proponents were cash-rich tech firms with visionary founders holding relatively high percentages of board control.

Nevertheless, Bitcoin – and other cryptocurrencies – are subject to unexpected market pressure. A prime example of this is the move by Chinese regulators in mid-May 2021 (the time of writing) to ban financial institutions and payment providers from offering services related to cryptocurrency transactions. Investors in China were also warned against speculative crypto trading. Understandably, this news caused the value of Bitcoin to plummet and the currency has lost approximately half of its value in just 30 days.

This was followed in late May by an announcement from the Chinese State Council's Financial Stability and Development Committee that China will crack down on bitcoin mining and trading activities as part of efforts to fend off financial risks. Further losses followed, although several major mining concerns were reported as investigating operational moves 'overseas.'

The regulatory setback was unfortunately timed, coming just after Tesla's recent back-pedalling on accepting the currency as payment until such a time as coin mining shifts to a more planet-friendly means. The reason for Elon Musk's change

of view is simple. Bitcoin's rise has been in parallel with that of sustainability-informed investing. This has exposed an incompatibility that may not be resolved any time soon.

The increasingly vast computing power needed to 'mine' bitcoins consumes an equally vast amount of electrical power to run and cool the computers. With at least 75% of all the world's bitcoin-mining power centred in China, where fossil-fuelled power stations account for almost two thirds of power production, serious ecological concerns are being raised.

The Global Times has reported that annual energy consumption by bitcoin mining in China is expected to peak in 2024 at 296.59 Twh, and generate 130.50m metric tons of carbon emission (about the same as the whole of the Philippines). The research was carried out jointly by the Chinese Academy of Sciences and Tsinghua University.

Chris Clothier, a fund manager at CG Asset Management, is quoted on the Institutional Asset Manager website as saying that "investors with any consideration for ESG principles should avoid" investing in bitcoin. "Bitcoin is nothing short of an environmental catastrophe."

Globally, bitcoin mining's carbon footprint is huge. As demand soars, and computing power-consumption rises in parallel, it has been estimated that bitcoin's CO2 production could soon triple. Coal-fired power consumption at scale is environmentally destructive; the pressure on Tesla to take a revised stance – at least on accepting bitcoin as payment, not holding them – may see others follow suit. With Tesla's statement immediately costing Bitcoin 10% of its value, the sustainability issue is not to be ignored.

Bitcoin mining resources will at some point have to change. But could it even encourage the use of renewable energy sources, as some have suggested? Projects such as the Bitcoin Clean Energy Initiative are advancing the idea that bitcoin mining could add momentum to the transition to renewable power. By acting as a flexible consumer of renewable energy, which is only produced under certain conditions (daytime for solar power, for example), miners can absorb excess grid power, reducing renewable production costs.

Not all buy this notion. In a FT opinion piece, Jamie Powell takes issue, mooting the idea that this is just the voice of self-interested bitcoin promoters being raised in response to environmentalist attacks. Bitcoin Clean Energy Initiative is run by committed bitcoin investor, Square, he notes.

It's a way, Powell said, of "trying to justify, after the fact, bitcoin's insane energy use", as a means of "guarding against people going off crypto on the grounds that it is actually a Very Bad Thing". Protecting bitcoin's value is one thing, but then telling China's miners (wherever they eventually locate themselves) to only use renewables is an altogether more interesting undertaking.

Kicking off an eco-debate that will see people strongly take sides may not suit most corporate treasury sensibilities, or that of their wider corporate ESG policy. Such issues cannot be dismissed, but bitcoin is nonetheless an interesting asset in the face of cash's current woeful performance.

Cash decline

While Bitcoin's maturation carries with it some worrying growing pains, the idea of large cash holdings on the books has been losing rather a lot of its shine. Bitcoin's rising investment star may even be more about cash's decline than its own special qualities, suggests Josh Deems, Director of Business Development, Fidelity Digital Assets. "Many corporates are in an economic environment where they are looking at cash on their balance sheet and thinking it could be worth less tomorrow than it is today. It's becoming an expensive holding," he says.

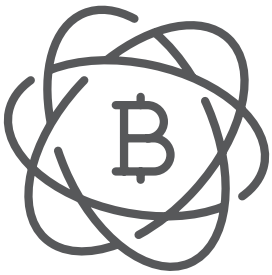
Indeed, using cash in a market where costs are rising means having to make that money work harder just to keep up. In today's challenging environment for interest rates, decent returns have all but disappeared.

Jeff Dorman, Chief Investment Officer, Arca, wrote in a recent blog that for a large corporate, cash holdings require multiple banking partners, incurring multiple fees for a wide range of transactions (not least foreign exchange), and still they are subject to frequent settlement delays. The "onerous" nature of cash holdings, he argues, is driving interest in alternatives such as Bitcoin.

This is not to detract totally from Bitcoin's recent stellar performance,

JOSH DEEMS

Director of Business Development, Fidelity Digital Assets



> *Kicking off an eco-debate that will see people strongly take sides may not suit most corporate treasury sensibilities.*

says Deems. "The reason why Bitcoin is becoming one of the most attractive alternatives is that it has gone through an incredible cycle in the past year," he notes.

Rising interest

In 2020, a Bitcoin supply crunch emerged. Demand grew so much that it outstripped the newly mined supply. It has an absolute maximum production of 21 million bitcoins embedded in its source code so, unlike gold, it has a known finite production run. As asset prices always come down to simple supply and demand, and Bitcoin demand is now outstripping demand, major investors are on the case, including key hedge fund manager Tudor Investments, which ploughed in around $425m in May 2020.

It's not much more than a 1% drop in Tudor's current $38bn assets under management (AUM) ocean. But for a 'traditional' player to engage at this level as a hedge against inflation, Deems argues that Bitcoin is taking on the characteristics of a hard asset capable of mitigating against the uncertainties of global economics.

And yet 84% of corporate finance respondents to a February 2021 Gartner survey said they did not plan to ever hold Bitcoin as a corporate asset. With the demand for traditional assets post-pandemic (mindful of activist-led assaults on equities as per GameStop, and the changing nature of commodities appetites globally) perhaps denoting market turbulence ahead, it may be time for re-assessment.

Fidelity research suggests an allocation of 2% to 3% Bitcoin can outperform, on a risk-adjusted basis, a traditional 60% equities/40% fixed-income portfolio. J.P. Morgan recently weighed in, saying investors could allocate up to 1% of their portfolio into Bitcoin as a hedge for other asset classes.

In 2020, Bitcoin returns were many times that of the S&P 500 Index and gold, pitching 160.40% versus 13.73% versus 21.60% respectively, according to CoinDesk figures. With the right market backdrop, there is now what Deems calls "a supporting precedent" for investment.

As such, to the list of Bitcoin-investing tech-driven businesses such as MicroStrategy, Square and Tesla, and more risk-inclined players like Tudor, can now be added traditional fund managers such as Mass Mutual, and Harvard, Yale and Brown university endowments, all of which made sizeable allocations in 2020. There are many other examples but the impact of the environmental issue around mining may yet temper some investor enthusiasm.

Gaining traction

Bitcoin is a unique digital asset in that it can be held as a balance sheet investment and as operational capital. In an increasingly digital world, arguably it offers a good fit. While synchronised global regulation of Bitcoin is unlikely, the fact that it has no single controlling entity can be perceived as a strength: no one can exert influence over its production or value.

That said, while individual governments will always want to understand how and where money is flowing through the system, there's a higher level of understanding of crypto among individual regulatory bodies now – in the US, for example, the new head of the Securities and Exchange Commission, Gary Gensler, even taught digital assets and blockchain at Massachusetts Institute of Technology.

At a technological level, compliance concerns around anti money-laundering can be mitigated by the historical provenance attached by blockchain to every Bitcoin transaction. Harry Hughes, Chief of Staff at Equos digital currency exchange provider Diginex, notes that every cryptocurrency move is traceable in a way that no cash deal could ever be. This is as a result of tech firms such as Chainalysis, Coincensus and Elliptic providing government agencies, cryptocurrency businesses and financial institutions with a common understanding of how cryptocurrencies are being used.

It has recently been reported by Chainalysis that a group of just 270 blockchain addresses have laundered around 55% of cryptocurrency associated with criminal activity. The report added that 1,867 addresses received 75% of all criminally-linked cryptocurrency funds in 2020, a sum estimated at around $1.7bn. Chainalysis describes this "bottleneck in money laundering" operations as "good news". The squeeze is on.

Arguably even the concept of 'dark coin' – cryptocurrencies designed to provide

HARRY HUGHES

Chief of Staff at Equos digital currency exchange provider Diginex

> *Many corporates are in an economic environment where they are looking at cash on their balance sheet and thinking it could be worth less tomorrow than it is today.*

secure and private transactions, primarily to evade government agency observation – has an upside. His view is that the emergence of a dark side means criminals now see the irrefutable blockchain trails of 'regular' crypto as too much of a risk, leaving the space clear for legitimate use.

This is also good news for commercial adoption. In the context of global supply chains, where even large retailers are starting to hold Bitcoin on balance sheet (Walmart is rumoured to be allocating up to $1bn), currency instability in certain territories can be safely mitigated by Bitcoin, explains Hughes.

Even if a business runs a USD-denominated book, local currency volatility can cause huge pricing fluctuations. It's feasible that demand for taking payment in Bitcoin, or even fiat-backed stablecoin (see box 1), will rise because crypto assets are not subject to debasement associated with unsustainable fiscal and monetary policies.

Another reason cited by Hughes is because crypto assets are highly portable, unlike the other alternative means of hedging against fiat currency inflation: gold. That said, even this now has a solution, offered by Kinesis (and reported online by TMI) to enable people in Indonesia to buy and transact with a blockchain-supported digital representation of physical gold bullion.

But treasurers need to go beyond managing pricing volatility and know your customer/anti money-laundering (KYC/AML) concerns. As part of a diversified treasury cash strategy, Bitcoin investment raises issues around taxation and accounting treatments, for example, not least because clear and consistent rules for each are yet to be determined.

Bitcoin vs tax and accounting

As a starting point, Deloitte's 'Corporates investing in crypto: considerations regarding allocations to digital assets' helps steer treasurers through their initial explorations of digital asset holdings – and presents the issues for all to see.

According to co-author, Rob Massey, Partner, Global & US Tax Blockchain & Digital Assets Leader, Deloitte Tax, those holding Bitcoin as an investment must recognise that tax treatment varies according to different authorities around the world.

"In most jurisdictions, it is viewed differently than other investment type assets in that it is deemed 'general property' and fungible," he explains. "Bitcoin requires a higher degree of operational care to segregate tranches of investments with varied basis in order to identify which is sold, the associated basis, and the resulting gain."

On the accounting side, Amy Park, Audit Partner, National Office for Accounting and Reporting Services, Deloitte (also a co-author), says accounting rules also vary by jurisdiction. "Under both US GAAP [generally accepted accounting principles] and IFRS [international financial reporting standards], Bitcoin is treated as an intangible asset. The resulting accounting and presentation may be different than one would expect for an investment which is often treated and transacted like a financial asset."

It's important to note that the accounting treatment for cryptocurrencies under US GAAP requires write down of losses, yet does not allow for 'write up' of gains. This means investors reviewing financial statements may not see appreciating digital assets, only impaired value, unless companies adopt a robust non-GAAP financial disclosure system or sell the asset and realise the gains. In terms of earnings per share reporting, a significant Bitcoin investment could be an issue.

The rules differ when Bitcoin is used for business payments. For tax purposes, Massey explains that, again, each jurisdiction is different, but one common theme is that Bitcoin is not viewed as a currency. Gains and losses therefore fall outside of the established tax rules of foreign currency.

"This leaves operational and tax complexities in determining character – capital versus ordinary asset – and basis tracking," he notes. "What's more, very few tax authorities accept Bitcoin as a form of payment which means that withholding taxes for things like payroll still need to be remitted in fiat currency, even when the underlying payment to an employee is in Bitcoin."

If accepting Bitcoin from customers for goods or services sold (as MicroStrategy and Square intend) or using it to pay vendors or employees, the accounting side

BOX 1: STABLECOIN: PEGGED FOR STABILITY?

Stablecoin is a generic term for a set of digital currencies that are linked to an underlying asset, such as a fiat currency, real estate, or stocks. Their stability comes from being pegged to these assets that do not form part of the volatile crypto world, and so (in theory) fluctuating with far less volatility. With multiple variants in existence, stable coins are not subject to a single set of regulations, making their control by any one authority more difficult.

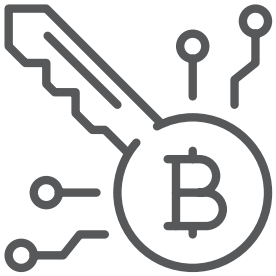
In practice, stablecoins, as a digital currency, may suit cross-border payments well because they offer faster, cheaper and more transparent passage, with instant settlement. They may also make storage of foreign currency easier, safer, and cheaper for users of remittance services. However, a number of general issues have been cited, including reduced consumer protection, reduced market competition, increased cyber risk and, if taken up in large measures, a potentially negative impact on financial stability and monetary policy.

> *While synchronised global regulation of Bitcoin is unlikely, the fact that it has no single controlling entity can be perceived as a strength: no one can exert influence over its production or value.*

can get complex, notes Park. The main issue arises from using Bitcoin in a manner similar to a financial asset while having to account for it as an intangible asset.

"The transaction price may be different in value than the ultimate amount received from a customer," she explains. "This in turn impacts the amount of revenue a company can record, and could also lead to derivatives that capture the volatility of the price of Bitcoin."

These amounts, while all related to a single transaction, will often be presented in different places on a company's financial statements and, warns Park, "can require consideration of how to best disclose and describe the resulting accounting and presentation".



> *Bitcoin requires a higher degree of operational care to segregate tranches of investments with varied basis in order to identify which is sold, the associated basis, and the resulting gain.*

Getting practical

In addition to these challenges, if taken as a credible asset class, treasurers need to understand Bitcoin "at least as well and as thoroughly as any other asset class to which they might invest", warns Tim Davis, Principal, Risk and Financial Advisory Practice, Deloitte & Touche.

He continues: "Given that Bitcoin has the ability to be a payment methodology that treasury will need to support, the treasurer needs to understand the underlying capabilities of the technology to provide more efficiency and effectivity in the payments requirements of the entire organisation – from customer receipts to employee and payroll payments".

This means practical decisions should be made well before engaging. For Ben Sebley, Chief Growth Officer, BCB Group, the purpose of Bitcoin allocation must be crystal clear from the outset. "Due diligence requires a methodical investigation of the impact such investments may have on different business units and jurisdictions of operation, and how these investments might be reflected in policy and procedural approaches," he advises.

The intentions of use – will it be an operational tool for payments and/or speculative investment, for example – should be evaluated alongside practical questions relating to the purchase, holding, managing and accurate reporting of digital assets.

Treasurers must also decide whether to self-custody or have a third party take custody of their assets, adds Davis. "Given the expertise required for self-custody, we predict most treasurers will elect to use a third-party custodian." And, as Sebley points out, with Bitcoin's potential to increase significantly in value, storage on internal hardware or some form of nano-ledger might not be appropriate.

Digital assets can, for example, be stored in 'cold' storage servers (designed for security in an offline environment for data that does not require real-time access), or in 'warm' storage facilities that allow quicker access for active trading.

Choosing a custodian and an approach therefore requires treasurers to consider the purpose of holding these assets, and the level of accessibility and portability needed. Further matters for discussion will include whether or not the provider is required to be registered and certified by a national regulator, in the UK this is the Financial Conduct Authority; the nature of security and protection in the event of disaster, such as backups; and insurance. Designing ongoing monitoring procedures capable of responding to risks specific to each digital asset held is also advisable, says Davis.

Get trading

For Diginex's Hughes, the challenges that corporate treasurers believe they may face are melting away as cryptocurrency credibility rises. But a broader understanding of the properties and benefits of crypto as a working currency are essential for it to be used effectively.

He offers three interesting scenarios to ponder. The first is that the continuation of central bank monetary expansion, used to deflect various financial crises in recent years, is eroding the value of any currency-based reserves held by treasurers. To retain shareholder value, a business needs to grow by more than the eroded value. In current market conditions, this can be a challenge.

The second scenario is around returns on investment in traditional instruments such as money market funds, where yields have dropped away. A third notion to consider, he says, is the portability of crypto. Running a global supply chain in the face of currency controls, and accepting, receiving and transacting in a safe environment, can be difficult in some territories. In each case, he believes that crypto, Bitcoin in particular, offers the best answer. But how does a treasurer get started?

There are two options, say Hughes. The first is join a regulated exchange, such as Equos. This is a matter of onboarding using the same KYC/AML procedures used by banks. Typically, being a digital-from-the-ground-up proposition, the process takes hours not weeks, he notes. Onboarding sets up the necessary transparency mechanisms needed for all participants to trade safely.

The exchange model is best suited to making smaller trades in and out of the asset; it's also useful for asset accumulation and generating access to derivatives associated with those assets, explains Hughes. For larger crypto transactions, off-exchange trading

capabilities are needed. For Diginex clients, this resembles the private banking experience, where access to a trading desk that will execute sizeable orders directly with market-makers, is offered.

As an initial exploration, it's perhaps logical that the transparency of exchange-based trade will best suit most treasurers interested in bitcoin. However, Hughes says that the majority of treasury deals facilitated by Diginex to date have been OTC.

"Because it is new territory, being hand-held throughout the process is valued," he explains. "We will see corporate treasurers starting to trade for themselves; the systems are being built in order to facilitate that, and access to trading screens and the capacity to track everything from a financial reporting perspective, is coming. But to start with, all traders have to build the appropriate muscles within their organisations."

CBDCs: real-world impact

For those still hesitant, perhaps the concept of a central bank digital currency (CBDC) may provide the right entrée to the world of digital assets. CBDCs are at a very early stage of development but a 2020 survey by *Central Banking* magazine (cited by Ledger Insights), covering 46 central banks from across the globe, revealed that 65% are exploring the concept. The first transaction between FIs has already taken place.

Indeed, when Banque de France (BDF) successfully completed the first ever successful live settlement of a fund using CBDC tokens (blockchain-secured assets issued and fully backed by the central bank as legal tender) on 17 December 2020, it marked a moment of great importance for the entire financial world.

Concept proven, Anthony Culligan, Chief Engineer of SETL (the provider of the IZNES platform on which the €2m transaction was executed), believes that the technical difference between holding traditional securities and holding cash could now drive the wider adoption of CBDCs.

Typically, a large institution will hold a security with a third-party custodian. This legally keeps it remote from bankruptcy; if the custodian goes under, the asset is ring-fenced. However, cash is held directly in custody by a bank. If that bank gets into trouble, the owner of the cash risks losing all, or at least having to stand in line with other creditors.

When a central bank issues money electronically – in much the same way that a large corporate issues shares electronically – it is available to be held in custody and is bankruptcy remote. "That has some very interesting implications for the way financial services work at the wholesale level," notes Culligan.

Traditional securities are typically traded on one system, such as CREST, Euroclear or Clearstream, and money is moved through another,, such as a real-time gross settlement (RTGS) system. This creates complexity when moving cash at a central bank, even around fairly standard transactions like delivery-versus-payment or if a clearing arrangement through, for example, LCH or Eurex, is used.

Electronic money, however, enables central banks to issue cash to market infrastructures and custodians, allowing direct and instant settlement on a platform such as IZNES by book entry, and without having any 'daylight' exposure to bank intermediaries. "In this setting, money becomes functionally the same as securities and so can operate on the same platform," explains Culligan.

Currently, direct access to electronic central bank money requires an account on the TARGET2 RTGS system. A new platform consolidating TARGET2 and T2S, its securities counterpart, will be launched in November 2022 as T2. Legislation dictates which institutions have access to T2, and therefore electronic central bank money. This means the legal framework must be updated to ensure the momentum of experiments by FIs such as BDF is not lost.

As well as working through the regulatory framework, CBDC momentum-building also means clarifying the roles of participants, says Culligan. Indeed, while it is not the position of central banks to undertake client management roles such as KYC and AML – this will remain commercial bank territory – central banks will be drawn closer to the market. "The model that is emerging is that of the commercial bank still owning the customer, but the customer, as an owner of central bank money, having a direct balance-sheet relationship with the central bank," he says.

The BDF experiment focused on the use of CBDC in the wholesale market

> *"The model that is emerging is that of the commercial bank still owning the customer, but the customer, as an owner of central bank money, having a direct balance-sheet relationship with the central bank."*

BEN SEBLEY

Chief Growth Officer, BCB Group

space. "Outside of this experiment, my own view is that we will see the eventual use of CBDC in a retail environment," says Culligan. The same cannot be said by him for bitcoin. For now, he believes it would be "difficult to live your life by Bitcoin when it still exhibits huge swings in value". As such, he sees no way currently in which it will become a significant part of the mainstream monetary system.

What's more, with the almost universally required AML and KYC processes of the financial sector having been derived from international treaties, he believes it would even be difficult, if not impossible, to fit a major crypto currency such as Bitcoin into the multiple legal frameworks that support such regulations.

There is a further interesting point concerning all digital currencies, and that, says Culligan, is the privacy desired by people when spending money; for many tracking is a civil liberties issue.

Coins and notes require no disclosure in use. "Any digital currency or CBDC system has to have a certain amount of anonymity, but only to the extent that it doesn't support large legal enterprises or even governments harvesting transactional data at an individual level." Attending to this issue may not be a concern in some jurisdictions, he says, but others, like Germany, are notably keen to uphold such freedoms.

CBDCs, as agreed social mechanisms of exchange that align with national laws, thus appear to Culligan as "the best way" to engage with the market. That said, a May 2021 report by Fitch Ratings concerning retail CBDCs argues that "the broader adoption of general-purpose CBDCs will present authorities with trade-offs between the associated risks and benefits".

The report notes that "the rise of digital payment systems, which have strong network effects, can create oligopolies among payment-system providers, often from the private sector". To counter this, if retail CBDCs gain significant traction, control over payments-related data by payments firms could be reduced. However, it adds, if CBDCs offer less privacy than cash, or severely cap amounts held in electronic wallets, some may be deterred from using them".

Should CBDCs experience widespread adoption, Fitch suggests they may also prove disruptive for financial systems, if associated risks are not managed. "These include the potential for funds to move quickly into CBDC accounts from bank deposits, causing financial disintermediation, and for heightened cybersecurity threats as more touchpoints are created between the central bank and the economy." Balancing individual security and systemic risk is the basis of yet another discussion on this topic.

Not going away

While digital assets such as Bitcoin, and now CBDCs, appear to be settling into a long and bumpy relationship with corporates, individuals, and the real world, it's clear that treasurers will need to do their homework before fully engaging.

CBDCs may eventually prove to be the most treasury-appropriate way to participate with the market but adoption is a long way off. Bitcoin may still perhaps be too volatile to be used as anything other than a limited investment instrument.

This may change. Bitcoin and other cryptocurrencies are carving out more mature roles than their chequered past may have previously suggested, and that landscape is changing quickly. With suitable technology to manage them, there is reason for many treasurers to start exploring crypto as an alternative asset class, or even currency.

The argument around the unsustainable mining requirements may stop investment in its tracks if it fails to meet corporate ESG criteria. There may be more fundamental issues that prevent investment terms.

Indeed, at this stage, there will be few, if any, highly leveraged companies wanting to take a major stake in Bitcoin, suggests Deems. "I think it's really only going to be for companies that are in a favourable position from a cash perspective, that can handle cycles of volatility, and have no short-term cash worries."

While Hughes feels it's too early for most, if not all, treasurers to work with anything other than Bitcoin, the broader proof-of-concept phase for the wider family of crypto has moved on. It is, he believes, set to have a "significant impact on the future of money and how we transact and store value".

The expectation that crypto will eventually achieve a greater market cap than gold makes for a compelling story. Hughes is predicting a shift to a point where treasurers hold crypto as reserve assets, and have access to the digital economy through assets such as Bitcoin. But simultaneously they should be maintaining a watching brief on the development of working concepts such as Ethereum's ERC-20 technical standard for token implementation.

Doing so will provide essential insight into what the future of transaction processing will look like. Indeed, he concludes, "corporate treasurers are soon going to have to get ready to answer such questions when their CFOs and CEOs come asking". Like it or not, that conversation may now also have to provide answers to satisfy corporate ESG sensibilities. ■

> *I think it's really only going to be for companies that are in a favourable position from a cash perspective, that can handle cycles of volatility, and have no short-term cash worries.*

Open Your Eyes to the Benefits of Open Banking

By **Eleanor Hill**, Editor

An untapped opportunity is a rare prize in the corporate treasury community, but open banking offers this potential. By leveraging the digital infrastructure that open banking creates, corporates can harness real-time data, benefit from new ways to pay and collect instantly, and ultimately leverage the evolving digital ecosystem to improve process- and cost efficiency. In turn, these innovations can help to reduce fraud, bolster sustainability, and enhance relationships with customers, suppliers and financial providers.

Many misconceptions exist around open banking, not least the idea that it is simply a regulatory initiative that applies only to consumers and small businesses. Although the concept for open banking came from a 2016 report into the UK's retail banking market (see box 1), in practice it has a much wider scope. In fact, it is a digital framework that underpins the very future of corporate treasury.

As Conor Maher, Head of Transaction Banking Products, NatWest, explains: "Open banking is an infrastructure that facilitates the secure sharing of financial information as well as payment instructions – through the use of open application programming interfaces [APIs]. There are clear opportunities to leverage the digital ecosystem that open banking creates to solve real business challenges for corporate treasurers and to leverage innovation opportunities. And let's not forget that APIs are a tried-and-tested technology. Open banking is simply opening up new avenues for using this technology to build even greater business value."

Payment use cases

As treasurers continue to embrace digital solutions, spurred on by the unique challenges of the Covid-19 pandemic, open banking has much to offer. Matthew Giannotti, Head of Transaction Services Sales FI & Professional Services, NatWest, comments: "The impact of Covid-19 lockdowns has brought about significant changes to corporate business models, with some organisations venturing into e-commerce for the first time. Many corporates have also shifted away from solely B2B [business-to-business] sales into direct to consumer [D2C] sales, through their own websites, or through digital marketplaces."

In turn, this has led to a rapid shift in the payments and collections channels used by corporates. "Organisations are also re-examining their digital strategies to look for ways to become more competitive and improve their customer service – by offering instant re-imbursements on returned items, for example. This is where open banking is coming into its own, especially around payment initiation," says Giannotti.

Maher agrees, adding: "Traditionally, payment initiation was a secondary journey on the back of an underlying commercial transaction. What we're seeing through open banking solutions today is that payments are becoming an integral and seamless part of the underlying e-commerce transaction journey."

To illustrate this, Maher and Giannotti cite the example of Payit™ by NatWest, which leverages open banking rails to provide corporates with a new way to send and receive online payments. The benefits include the ability to easily reach non-Nat West customers, no requirement to hold customer data, real-time transactions, and a reduced potential for fraud (see box 3 for further details).

Aside from Payit™, another interesting innovation leveraging open APIs is the Confirmation of Payee services that UK banks have rolled out. This functionality validates a payee's account details ahead of a payment being made, by checking the account name and number with the payee's bank via an API call. If the result is a match, the payment can proceed. If there is no match, the payer must double-check the details with the payee before they can authorise the payment. Maher comments: "Confirmation of Payee is a simple yet incredibly useful functionality that can significantly reduce fraud. It's something treasurers have long been asking banks to provide, and now, because of open banking, we are able to deliver it."

Real-time treasury and trade

The transformational potential of open banking is by no means limited to payments, however. As Rowan Austin, Head of Trade Origination and Advisory, NatWest, explains: "The fundamental point is that open APIs create a broader digital ecosystem that enables the sharing of information – this can be particularly useful in the world of global cross-border trade."

Traditionally, trade has relied on paper-based processes. This creates numerous challenges – not least the slowing down of transactions. Until recently, these 'analogue' processes have been difficult to digitise but "Technology solutions are starting to be implemented to enhance processes in many areas of global trade," says Austin. "Indeed, we are seeing numerous digital platforms emerge, many of which are collaborations between banks and fintechs, as a means to digitise trade workflows and trade finance instruments, such as letters of credit."

Although the digitisation of trade processes has undeniable benefits, there

> *There are clear opportunities to leverage the digital ecosystem that open banking creates to solve real business challenges for corporate treasurers.*

BOX 1: OPEN BANKING: A BRIEF HISTORY

In 2016, the UK's Competition and Markets Authority (CMA) published a report on the UK's retail banking market, which found that older, larger banks "do not have to compete hard enough for customers' business, and smaller and newer banks find it difficult to grow and access the market." To tackle this, the CMA proposed a number of remedies including open banking.

To this end, the UK Open Banking Implementation Entity was formed in August 2016. Over the following months, 'open data' was launched as a concept and open banking standards were created and refined to help regulate and streamline the transfer of data between approved third-party providers (TPPs). There are two types of TPPs:

1. Account Information Service Provider (AISP): authorised to retrieve account data provided by banks and financial institutions
2. Payment Initiation Service Provider (PISP): authorised to initiate payments into or out of a user's account

Open banking went live in the UK in January 2018, coinciding with the publication of the Second Payment Services Directive (PSD2) in Europe. This legislation enables regulated TPPs, with a customer's consent, to access a customer's bank account information and/or request payments.

Since then, open banking has become a global concept – with Asia and the US following suit. While there are nuances, the fundamentals of data sharing through open APIs underpin the notion of open banking worldwide.

Source: https://www.openbanking.org.uk/about-us/

BOX 2: BANK OF APIS

NatWest's Bank of APIs is a community designed to help build the future of banking through collaboration with fintechs and customers. The bank's API ecosystem simplifies and facilitates the development of innovative digital solutions across a range of services. Discover more at www.bankofapis.com

is a risk that the new platforms turn into digital 'islands' rather than being part of a digital ecosystem, says Austin. "Of course, everyone thinks that the 'island' they have built is best. But if these platforms don't talk to each other, this creates barriers to the flow of data. In turn, this hampers the efficiency of trade processes – which is counterproductive."

The ray of light here is that APIs enable interoperability between technology platforms and can build bridges between those digital islands, linking them together to form a trade ecosystem. In fact, "APIs are rapidly becoming the cornerstone in the development of new technology in global trade and trade finance," notes Austin. "And many of the emerging trade platforms built on distributed ledger technology are in fact based on open API technology."

Visibility and velocity

From the treasurer's perspective, one of the main potential benefits of using these digital platforms is obtaining a single view of trade-related transactions and trade finance arrangements. Currently, corporates typically have to access multiple 'destination' platforms and bank systems to achieve this visibility. "Thanks to open APIs, corporates will be able to manage and control their financing and risk-related requirements through their own, or selected third party, platform – rather than having to access a multitude of individual bank systems."

By creating a digital ecosystem, APIs will also help data flow quickly and transparently across the many counterparties involved in a global supply chain. At the same time, the

BOX 3: PAYIT™ BY NATWEST

Payit™ is a new NatWest innovation, based on open banking, which offers a fast, fair, simple and safe way to pay and get paid. Although Payit™ is developed by NatWest, as part of NatWest's Bank of APIs initiative [see box 2], end customers don't need to bank with NatWest to use it.

Collecting payments

Payit™ offers businesses a new way to collect payments online; an alternative to credit and debit cards. Maher elaborates: "For collections, the open API enables customers to pay direct from their bank account – with any bank. At the point of online transaction, customers can now choose a 'cardless' experience. Using Payit™, they see a list of all the main UK banks, and can scroll through to use their bank, and their account of choice, to pay from." Giannotti explains: "Payments are settled in real time, which improves cash flow and visibility over cash. It is an end-to-end solution, which simplifies the merchant's financial supply chain and ultimately saves costs, such as card-related interchange fees. Since customers do not enter their details or register for Payit™, the merchant also has no need to store customer billing data, which reduces the data protection burden under GDPR [General Data Protection Regulation] and mitigates the risk of fraud."

For customers, Payit™ is a quick and easy journey – they don't have to enter their card details or create an account to use Payit™. The solution also provides them full visibility and choice over the account they use, so they can see their account balance before confirming the transaction. In addition, customers – like merchants – benefit from reduced exposure to fraud and greater control over data sharing as they don't share their financial data with anyone outside their own bank.

Maher adds: "So, in one solution, we are able to resolve major e-commerce pain points for the merchant and the customer, all thanks to open banking."

Sending payments

Additional functionality launched in February 2021 means that Payit™ now offers corporates the ability to send money direct to customers' bank accounts, without needing their account details. The feature aims to replace the use of cheques and bank transfers when sending money to customers, allowing for instant payments to be made when issuing refunds or customer service payments, as well as for specific uses such as compensation payments and emergency cash requirements. The rapid, electronic means of processing the payment not only delivers a seamless customer experience and reduces environmental impact but also gives instant cash flow information for the corporate and saves significant time and money compared with refunds by cheque or cash.

Making a positive impact

Maher notes that as well as delivering concrete results for corporates and their customers, Payit™ also embodies NatWest's purpose-led strategy to champion the potential of people, families and businesses and to help them thrive. "Our aim is always to make a positive impact on our customers' lives by supporting and driving enterprise, giving them confidence through learning and combating climate change. Payit™ is a great demonstration of how innovation can achieve those aims. The solution helps to make businesses more efficient and competitive, provides a fair and safe environment for end customers, and improves ESG metrics – what's not to like?".

Eligibility criteria and fees apply. You must hold a business current account with the NatWest Group.

availability of this data will enable financial products and solutions to be accessed and delivered in a more seamless and rapid manner. Corporates can also manage their own financial supply chain in near real time, thanks to APIs.

Bringing this to life, Austin cites the example of a customer that is waiting for a shipment of goods from a supplier. "It is common for suppliers to hold back further shipments until the customer has cleared their account to below their credit limit. An API can ensure the supplier's credit control department is notified in near real time of any incoming payment from the buyer. In turn, credit can be granted and the goods can be shipped – in a timely fashion. This delivers benefits for all involved."

As well as providing greater transparency over the financial flows related to trade, APIs will also enable greater visibility and data sharing around ESG metrics, believes Austin. "Sustainability is becoming an increasingly an important component of corporate life, and organisations are keen to understand the ESG impact of their supply chains. APIs are a natural fit for enabling ESG transparency and I expect this to grow as an area of focus. Treasurers could also find their role in ESG expanding as companies look to incentivise suppliers to become more ESG-compliant through sustainable supply chain finance programmes."

Additional treasury benefits

Besides increasing the velocity of global trade, open APIs are also speeding up the delivery of multibank cash positions, without the need for SWIFT connectivity. Says Giannotti: "The beauty of APIs is that they enable treasurers to have a real-time connection with their banks, providing an immediate and accurate picture of their cash position. More and more treasurers are using API calls in this way, and we are also witnessing a significant uptick in the use of APIs to authorise payments in real time [see box 4]."

While many large transaction banks now offer these kinds of API functionalities, with very little to no technology lifting required from the corporate side, not all system vendors have adapted to this real-time environment, says Giannotti. To enable corporates to move away from their traditional batch-processing approach, towards real-time treasury, he believes that treasurers must petition their ERP [enterprise resource planning] and TMS [treasury management systems] vendors to link with their banks via APIs.

"Now more than ever, treasurers require multibank real-time cash visibility. They need to be able to initiate payments in real time, from their TMS. Treasurers also require an immediate line of sight over receipts, with the ability to layer intelligent reconciliation solutions on top. Dashboards with real-time information for improved decision making will also be critical, and vendors must respond to these requirements sooner rather than later."

Seeing the bigger picture

It is not just vendors who have homework to do around APIs and real-time treasury, however. Giannotti comments: "It is one thing having access to real-time information thanks to APIs; it is quite another to know how to use that

CONOR MAHER

Head of Transaction Banking Products, NatWest

MATTHEW GIANNOTTI

Head of Transaction Services Sales FI & Professional Services, NatWest

BOX 4: THE NUMBERS SPEAK FOR THEMSELVES

- **125 million requests** were made by customers via NatWest Group's APIs in March 2021, which represents a 60% increase from March 2020
- **577,000 customers** used NatWest Group's APIs in March alone for account information services, up from 335,000 customers in March 2020
- **1.44 million customers** in total have now used NatWest Group's APIs for account information services at least once, as of March 2021
- **368,000 customers** in total have initiated payments using NatWest Group's APIs, as of March 2021
- **£836 million** in transactions have been made in total through payments authorised via NatWest Group's APIs, as of March 2021 – this is over ten times the total reached in March 2020

Source: NatWest Group

See the infographic accompanying this article for more open banking statistics:

http://tiny.cc/cz6huz

information to the benefit of the business. Treasurers would do well to assess which information they truly need in real time, and which can simply be provided in a timely fashion. Then there are wider conversations to be had around business processes – is the company ready for a real-time environment? Are next-day processes baked in or could they be modernised through automation, for example, to increase the velocity and productivity of the entire business, not just treasury?"

Maher agrees, adding: "APIs can help to solve many business pain points, not just treasury challenges. For example, we are working on pilots in the Digital ID space where corporates could use APIs to verify customer identification. This can be particularly useful in age-restricted industries to safeguard minors, speed up the customer onboarding process and reduce identity fraud, while improving customer experience."

Of course, all the usual data protection and security caveats exist around such functionality. And, as Maher points out, "trust is essential" for API usage to grow. "The beauty of open banking is that it brings together experts in their relative fields – banks and fintechs – to deliver the best of both worlds for customers. Corporates get the security and reliability of their banking partners, together with the cutting-edge technology know-how and agility of fintechs," he adds.

That's not to say that banks aren't innovating themselves, many are also investing internally in technology advances. But open banking has led to a much stronger partnership approach whereby banks, fintechs and corporates are working together to create a seamless, real-time, digital business environment.

Giannotti and Maher also advocate a partnership approach within the corporate entity, to help make the most of what APIs have to offer. Says Giannotti: "Open APIs are all about ecosystems. The treasurer is not an island and to reap the full benefits of APIs, treasury must work hand in hand with other business functions – such as IT, procurement, sales and marketing. There is a waterfall effect to open APIs and, through cross-departmental collaboration, treasury can identify pain points in other areas of the business that could be solved using the information obtained via an account information API, for example."

Open dialogue within the corporate organisation can also help to pinpoint areas where APIs and open banking will not add value, says Maher. "Using open banking for the sake of using open banking is not going to deliver results. Having a clear idea of the pain points that need to be solved is vital. It is also important to consider how open banking fits into the enterprise's broader ambition, and chimes with its digital strategy and future ambitions."

So, while open APIs themselves are easy to implement and use, arguably the internal reflection required to extract maximum value from them is the hardest part of the corporate journey. Maher concludes: "Open APIs offer an opportunity for corporates to make their business more sustainable in every sense of the word. Those organisations that leverage the current and future potential of open banking within treasury and the wider business will reap the benefits – by building out digital ecosystems that bring them closer to the customers, suppliers and business partners. In short, open banking can no longer be ignored."

BOX 5: MAKING THE MOST OF OPEN BANKING: 5 KEY TAKEAWAYS

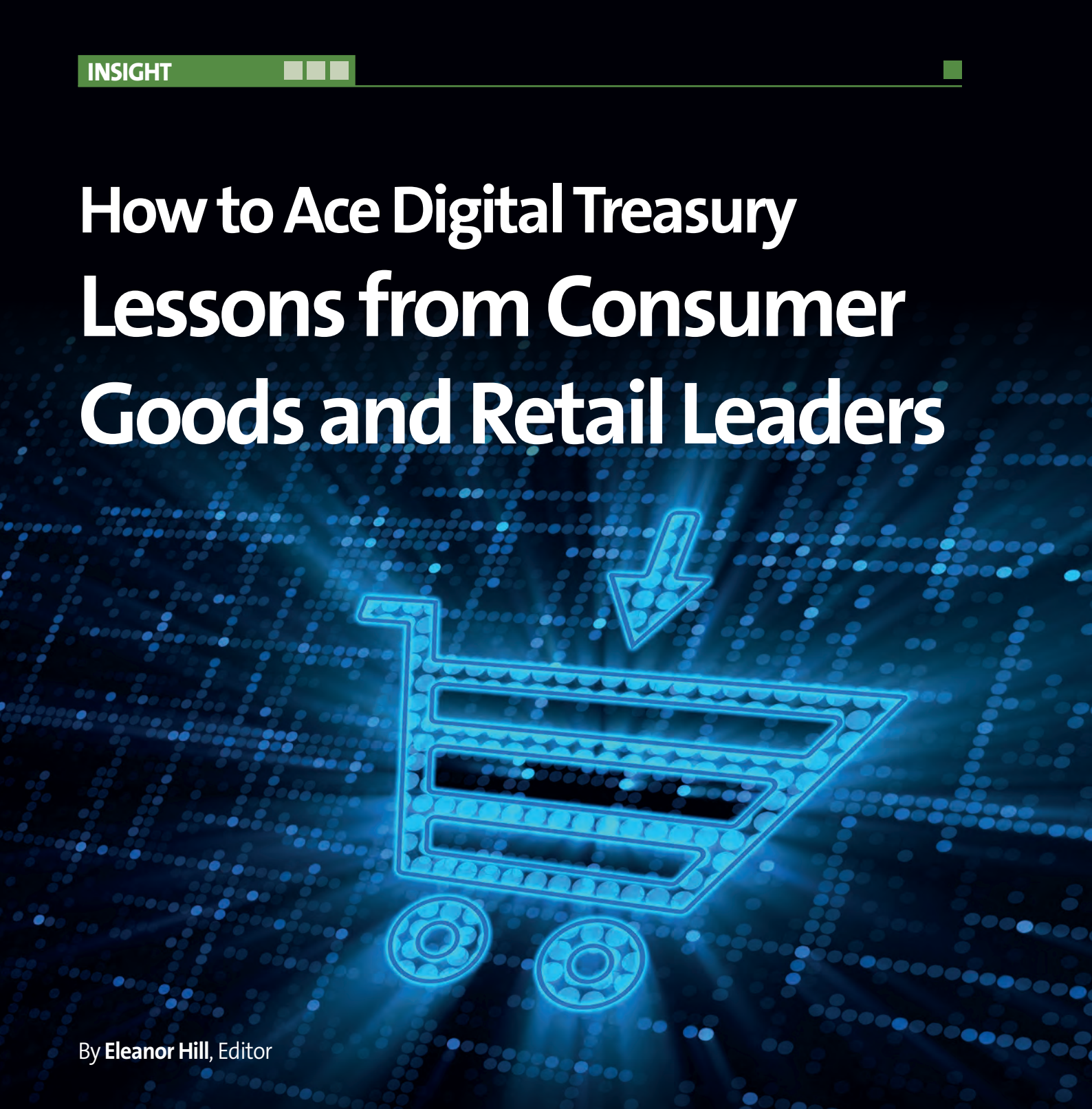
1. **Forget what you think you know.** Open banking is not just a regulatory initiative. And it is not only for consumers and small businesses. It is the digital infrastructure that enables the secure exchange of financial information and payment instructions – and it holds huge potential for corporates.
2. **Explore the payments possibilities.** APIs can be used to collect from customers in real time, direct from their bank account without the need for account details or costly fees. APIs can also be used to generate instant payments again without the need for bank account details. Benefits of payments APIs include improved cash visibility, greater efficiency, reduced costs, mitigation of fraud, and data compliance risks.
3. **Begin to transform trade.** While there is still a long way to go in the digitisation of global trade processes, APIs can be used to create a digital trade ecosystem through shared data. In turn, this can help increase the velocity of trade transactions, as well as the provision of trade finance. Corporates can also manage their own financial supply chain in near real time, thanks to APIs. For example, if treasury is alerted of incoming funds from a customer via an API, this information can then be passed on to credit control so that the customer can have pending goods released to them, or even plan an additional order, almost instantaneously.
4. **Embrace real-time treasury.** APIs deliver information instantly, and form the basis of real-time treasury. But to make the most of this real-time data, treasurers require their TMS and ERP to be up to speed. Moving away from batch-processing habits and next-business-day mindsets will also be critical.
5. **Examine the waterfall effect.** The benefits of open APIs are not limited to treasury. Cross-departmental collaboration could enable the identification of pain points in other areas of the business that could be solved using the information obtained via a treasury API – delivering even greater value.

ROWAN AUSTIN

Head of Trade Origination and Advisory, NatWest

How to Ace Digital Treasury

Lessons from Consumer Goods and Retail Leaders



By **Eleanor Hill**, Editor

Digitisation is prompting major changes across industries and companies, economies, and societies. Businesses must respond to new business models, disruption by new entrants, and the emergence of virtual infrastructures and new ecosystems. They also need to understand digital trends and the opportunities (and threats) they represent.

For these reasons, Citi has established a new forum for policy advocacy to formulate and share Citi's point of view on key policy areas related to technology and digital developments, such as crypto currencies, cyber security, AI, data and ESG. This framework seeks to enable all economic participants — such as governments, corporates, financial institutions and households — to use digitisation to create value, achieve sustainable growth and productivity, and mitigate the risk of disruption. Everyone knows that new business models are emerging, but Citi is looking to make it easier for clients to identify the implications of those models — and most especially the opportunities and potential risks they present — early on. This is the first installment in a new series where Citi experts and corporates talk to TMI, examining how digitisation and emerging digital trends are impacting businesses in different sectors.

E-commerce is coming into its own – and it's no longer just for retailers. By setting up online stores, companies have gained direct access to their customers, and the data that comes with digital transactions. For treasurers in many sectors, not least consumer goods, this shift opens up the chance to significantly enhance data-driven cash management and garner a new level of insight. But to make the most of this new digital ecosystem, treasurers must also plug into other stakeholders in the business, in an advisory capacity.

MAUREEN O. FREEMAN

Managing Director, Global Solution Sales, Consumer and Healthcare, Treasury and Trade Solutions, Citi

It's no secret that the Covid-19 pandemic has accelerated e-commerce capabilities. With global lockdowns preventing footfall in retail stores, the internet became 'the place to shop' in 2020 – and beyond. Indeed, e-commerce is expected to grow to $6.5tr. by 2023, effectively doubling from 2019 levels[1]. And the very definition of e-commerce is evolving too: where once it used to refer to sales websites, it now spans multiple points of sale including 'traditional' online, in-app, social media, and smart assistants.

In this flourishing digital era, many corporates have leapfrogged towards a direct to consumer (D2C) approach, leaving behind the middlemen of yesteryear. This trend has been especially clear in the consumer goods sector, according to Maureen O. Freeman, Managing Director, Global Solution Sales, Consumer and Healthcare, Treasury and Trade Solutions, Citi. "Before the pandemic, when a consumer goods company referred to 'e-commerce', they were most likely talking about the sale of goods through other well-known online retailers or marketplaces," she explains.

"With the 'distance' created by global lockdowns, consumer goods companies realised how disconnected they truly were from their end consumers – this is something they hadn't much considered previously as the business model had almost always been to use distributors. But just as the pandemic converted people to remote working and digital operations, it opened the eyes of consumer goods companies to the opportunity to truly own the consumer experience – and the data that comes with that. D2C sites are the obvious channel to accomplish that and, amazingly, one of our Citi clients created over 20 D2C sites within their brands globally in a matter of months."

Adopting an omnichannel approach

While this client story illustrates flexibility and resilience, it also highlights one of the challenges around getting e-commerce right – not only from a sales perspective but also from a finance and treasury point of view. Peter Cunningham, EMEA Corporate and Public Sector Sales Head, Treasury and Trade Solutions, Citi: "With more channels available to make sales, the ability to seamlessly traverse these channels, whether you are the consumer or the treasurer, is critical. What happens, for example, if a consumer buys a product through an app, for instance, but goes to the website to request a refund? Can the e-commerce path and the trail of the information and financial flow follow one another?"

Cunningham has indeed worked first-hand with companies that have successfully adopted such an omnichannel approach. "Leading companies now have the capability to interact with consumers through multiple media. Shoppers can buy items online and return them in the physical store, without any blockages in the data flows, for example," he says. "But this is very much at the best practice end of the scale. There is still a long way to go for many corporates, not only around how to achieve a truly end-to-end omnichannel approach, but also around encouraging consumers to engage with the brand."

This is where customer experience comes into play. "Some treasurers might be wondering how this relates to them, but there is a clear link between great customer service and the smoothness and stability of cash flows. Treasurers and the wider finance function also have a strategic role to play in helping organisations to prioritise the payment methods offered to consumers, for example," notes Cunningham.

Digital-savvy consumers arguably have far less tolerance today to jump through hoops to make purchases than in the past. The more that a sale becomes a hassle to a consumer, the more likely they are to avoid both that particular sale and the retailer involved going forward. Freeman comments: "To avoid this type of poor customer experience, it is important there is a good connection across the organisation on the corporate side from the very beginning of a shift towards D2C sales. And treasury can, and should, be an adviser on the project."

Indeed, pitfalls can occur where D2C decisions have been taken without

> *"Digital-savvy consumers arguably have far less tolerance today to jump through hoops to make purchases than in the past."*

being passed in front of a treasury lens. Cunningham notes: "Without the guidance of treasury, commercial directors may not pay attention to issues such as payment terms, for example. They might not be necessarily thinking, 'what is the cost of using this payment/collection channel?'. It is also unlikely that they will fully consider the risk they're exposing the company to. For example, what currency is the company selling in, and is it a functional currency? This is the advisory piece that treasury can provide."

Freeman adds: "In its advisory capacity, treasury also brings a deep understanding of the global environment. If, for instance, a company is based in the US and trying to launch an e-commerce proposition in Asia, it may not fully understand the payment/collection options available and which ones consumers in that region prefer. Treasurers are best positioned to advise here since they have insights others don't."

One example of where treasury working together with the business on the e-commerce approach has worked successfully is at a US sports apparel company, which has had well-publicised growth in its D2C business. Says Cunningham: "Treasury was really at the forefront of this project, with the treasurer working hand in hand with the web designers as they were creating the online checkout page for some of the European sites. The treasurer was instructing the web team to put a certain payment instrument first in the checkout options, another second, and so on.

PETER CUNNINGHAM

Managing Director, EMEA Corporate and Public Sector Sales Head, Treasury and Trade Solutions, Citi

> *The gold dust for companies that adopt the D2C approach, beyond the upside of disintermediating the middleman, is the data that they now own and have direct access to.*

"This enables the firm to subtly point the consumer to its preferred collection instrument that has a lower interchange fee. And by following the guiding principles of minimising costs and the risk of potential non-collection, i.e. decline rates, the treasurer can actually influence the success of the organisation's D2C sales."

Mining data for insights

The revelations do not stop there, however. The gold dust for companies that adopt the D2C approach, beyond the upside of disintermediating the middleman, is the data that they now own and have direct access to, says Freeman. "The challenge is to ensure that appropriate, standardised processes are in place from the very beginning of a D2C effort to ensure that a single transparent view of that data is in place as this side of the business grows.

"While the direct-to-consumer part of the company might start small in the overall context of the business, and managing it with some manual processes was acceptable in the beginning, companies need to be prepared for exponential growth. As orders increase, and the velocity and volume of cash flows ramps up, the last thing companies need is bespoke, manual processes behind the scenes," she cautions.

Thankfully, treasurers, particularly those in multinational companies, have been proactive in pursuing standardisation in areas such as services, processes, and technology. "But with the excitement over e-commerce and the unprecedented growth as a result of Covid-19, some companies have been tempted to skip these steps. Again, the treasury team acting in its advisory capacity can help set the company on the right path," she adds.

"Slowly but surely, we are now seeing standardisation start to happen, not only on the infrastructure side but also on the payment side. Having a proper handle on reconciliations, preferably with automated processes, is critical in a dynamic e-commerce environment," Freeman continues. "Treasurers require visibility on what has been recorded as sales, where that is in the banking structure, whether it is actually in the bank account, or whether there is a delay on it, and so on."

After all, capturing and analysing the right data at the right time is essential for one of treasury's core responsibilities: cash flow forecasting. Here, tools such as artificial intelligence (AI) and machine learning (ML) can support treasurers as they engage with prescriptive analytics to gain more insight around the data they now own.

If treasurers are able to harness that data from e-commerce in a more real-time way, perhaps via application programming interfaces (APIs), they can then use automation, ML algorithms and AI to quickly analyse that data and present them with 'next best step' options. Freeman adds: "This is not about taking the human factor out of treasury, but these technology tools can show a treasurer their cash position in real time, what's happening in the next three days, and present the options available across areas such as investments, borrowing, foreign exchange [FX] management and so on, for the treasury team to act upon."

But – critically – in order for this to happen, the data has to be intelligible. This can be easier said than done because typically companies that have a large e-commerce network have a patchwork of different instruments, countries and providers in the mix, all of which report data in varying ways. How that data is normalised and centralised is a huge project for corporations. This foundation is essential for treasurers to then go on to enhance their predictive capabilities.

Cunningham comments: "Establishing that foundation presents an opportunity for treasurers to be more specific and granular in terms of the forward-looking operational cash forecasts. And if you can forecast with a much higher confidence level on that cash, you can invest out further on the yield curve, and perhaps be slightly more risk tolerant on some of the other aspects of treasury."

Freeman agrees: "Now that treasury has the data, it's really important to be able to make it useful and be able to act on it more immediately, particularly if your model is moving more towards instant payments and instant collections. We're entering a world of instant liquidity, and treasurers who have the right tools in place to enable them to make on-the-spot informed decisions will have the competitive edge."

New business models

Another rising trend that will likely enable more accurate cash forecasts is the growth of subscription-based models. According to Suora, a billing software provider, companies in the 'subscription economy' have registered compound annual growth rate (CAGR) of 18% between 2012 and 2019, a rate five times faster than that of the S&P 500[2]. For companies that are able to blend a subscription-based business model into their existing operations, or even replace the pay-per-service model with subscription services, this means much more predictability of incoming cash, which in turn provides more of a stable operating cash balance.

"This is an interesting dynamic and transformational in terms of cash flow," says Cunningham. "But of course, changing from an up-front lump sum income into an advertised fixed period such as 24 months also raises a number of questions from the treasury side. In terms of the net present value, firms may rather have the money up front as opposed to a drip feed over two years. That is a change that the finance function needs to prepare for. Then there's the cost of collection to consider – the treasurer will now be making 24 collections not just one and there will be costs associated that could eat away at margins."

This also creates implications for the cash flow conversion cycle, such as days sales outstanding (DSO). For decades, treasurers have had a model that matches that with income and receipts, effectively self-funding through the cash conversion cycle with access to other borrowing when gaps appear that need to be bridged. With any move to a subscription model, the equation for corporate collections has changed.

Cunningham explains: "The danger is that you create a funding gap in terms of your internal sources of funds and you need to bridge that gap. Can you just deploy excess operating cash or do you need other fund facilities? It's an interesting dynamic – and I think many firms will find that the efficiencies of the subscription-based model do outweigh the downsides."

Embracing change

This focus on efficiency and margins is also driving digitisation across the supply chain, which will inevitably impact supplier relationships. Technologies such as drones, blockchain, the Internet of Things, and data analytics will be key in building the 'factory of the future', according to Freeman. For corporates that have been ramping up e-commerce, this focus on digitisation has also extended to the warehouse and logistics.

"In the consumer goods space, there's been a lot of thought around where the factories are located and potentially changing where manufacturing occurs," notes Freeman. "Many are looking at having manufacturing closer to the end client rather than at a remote hub – and even encouraging suppliers to move with them. The use of data and automation within the factory is also being explored, so a linear process in the factory is being replaced by workflows that adapt in real time to the current circumstances. Just as in treasury, robotics and data are vital in the factory of the future – but all parties in the supply chain need to be on board for maximum efficiency."

From a treasury perspective, it is important to understand the impact these changes might have on the supplier relationship. "If a large buyer has asked a major supplier to move its site, or to become more digital, it may well be that the finance function needs to extend some kind of olive branch here to reassure suppliers. For example, any costs incurred by the supplier could be offset by treasury rolling out supply chain finance programmes," says Cunningham.

Of course, not every treasurer will face such a situation, but it is worth being aware of the potential impact of the factory of the future on the treasury of the future.

Preparing for tomorrow

Whichever way the e-commerce boom and the digitisation of factories impacts an organisation, arguably the most important step in setting up the company for success is ensuring treasury remains firmly connected to other stakeholders within the organisation. Being 'plugged in' to D2C conversations from an early stage enables treasury to bring its unique perspective to the table.

Cunningham comments: "So, for those treasurers who are not yet part of this conversation, it is time to ask questions. 'Am I aware of the company's e-commerce strategy?' and 'Who do I need to link with in order to make sure we as a company are making the right decisions?' are great starting points." Making those connections is a foundation for success – and an opportunity for treasury to showcase how their payments and risk management expertise can positively influence the company's future growth. ■

Notes

1 Citi GPS: Technology At Work V4.0;

2 https://www.zuora.com/press-release/subscription-economy-grows-300-last-seven-years/

Why ESG is the Future of Business – and Treasury

With 'sustainability' being today's buzzword, there has never been a better time to clear up the misconceptions about environmental, social and governance (ESG) measures, not least among the treasury community. In the first of a three-part series on this increasingly important topic, experts from Bank of America tackle the myths and mysteries head on, offering a new perspective for 2021 and beyond.

Often labelled as 'a feel-good marketing strategy' or 'greenwashing', it's little surprise that some view the ESG agenda with a little scepticism. Of course, it is natural to question the values and agendas that nestle among the good work being done in this space; but there comes a time when the debate must stop and action must begin.

Indeed, with sustainability-based strategies becoming essential for driving business growth and transformation, this is the ideal moment to re-examine the treasurer's role in supporting, and embracing, ESG.

By **Eleanor Hill**, Editor

What ESG truly means

Although the broader goal is generally understood, the core elements of ESG can lack definition. For Melissa Moi, Head of Asia Pacific Environment, Social, Governance, Bank of America, the term broadly represents the non-financial factors that affect company performance.

'Environmental' typically addresses issues around operational footprint, such as greenhouse gas emissions, landfill waste, and water and paper usage within the business, its suppliers and customers, she explains.

'Social' elements, says Moi, range from more traditional corporate social responsibility (CSR) engagements such as philanthropy and community work, to employee treatment and well-being, diversity and inclusion, and workplace health and safety. Cyber risk management also falls into the social bucket, given the ethical and human rights concerns that surround data privacy and data security.

'Governance', often the less-talked-about but nonetheless vital aspect of ESG, is about decision-making and the distribution of rights and responsibilities among different stakeholders. "It considers the impact, for example, of organisational structure and oversight, transparency and reporting regimes," she notes.

This is not an exhaustive list by any means. ESG covers a wide spectrum and the individual elements inevitably interact with each other – and impact how investors and other stakeholders respond to the business. "It is essential to look at the entire ESG grouping as one, rather than viewing 'E', 'S', and 'G' in isolation. Moreover, one element should not be considered 'more important' than another. Think of it as an ESG ecosystem, rather than siloes," Moi observes.

Understanding the real value of ESG

Translated into corporate significance, ESG is first and foremost about managing risk and establishing response structures and measures, says Moi. "Considering ESG-related factors holds up a lens through which organisations begin to see and understand different risk exposures. A good example is the risk of disruption to business processes as a result of diverse factors ranging from adverse weather events to human rights issues."

There is, she notes, a strong link between business success and effective ESG planning. In fact, ESG increasingly creates opportunity, she believes. "Early adopters who understand consumer interests and investor preferences are better able to assess the impact and discuss matters such as climate change with their stakeholders – which can only be a positive move."

Those that move early on ESG are also better positioned to invest in research and development (R&D) or acquire appropriate technologies enabling them to respond to these different stakeholder pressures in ways that offer market differentiation. For Moi: "ESG is becoming a serious means of attracting new and different investor flows and ultimately adding value to products and services".

Indeed, early ESG engagement has seen Bank of America build a strong reputation among its stakeholders, including investors, over many years, says Moi. "It's allowed us to demonstrate our commitment, building ESG into the values that we talk about as a firm, and how we operate."

Having a long and close association with ESG incorporated within its framework means the bank can respond rapidly to unfolding events in a highly practical and efficient way. The Covid-19 health crisis, for instance, saw Bank of America maintaining service quality despite the enormous pressure on personnel, employee satisfaction criteria having already benefitted from significant investment.

MELISSA MOI

Head of Asia Pacific Environment, Social, Governance, Bank of America

Acceleration of ESG in supply chains

Elsewhere, the health crisis has intensified the focus on ESG, particularly in the supply chain space, says Peter Jameson, Head of Trade & Supply Chain Finance, Asia Pacific, Global Transaction Services, Bank of America. With many of the bank's clients already thinking about re-organising their supply chains, the health crisis acted as a catalyst. The focus is less now on labour cost, he notes, and more about being closer to the end-user.

"Although near-shoring re-emerged as a trend because of disruptions to supply chains as a result of global lockdowns, inevitably it is beneficial for carbon footprints, and this is also being factored into decisions." What's more, "as new supplier bases are onboarded, there's more thought about ethical sourcing and the notion that much of an organisation's environmental footprint is external and in downstream supply chains," he says.

To this end, Jameson notes too that there has been a huge uptick in interest in supply chain finance (SCF) as a working capital tool. This has a genuine ESG driver. "Many companies realised during the

HOW TREASURY CAN ADD VALUE THROUGH ESG

For more insights on the ways that treasurers can contribute to organisational growth and responsible business practices by embracing ESG, please see the infographic which accompanies this article and look out for the second article in this series.

tinyurl.com/m46dpwhd

BANK SUPPORT

The right banking partner can be a significant asset to treasurers looking to embrace ESG. For its part, Bank of America has so far issued eight bonds, including a Covid-19 bond, that fall within the 'green', 'social' or 'sustainability' playbook. The bank has also worked to create a raft of ESG products within its Global Transaction Services camp, including sustainable supply chain finance. Venkat comments: "It is important for a tier-one bank to help build the ESG market; it won't gain widespread traction without it. But such a response can only come from an organisation committed to embedding and integrating ESG into its own ethos."

Moi explains: "We are working hard to operationalise ESG as part of how we conduct business and grow responsibly. We've got a multitude of sustainable finance projects, thought leadership programmes and sustainable capital market initiatives underway; it's something we've really taken to heart." Of course, this is a nascent finance sector and the team is under no illusions. There is a learning curve in terms of engagement with stakeholders and clients.

PETER JAMESON

Head of Trade & Supply Chain Finance, Asia Pacific, Global Transaction Services, Bank of America

VENKAT ES

Head of Treasury Product, Asia Pacific, Global Transaction Services, Bank of America

crisis that providing a sustainable cushion of working capital to their suppliers is in itself a sustainability tool," he explains. "Keeping suppliers afloat is about sustainability in every sense – supporting the community and ensuring business runs smoothly."

Another ESG-related area that has been accelerated by the health crisis is digitalisation. Shifting from paper to electronic workflows improves efficiency, reduces waste and reduces the corporate's carbon footprint. And the statistics here are eye opening. According to estimates from Gartner, Inc, a typical office worker uses 10,000 sheets of paper a year and up to 3% of a company's revenue is spent on paper, printing, and related filing and storage activities[1].

Importantly, comments Venkat ES, Head of Treasury Product, Asia Pacific, Global Transaction Services, Bank of America, digitalisation also facilitates inclusivity by lowering the barriers of entry for business customers and suppliers, with digital channels enabling greater access to new networks, regardless of geography.

Global versus local

It's worth noting here that location is a dynamic ESG element, since different commitment levels have arisen between geographies. Europe has quite an advanced outlook, Moi feels, certainly in terms of investor requirements and the regulatory position of traditional institutional investors that have been driving the ESG conversation.

"What we're seeing now in Asia is an opportunity to take the lead from a regulatory perspective," she notes. With a number of authorities in the region exploring closer integration of climate-related risk, and stock exchanges requiring more ESG-related reporting as part of listing requirements, she believes this will drive the requirement for all participants to know and understand their ESG exposures.

Greater understanding will incentivise the development and adoption of sustainable finance products, like sustainable loans, green bonds and social bonds. And with a number of countries in Asia having made commitments to net zero carbon emissions – including Japan, Korea, New Zealand, Hong Kong and China – Moi says this will further widen the regulatory umbrella covering companies operating in this region. "In particular, large corporates headquartered in Asia are going to have to really up their game in terms of ESG governance and digital integration. Other geographies will follow suit, but perhaps not at the same pace."

ESG within treasury

These changes signal the importance for treasurers of embracing ESG as part of their own role, argues Jameson. While some may believe ESG is a matter for other functions to address, the treasurer's role as the 'central bank of the corporation' gives them more influence over corporate behaviour than many think.

"From my perspective, treasury is critical in all of this," he says. "They are at the centre of financial decisions. Whether extending better payment terms to ESG-certified suppliers or higher ESG-scoring customers, or placing ESG investments such as green deposits, treasurers need to be not only aware of and thinking about ESG, but they also need to be at the centre of it."

Of course, green loans were the origin of much ESG thinking in finance, but Jameson says clients have gone beyond simple acceptance of the product and are giving serious consideration to both

sides of the balance sheet. "They also want to understand how that loan is being funded by the bank," he notes. "They have progressed and are thinking about reputational risk too."

At a practical level, another way for treasurers to attain a significant boost to their understanding of ESG elements is by opening up digital channels and providing tools for automation. Indeed, when it comes to traditional banking in Asia, Venkat notes that local regulations can mean a heavy burden of document provision.

"There is a weary acceptance of paper-based processing in payment initiation, collections and statement processing across many Asian countries," he notes. "But data flow and visibility can be improved dramatically through the adoption of emerging technologies. With a change in mindset that steers treasury away from paper towards digitalisation, more light will be shed on all supply chain data. This is vital from the perspective of understanding supplier's ESG credentials, but it can also lead to significant cash and working capital efficiencies. It's a double-headed benefit."

Like Venkat, Moi sees corporates feeling increasing responsibility for their own and their partners' ESG commitments. "They have to know and understand the standards, measurements, reporting and the traceability of everything that's happening," she says. "This is no longer a tick-box exercise that they can execute and walk away from. Treasurers have to play their part."

Staying in the know

Keeping tabs on changes made internally, and those of external partners, is inevitably more challenging as ESG sophistication increases. For some time, agencies have offered independent assessments and ratings. But reporting of ESG has seen a real leap forward in terms of quality in the last year or so.

"The standards by which companies report has developed significantly, in that they now feel the need to employ auditors and to be certified, means the quality of data emerging can be trusted," Moi says. As more stringent specifications are issued by investors, activist groups and ratings agencies, credibility must be proven. Eventually, reporting standardisation across the E, S, and G dimensions follows.

Of course, this may be an issue for smaller suppliers that may not have the sophistication to meet reporting and certification requirements. But this is where tools such as sustainable SCF can help investment in resources, which then raises the quality of the entire supply chain. Under such an arrangement, suppliers are incentivised to meet certain sustainability criteria through more favourable financing rates. If these criteria are not met continuously, the financing returns to the less favourable base rate.

That said, the narrative around client exchanges is moving on, says Venkat. He notes that ESG is now cited as "a must-do rather than a nice-to-have". These conversations are shaping financial strategy, and treasurers are key to this change. Having a bank on board that is demonstrably committed to ESG is also vital, not least in an era of evolving regulation.

Are you ready?

In an effort to integrate ESG into companies' business as usual practices, Moi has seen leading corporates setting goals and changing business models to reach them. "In the last 18 months we've seen the need for companies to pivot, and to do so extremely quickly. This is only going to intensify as the internal and external ESG drivers become more powerful" she notes. "If you plan properly for this ESG-focused future, and factor in transition risk, then you will be well equipped to react in time to operational, commercial and regulatory risks."

Venkat adds: "It's highly likely that competitors will be looking at opportunities to invest in technology and R&D to meet ESG goals. And it is a certainty that as investors become increasingly sophisticated in their demands, so corporate reporting of accurate ESG metrics must keep up. More information and transparency is required."

Jameson echoes this, noting: "We are seeing incredible progress in this space, bringing huge benefits to those already investing in sustainability. Leading treasury professionals are integrating ESG into everyday tasks and processes. This demonstrates that treasury has a unique opportunity to be at the centre of sustainable changes." ■

PUTTING ESG INTO ACTION

Bank of America is continually investing in and embracing ESG initiatives, including:

Environmental business commitment
Bank of America's Environmental Business Initiative will direct $1tr. to low-carbon, sustainable business activities by 2030.

Green, social and sustainability bonds
Since 2013, Bank of America has issued $9.85bn in eight corporate green, social and sustainability bonds.

Covid-19 support and equality progress
In 2020, the bank issued a $1bn corporate social bond to support those on the front lines of the health crisis; and a first-of-its kind $2bn equality progress sustainability bond to help advance racial equality, economic opportunity and environmental sustainability.

Women's economic empowerment
Bank of America expanded opportunities for 50,000 women entrepreneurs, with a focus on women of colour, to participate in the Bank of America Institute for Women's Entrepreneurship at Cornell.

Sustainable finance
In 2020, the bank mobilised and deployed approximately $100bn in capital to support the environmental transition to a low-carbon economy, as well as inclusive development focusing on affordable housing, healthcare, education and racial/gender equality.

Source: Bank of America Annual Report 2020

Notes
1 https://mydatascope.com/blog/en/how-much-paper-waste-is-costing-your-business/

Roundtable Debate

What is it Really Like Working with a Fintech?

Innovations in treasury technology and processes are vital for future-proofing the function. But how can treasurers decide who to partner with – banks, vendors or fintechs – to help implement cutting-edge solutions? Or should they innovate in-house? TMI's Innovation Lab brought together three experts from different fields to fight their corner in this debate, while exploring how fintechs slot into the treasury ecosystem.

By **Eleanor Hill**, Editor

Eleanor Hill (EH): Why is it actually important to be innovative in corporate treasury? Is it ever OK for treasurers NOT to innovate – or to be slow in adopting innovations?

Mario Benedict (MB): Speaking to clients, the pandemic has accelerated the thought process around innovation enormously. Previously, any kind of digital transformation project came from the top of the house, but this is now driven by corporate treasury. Automating and streamlining processes is arguably more critical than ever, especially in the era of real-time data. This makes it very tough not to innovate – in fact, innovation is becoming an integral part of the treasurer's role. And from a corporate perspective, now is a great time to think about innovation and how to make use

ROUNDTABLE PARTICIPANTS

Gerard Tuinenburg, Director Systems, Innovations and Transactional Banking, Unilever Treasury

Mario Benedict, Head of APIs and Open Banking, EMEA- Digital Solutions, Wholesale Payments, J.P. Morgan

Zitah McMillan, Co-Founder and CEO, Predictive Black (a fintech that offers an AI-powered financial solution to transform cash-related data into a dynamic vehicle for growth and value creation – in real-time)

Moderator:
Eleanor Hill, Editor, TMI

of innovative treasury technologies, such as application programming interfaces (APIs), to add value to the organisation.

Gerard Tuinenburg (GT): I agree with Mario. While treasurers may have been more reactive in the past, there is now increased pressure on the operational side to be more proactive. Business models are changing, with the growth of e-commerce being a prominent example, which is driving change in treasury. Rather than being a reactive cost centre, there are increasing strategic demands being placed on treasurers and they are expected to come up with innovative ideas and analysis that support the company's growth ambitions.

Zitah McMillan (ZM): We also need to be honest about what we mean by innovation. On the one hand there is 'out there' innovation, where fintechs are experimenting with cutting-edge technology that could sometimes be considered too innovative for treasury. But on the other hand, there is tried-and-tested innovation that can add concrete benefits to treasury operations right now. It's important to recognise that there are levels of innovation. We shouldn't allow the word to be a deterrent to progress itself. Sometimes the innate bias to avoid risk will mean we avoid innovation because it sounds like it's going to be a high-risk, resource-heavy project. In reality, innovation is about getting what you need, when you need it and solving a specific problem you have. It may be an effective solution, or it may just be a better version of what you've got today. That's true innovation.

GT: That's a good point. Within corporate treasury, processes are relatively small in nature, but are part of a group-wide workflow. As such, it's very difficult to make a complete change to such a process and to be radically innovative. But a small change can often be 'good enough'. Innovation doesn't have to be earth shattering, also smaller continuous improvement activities can add a lot of value.

***EH:* What would you say is the number one area where treasurers want more innovation today?**

GT: In fairness, there is a lot of innovation happening already. Mario touched upon APIs and the era of instant information and this is a critical topic for treasurers in terms of real-time cash and liquidity – not least because of increased volatility caused by the Covid-19 pandemic. As well as having current visibility over cash, the predictive side of things is incredibly important. It's relatively easy to report on your past because it's on the balance sheet and in your TMS [treasury management system] as a transaction. The harder part is to know what's going to happen in the future with your cash forecast or with your working capital. Being able to operate in real-time and to enhance forecasting models for better accuracy in liquidity management are two key areas where corporate treasurers would appreciate further innovation, in my view.

ZM: Absolutely. The predictive element is something almost all treasurers seem to be yearning for, because it's something that most teams don't feel they are able to accomplish themselves. It's here that treasurers will look to bring in external resources that enable them to generate reliable predictive models. But to have the predictive capabilities, you need the real-time data first. There are a lot of companies which aren't quite there yet and they need to make a step change before they can progress to the predictive element.

Some treasurers also find the predictive modelling side of things to be uncomfortable because some of the 'thinking' is carried out by a component that is based on machine learning [ML] or artificial intelligence [AI], since that's where the power lies. Personally, I'm interested in exploring how to encourage treasurers on that journey towards adopting more predictive looking data and how they put it to use. There's no point having it if you're not going to use it.

GT: At Unilever, we have a team called the Automation Factory, which is based in India. It started about four years ago with five people and has grown rapidly since. This team looks at robotic process automation – RPA – but also at in-house predictive and cognitive analysis such as ML and AI, for the whole of Unilever. The Automation Factory focuses a lot of time on the supply chain, but departments throughout the organisation can leverage its expertise. From a treasury point of view, we have also worked on RPA projects with them. For example, we've had discussions about working capital and looking to introduce predictive capabilities for debtor and creditor management.

MB: I agree with what Gerald said earlier, that real-time treasury is the number one area of focus for most treasury functions right now. At J.P. Morgan, we are hugely focused on how we provide the real-time data to our clients. But, as Zitah also said, the real question is 'what do you do with that data'? Unless you have that forward-thinking mindset within treasury, and the sponsorship within the organisation, like Gerard's example from Unilever, it can be tough to use the data to great advantage.

***EH:* What benefits does collaboration between banks and fintechs bring for corporate treasurers?**

MB: One of our main innovation strategies is co-creation. The days when banks would innovate behind closed doors, and then bring a new product onto the market for all clients, are gone. Today, it's all about how you co-create with a corporate client,

> *Business models are changing, with the growth of e-commerce being a prominent example, which is driving change in treasury.*

meaning how do you solve a particular client issue in collaboration. Often this will involve working alongside a fintech.

I think clients, like Unilever, are increasingly comfortable dealing with a fintech if it's already aligned with a bank's products. Not only does this benefit the fintech, but if it is successful then we can replicate that for our clients, so there are huge benefits in collaboration.

> *Everything that is now going on around APIs and real-time still has to become mainstream – and I think we will see this move beyond early adopters over the coming years.*

GT: Banks and fintechs working together provides the best of both worlds. You get the entrepreneurial drive and the systems on the fintech side, and the stability to the partnership on the bank side.

EH: Would you consider working directly with a fintech these days, without the bank partnership?

GT: Absolutely – as an example, we use a specialised TMS, but the cash forecasting module in that solution is not as good as we need it to be. So, we reached out to Cashforce, a fintech specialising in forecasting software, and we will start using their tool later this year. What we want to have included in our new set-up is an API connection with the banks that links with Cashforce and we are talking with Mario and our other bankers to arrange this at the moment.

MB: Yes, that's a fantastic example – and it also points out how banks can support fintech solutions behind the scenes.

GT: It is quite obvious which banks have invested in this area – and which haven't. In my experience, the large US banks seem to be a little further ahead when it comes to the ability to use APIs to connect with corporates and fintechs.

EH: Zitah, from your perspective, how do you feel about working with a bank? What are you seeing in terms of treasurers wanting to work directly with a company like Predictive Black?

ZM: Being part of the fintech community, I'm starting to observe a maturity that I think had been lacking previously. A few years ago, being a fintech meant that you needed to be hugely disruptive, and some fintechs might not have wanted to work with big corporate partners back then. Things have changed. There is a greater degree of respect from fintechs now for what the banks and the large corporate partners can provide to their own business. There's also a recognition, as Mario and Gerard have said, that we can do good things by collaborating together on behalf of clients. I think both sides have reached a sort of unspoken agreement – and that's brilliant.

EH: How can we measure the success of an innovation? It can be quite difficult to look at ROI [return on investment] or define some of the softer benefits, for example. And how can we tell when an innovation has run its course?

ZM: From my perspective, there's still too much focus on the output rather than the outcome of the process. The end benefits may take some time to emerge and people have a tendency to get bored by the time you get there. Hopefully Mario can tell me I'm completely wrong, but I feel that a lot of the innovation measures are still quite old school!

MB: I have to agree. Innovation is just measured like any other product roll-out. But it is a much longer-term project. Take our API investment, for example. We continue to invest in APIs and open banking, as we have done for several years. Innovation requires a longer-term mindset.

You have to celebrate the small wins, because it is a journey. Another important point is knowing that it's OK to fail when innovating, but we always say to 'fail fast'. If you try something and it doesn't work, it's OK to admit that and find another angle to explore. It isn't failure, you've proved that the concept hasn't worked and you then plan for something else.

MARIO BENEDICT

Head of APIs and Open Banking, EMEA- Digital Solutions, Wholesale Payments, J.P. Morgan

GERARD TUINENBURG

Director Systems, Innovations and Transactional Banking, Unilever Treasury

***EH:* Looking ahead now, what innovations or technologies do you think will redefine treasury in the next few years?**

GT: Everything that is now going on around APIs and real-time still has to become mainstream – and I think we will see this move beyond early adopters over the coming years. An area where I see major changes coming up is on the payment side. SWIFT is doing quite a lot of work around the ISO 20022 standard, for example. And we see countries looking to develop central bank digital currencies [CBDCs] too. On top of that, the whole area of real-time payments is going to have a significant impact on e-commerce and how companies receive funds, so that's a definite area to watch. Treasurers will need real-time cash and liquidity tools to help keep pace.

MB: When we talk about real-time data, there's still a way to go, particularly with regard to making it easier for corporate clients and large institutions to consume the data. ERP and TMS vendors as well as fintechs are focused on this, which will hopefully bring about a change for the better.

Open banking will also take on much more relevance for corporates. So far, open banking has been predominantly focused on innovation in consumer banking. Increasingly, we are looking at innovation in the corporate banking space, particularly around how you bring open banking together with a traditional payment method. For example, bringing open banking into the direct debit process. Before corporates run direct debits, they can validate accounts so that when they collect the direct debit, they know you're not going to have a rejection or a fraud. Capabilities such as this, particularly when clients are thinking about moving into e-commerce and the business model change that goes along with that, can be extremely valuable. There's more to be done here, especially as subscription-based economies continue to grow.

Finally, we see a number of use cases for distributed ledger technology, not least in the digital currency space. At J.P. Morgan, we're looking at JPM Coin, which we're exploring for faster settlement. That could have a huge impact on the way treasurers operate in the future.

ZM: Payments is certainly the place that has been very exciting and still offers more excitement to come. But we're still a few waves off the current innovations and tech actually starting to gain significant momentum and scale.

From my personal perspective, I'm looking at technologies where ML becomes normalised as part of the process. The full benefits of ML are still yet to be fully understood and explored. But we also need to be conscious and cautious about not terrifying people too much about what is coming down the pipeline. There are innovations that need embedding before we move on to the next step.

***EH:* What's your best piece of advice for helping treasurers to make the most of innovation?**

ZM: I would encourage treasurers to have more conversations, both within their peer community, but also with tech firms that are providing solutions. Even if it's not necessarily a conversation about a technology they want to adopt, things are less scary when you understand them better. So, my advice to treasurers would be to schedule some time to see what is out there for your business, so that you are comfortable that what you're doing is right, or at least you have a plan to consider options. Nothing is ever as terrifying once you've had a conversation with someone who knows the technology well. Don't be afraid to take that first step – it doesn't mean you're signing up for anything!

GT: That resonates with me. One of the things we did a couple of years ago was to try to find out how much of our processes are really rules-based. Everybody thinks that treasury is special and has unique qualities, but if you sit down and analyse it, quite a lot is rules-based and can be part of an RPA process or another automation process quite quickly. Just thinking about your own processes and how your data is structured is already a good thing, as is having the discussions with partners who might have additional insights, just as Zitah said.

ZITAH MCMILLAN

Co-Founder and CEO, Predictive Black

MB: Digital transformation is an ongoing journey, so start with something small. With Gerard and Unilever, when they were looking at ways to better access their data, they were not ready to do a full integration into their TMS – actually, they were still thinking about a TMS at that point – so an easy solution was an Excel plugin. It was as simple as that. Something small can help you to touch and feel the data. Then you can weigh up which part of that data is worthwhile and move on to bigger things like the API project a little later. So, don't think that innovation has to be groundbreaking. Doing something small can be a useful way to put in place a building block for your longer-term strategic vision. ■

> ***"Digital transformation is an ongoing journey, so start with something small."***

Preparing for the Next Crisis

10 Steps for Treasurers

No-one can predict where the next crisis will come from, or what form it will take. It could be another wave of Covid-19, or a different challenge altogether. Regardless of the source of any future turmoil, treasury teams can build on lessons learned from 2020 to be better prepared. Here, three HSBC experts share their insights around making treasury 'crisis-ready' – from mining data and embracing real-time payments to upskilling team members and placing sustainability centre stage.

By **Eleanor Hill**, Editor

If a spider's web were human-sized, it would be strong enough to catch an aeroplane[1]. This is not only because spider silk is stronger than steel, and even kevlar, but also because it is flexible. During high winds, the strands of a web soften to allow it to flex without breaking[2].

This demonstrates that successfully weathering a storm is not just about having solid foundations; the ability to be nimble

in response to events is just as important – as corporates discovered during the Covid-19 crisis. According to Jared Smith, Managing Director, Global Head – Corporates, Global Liquidity and Cash Management, HSBC, "Corporates have done an incredible job in responding to the pandemic and shifting their operational models, almost overnight".

Digital ways of working have quickly become the norm, with treasury teams across the globe working from home. "Business models have also evolved, with companies exploring e-commerce and direct-to-consumer sales in a bid to overcome the logistical challenges of reaching consumers through traditional outlets during global lockdown," says Smith.

Evaluating progress

Despite the undeniable pivot towards digital treasury*, it has not been plain sailing for all treasury functions. Smith elaborates: "The pace at which events unfolded took most corporates by surprise. We witnessed a few limited media reports about a new virus in January 2020, which suddenly turned into a worldwide pandemic by March. With this came a global liquidity crunch, extreme levels of FX market volatility and, subsequently, central bank decisions to cut interest rates. This resulted in many companies struggling to access immediate liquidity."

Not all corporates were ready to shift to remote working on such a large scale, either says Smith. "For those that relied on manual processes, there were some initial challenges to overcome. Traditional paper-based markets where cheques are commonplace had many more hurdles to contend with – ranging from the logistics of enabling remote access to exploring digital ways to pay and receive."

Noor Adhami, Managing Director, Regional Head of Middle East, North Africa and Turkey (MENAT), Global Liquidity and Cash Management, HSBC, has witnessed many such struggles on the ground. "Some pockets of the MENAT region were not as advanced in terms of digitisation, especially when compared with progressive areas such as The United Arab Emirates [UAE]," she explains. "As well as the overnight shift away from longstanding paper-based processes, clients were thrust into an unknown world of remote working. Culturally, this is not a common phenomenon in many parts of MENAT."

Fortunately, she says, HSBC has always been forward-thinking in this regard. "We've had remote access enabled for employees for well over a decade, and been at the forefront of assisting clients with everything they need for working away from the office – from soft tokens for accessing the banking portal to cybersecurity training. We've also placed a huge focus on helping clients to transition to digital ways of working."

With many successful stories of digitisation to tell, Adhami believes the pandemic has shifted mindsets in the MENA region. "Where some clients were tied to legacy ways of working, they have now opened their hearts and minds to digital channels. So, while the human cost of the pandemic has been unspeakable, Covid-19 has motivated our clients to embrace ways of working that will help them to grow, prepare for the future, and be more resilient," she comments.

Mark Evans, Global Head of Payment Advisory, Global Liquidity & Cash Management, HSBC, agrees: "Treasurers have progressively moved their operating models away from paper. We've seen more clients searching for our digital solutions on the web, and this has translated into a record numbers of online enablement. The shift to mobile has also accelerated, with downloads of our HSBCnet Mobile app and mobile transactions up by more than 700%. In turn, we have seen a significant reduction in cheques and paper. These digital shifts are setting clients on the path to becoming resilient and agile enough to cope with future crises, regardless of the origin of those challenges."

That said, there is always more to be done. "Although changes have been made in organisations – and in some cases these adaptations have been almost revolutionary – this is just the start. Treasurers must now continue the

> *As well as the overnight shift away from longstanding paper-based processes, clients were thrust into an unknown world of remote working. Culturally, this is not a common phenomenon in many parts of MENAT.*


INSIGHT

The Resilient Treasurer

Building a Digital Armoury for 2021

By Eleanor Hill, Editor

To find out more about digital journeys throughout the pandemic and tools for building digital resilience, please read our article The Resilient Treasurer: Building a Digital Armoury for 2021. *(TMI 280, Page 26)*

View our infographic for a broader overview of digital treasury resilience.

treasury-4-0.com/hsbc/NA/382/the-resilient-treasurer-infographic.html

great work they have begun and ensure improvements roll on consistently, rather than reaching a plateau," Evans comments.

Forging ahead

The experiences and lessons learned from the Covid-19 crisis can help to create a roadmap for this continuous improvement journey. Smith kicks off with, in his eyes, the number one priority:

1. Maintain visibility and control, always
"Visibility is a treasury fundamental; yet many companies didn't have a complete line of sight over their cash prior to Covid. This was often a result of under-investment in technology, but also of complex legacy cash management structures and relationships, " he reflects. Fortunately, with the spotlight firmly on treasury, "The board now understands the pitfalls of only having an end of day cash position, and real-time visibility has become essential."

Evans adds: "Actively managing payments and receivables during the crisis, in real-time, had a direct effect on organisations' ability to respond to the crisis in a robust manner. Instant visibility also led to an increased ability to forecast accurately, with the help of intelligent tools, such as our new cash flow forecasting solution [see point 3 for more information]. This meant that the treasurer could make informed and timely decisions, enabling the organisation to be nimble even during the toughest times – which is a key component of a crisis-ready approach."

2. Ask smarter questions
Adhami builds on this, saying: "Once treasurers have visibility, they can start asking smarter questions." She points to liquidity buffers as a prime example: "At the height of the Covid-19 crisis, many companies drew down on their revolving credit facilities [RCFs]. It was understandable as no-one knew what was going to happen and they wanted a safety net. But 'safe' does not necessarily equal 'effective' or 'efficient' liquidity management." To be crisis-ready, corporates must take the time to stress test liquidity positions and look at the buffer that's truly needed, she believes.

Technology can assist in this endeavour. "Now treasurers have digital access to 24/7/365 insights, and visibility and control over cash flows both domestically and internationally, they can start to really slice and dice their cash positions," she says – pointing to the bank's Liquidity Management Portal as a helping hand, here. Armed with this insight, she says treasurers can also review their entire cash and liquidity structure, and assess the potential of solutions such as next generation virtual accounts to help them "work smarter, not harder" – and be ready for any future turmoil.

JARED SMITH

Managing Director, Global Head – Corporates, Global Liquidity and Cash Management, HSBC

3. Harness data like never before
Of course, underlying these 'smarter questions' is smart data. Before the pandemic, treasury teams did not always fully appreciate the value of real-time data, or simply didn't have the luxury of accessing it, says Smith. "Now that treasurers have digital set-ups, they will be looking to leverage centralised data sets in deeper ways. They realise that to be increasingly nimble, they need actionable data insights, not just information."

As a result, Smith believes that we will likely see greater use of tools such as application programming interfaces (APIs), robotic process automation (RPA), artificial intelligence (AI) and predictive analytics going forward. Evans also flags APIs as tools fit for a crisis-ready treasury team. "With APIs, corporates are exploring new ways to consume our services – and the data we hold – in an 'on demand,' streamlined manner. We have a suite of APIs, with functionality ranging from reporting to payment initiation and payment tracking. If a treasurer needs a

MOVING MOUNTAINS IN MENAT

HSBC has been helping clients across the globe to progress their digital journeys. But adding more detail on the move away from paper in MENAT in particular, Adhami says: "Usage of HSBCNet is up 134% in the region and mobile transactions, which started from a very low base, have increased by 1037%. More or less all payments are now being made digitally."

She continues: "Of course, we work with our clients to adapt at a pace they are comfortable with, but switching off manual alternatives is also important in ensuring clients transform in line with the market. In the UAE, HSBC was one of the first banks to mandate that all payments must be conducted via digital channels, and we're up to circa 98% client compliance. We're also working on similar initiatives in other parts of the region.

This digital effort has clearly paid off. "Feedback from clients around our response to the Covid-19 crisis has been incredible," says Adhami. "They praised our readiness and the fact that our client service teams were – and are – always available to answer queries. HSBC was also the only bank in the region that was able to commit to keeping the same cut-off times for making cross-border payments and, as matter of fact, increased the window for FX trading, which has been a huge benefit to our clients."

Adhami's team has also been proactive in educating clients on the further potential of digital solutions and improving cybersecurity (see below for more information on these topics). "I cannot over emphasise the importance of the relationship aspect of what we do as a bank," she says. "Yes, technology is critical, but our people are the backbone of our organisation – and the key to helping our clients through a crisis."

balance on an account, they simply ping the bank via an API and the response will come back in a few milliseconds. That's an incredibly powerful tool at any time – but especially during a crisis."

On the data analytics front, Smith points out that "It has been a challenge for some treasury teams to engage with data analytics: they haven't had the budget, the in-house talent to leverage it, or even the time to properly consider the value it can add." But banks are now building functionalities into their corporate offerings which enable treasurers to make use of these technologies, without the resource burden.

Smith cites HSBC's new cash flow forecasting tool, and intelligent receivables capabilities (in conjunction with solutions such as virtual account management), as examples. The former not only enables forecasting at the touch of a button, but also enables the analysis of customer payment behaviours. In turn, this arms treasury with insights on where to focus the collection team's efforts, and potentially, which customer relationships are no longer tenable. Meanwhile, the latter leverages 'smart' technology – such as artificial intelligence and machine learning – to automate tasks like matching invoices, including part payments. In turn, treasury is freed up for more value-added duties.

4. Upskill the treasury team

Even with data crunching done by banks or technology on their behalf, treasury teams of the future will still require a certain 'fluency' with data. Evans comments: "With this shift towards data-driven treasury, and towards digital business models, companies must not forget that the workforce also needs to evolve." Team members, he says, must have the ability to understand technology and 'read' data in meaningful ways.

It is also important to build a culture in which existing team members feel comfortable pointing out areas where they need upskilling, Adhami cautions. "People can be the strongest link in the treasury function, or the weakest. Culture and training both play a vital role in making the treasury team resilient," she says.

5. Protect against fraud and cybercrime

Nowhere is the need for good training more evident than the world of fraud prevention. Cyberattacks and fraud attempts have increased as a result of Covid-19 – with criminals taking advantage of organisations making huge changes to their operating models**. Adhami says that, as a result, the bank has been conducting "Even more frequent cybersecurity training sessions with clients, and enhancing its own security measures".

Smith adds: "The more we rely on technology, the more critical it becomes to have adequate fraud and cyber protection in place." Nevertheless, technology can also help in the fight against 'bad actors'. "From biometric security innovations to payment outlier detection tools, technology is one of the most effective ways of staying protected. Algorithms can also continually learn how to mitigate fraud," he says.

With this in mind, Smith argues that having access to cutting-edge fraud and cybercrime prevention technologies is now critical when looking to prepare for future crises. And according to a poll conducted by Treasury Management International (TMI) in October 2020, 22% of treasury professionals agree – citing 'fraud protection services' as their number one technology for helping to weather another unexpected event.

Since treasurers do not necessarily have access to the latest cybersecurity tools themselves, they are reliant on their banking partners to provide them. Banks will likely be investing more heavily in this area therefore, while treasury RFPs will doubtless be updated to reflect the evolving nature of cyber and fraud threats.

6. Implement true real-time processes

The results of the TMI survey mentioned above also found that 57% of treasurers believe real-time data and transactions will be the best tool for assisting them to navigate future crises successfully. While the importance of real-time data has already been discussed, Evans stresses that it is critical not to overlook the transactions themselves – and wider treasury workflows.

"Real-time payments and collections can assist enormously in optimising working capital – with funds coming in 24/7/365 and monies being paid out 'just in time'. But it is important to note that real-time payments are only truly efficient when they are executed in real-time," he says. "This requires corporates

NOOR ADHAMI

Managing Director, Regional Head of Middle East, North Africa and Turkey (MENAT), Global Liquidity and Cash Management, HSBC

> *"Treasurers must now continue the great work they have begun and ensure improvements roll on consistently, rather than reaching a plateau."*

GREEN DEPOSITS

HSBC has responded to rising ESG demand with a green deposit offering, which is currently available in the UK, Singapore and India. This product allows corporates to place a deposit that is subsequently ring-fenced and used to fund HSBC's portfolio of qualified green assets.

to move away from batch processing. Interestingly, going through this shift has enabled clients to look more closely at who they're paying and when/if they can leverage that for competitive advantage."

He cites marketplaces for gig economy workers as an example. "In that environment, an employer offering an instant way to pay workers can make themselves more attractive than a competitor, helping to secure the best talent for their project. This kind of advantage could be critical for a company that has seen a boom in business as a result of a crisis situation," he notes.

7. Modernise your supply chain ecosystem

Another area that Evans believes is important to review is the network of organisations that treasury connects with, both internally and externally. "Preparing to withstand future crises is not just about looking at the treasury organisation in isolation. Corporates must proactively work with their counterparties and their own customers and suppliers to digitise everything in their sphere of interaction. Incentives will be key, such as small discounts for electronic payments, rather than cheques, from buyers – or faster payments if suppliers interact in an entirely digital fashion."

Smith echoes this, adding: "A treasury function can't be truly digital unless the counterparties it deals with are prepared to be part of that digital journey too. Taking an ecosystem approach to digitisation is an important aspect of future-proofing."

8. Make ESG part of BAU

Elsewhere, ESG and sustainability remain a top priority, not just for clients, but also for many corporate employees, regulators and shareholders. Says Smith: "The crisis has generated a huge focus on business practice and ethics, together with wellbeing and the role of corporates in supporting communities. As a result, we feel that it's no longer an optional aspect of treasury strategy – it's a necessity. What's more, all treasuries have the ability to make a positive contribution, regardless of the sector they operate in."

And while Smith admits that "Treasury is not the traditional home of ESG," he believes that with the move towards digital, and the elimination of paper from treasury processes, sustainability is being highlighted. "Treasurers are also looking for creative ways to support the organisation's wider ESG goals through green and/or sustainable cash and liquidity management solutions***. And as consumer behaviours continue to shift in favour of sustainability, corporates would do well to build ESG into their resilience plans, and indeed their blueprint for business as usual," he believes.

9. Review with a risk lens

Alongside the exciting tasks of embracing new technologies, exploring data insights and becoming more sustainable, treasurers must also revisit their policies and procedures, says Smith. "This might not sound like the most interesting prospect, but actually there is an opportunity for treasury to embed risk management even more deeply into the department and its workflows," he notes.

"It is no longer sufficient for treasury to only have policies for traditional areas of risk like FX and interest rate movements. Treasurers need to approach their role and responsibilities with a fresh risk mindset and have documented guidance to follow in the event of another unexpected occurrence of this magnitude."

10. Keep pushing ahead

As much as it is important to look in the rear view mirror and to learn lessons, what matters most when preparing for the next crisis, says Adhami, is to make sure that positive change is sustainable. "Now that we are on the digitisation journey, there must be no turning back."

There can also be no stopping, she says. "As a corporate, it would be easy to reap the initial 'quick wins' of digitisation and be satisfied with those alone. But there are many additional benefits to be had: data that can be mined; processes that can be optimised; new technologies like blockchain that can be explored."

Even if a treasury function is 100% digital in their operations, there is always further innovation and optimisation to be found, she believes. "Crisis-ready companies, never stand still or rest on their laurels – they explore the boundaries of the possible and consistently push them further," she concludes. ■

MARK EVANS

Global Head of Payment Advisory, Global Liquidity and Cash Management, HSBC

A HELPING HAND

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Note

1 *https://www.sciencemag.org/news/2018/11/spider-silk-five-times-stronger-steel-now-scientists-know-why*
2 *http://www.planet-science.com/categories/over-11s/natural-world/2012/02/strong-like-spider-silk.aspx*

Instant Reactions

The Value of Currency Management Automation

With risk, cost and process inefficiencies multiplied by complexity, spreadsheet-based currency management has surely had its day. But what added value does currency management automation software bring to the table? In this roundtable discussion, three industry experts explore the opportunities.

EH: What do you consider to be the main disadvantages of managing currencies on spreadsheets versus purpose-built technology?

TR: The first thing that comes to mind is the operational risk. Excel often has a life of its own. Spreadsheets tend to pass through many different hands, becoming more complex, often to a point where nobody dares touch the formulae, even when they need to be updated because the underlying business has changed. Companies can find they've built their own 'black boxes' that no one fully understands.

Using Excel can also increase the risk of making mistakes and of not understanding or even being able to find or correct those mistakes. But it goes far beyond operational risk. With large values, currency volatility can create a huge impact on corporate accounts. A company may implement a robust foreign exchange [FX] policy, but through the inherent risks of using Excel, if those processes are not being followed in real time, FX risk can increase. Also, the labour-intensity of spreadsheets detracts from time spent on other activities, so it's worth asking if this model is imposing limitations.

JL: Managing execution risk is absolutely critical. Moreover, when a software, like Excel, is used for a purpose for which it was not necessarily designed – we call it shadow IT – there's always a time lag between when the FX risk is created and when the exposure is actually managed. With Excel, there's indeed no live monitoring, and in today's volatile markets, that's a risk in itself.

PANELLISTS

Toni Rami
Co-founder and Chief Growth Officer, Kantox *(TR)*

Jacques Levet
Chief Digital Officer, Global Markets - Corporate Franchise, BNP Paribas *(JL)*

François Masquelier
CEO Simply Treasury, chairman of Luxembourg Corporate Treasury Association ATEL *(FM)*

Moderator:
Eleanor Hill
Editor, TMI *(EH)*

FM: I think there's an overuse of Excel for FX management, and it stubbornly remains a manual process among corporate treasury in Europe. The rise of home working (or remote working) during the pandemic has increased risks too. Using Excel gives people a very individual tool; it's too easy to duplicate operations or fail to hedge because you assumed someone else was doing it. Excel demands perfect co-ordination – which rarely happens in reality! A more robust, automated approach makes it easier to track activities, enabling better execution and adherence to procedures and policies.

EH: What might a more robust, automated FX workflow look like in practice?

TR: The aim is to create an end-to-end FX workflow [see Figure 1]. Depending on the business need, there may be multiple pre-trade, trade, and post-trade tasks, with a number of subtasks, all of which might occur daily, monthly or yearly. Each exposure must be understood and processed according to what's required. And, typically, there will be several functions fighting their own corner, somehow trying to communicate their own needs using their own spreadsheets, reporting their own exposures and budgets via email, for another department to run calculations, and another to trade.

Even with an ERP [enterprise resource planning] system or TMS [treasury management system] and a multi-dealer platform [MDP], the communication process can become fragmented and error-prone – and this is replicated for every single trade, with some companies making hundreds of trades per month. Currency management automation is about breaking down silos and then 'gluing' them all back together using a common platform. Importantly, it is not about creating another autonomous function but a single connected flow across the piece.

FM: I absolutely agree with Toni on this. When you see the FX process broken down, you understand just how complex it is – and how much automation could assist. ERP software typically fails for this kind of task, and even the best-of-breed TMS cannot give treasurers all the functionality they need. Something additional is required to create a more complete picture.

JL: Withoutwanting to make this discussion commercial, the partnership between Kantox and BNP Paribas is a good demonstration of this additional layer. Kantox brings the technology, which delivers the streamlined and automated capabilities that Toni spoke about. Meanwhile, BNP Paribas brings the ability to price and provide liquidity, even in troubled markets like we experienced last year.

Importantly, though, we strive not to disturb a client's existing processes when we present them with such innovative solutions as Kantox. A successful implementation of any innovative solutions indeed depends on its ability to integrate within our clients' existing ecosystem, with minimal disruption.

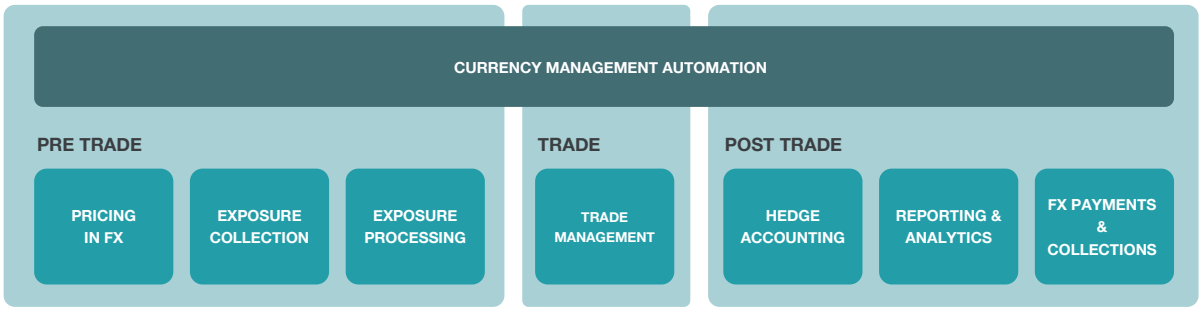
EH: One interesting aspect that arose from the recent TMI/Kantox survey was resistance to change, with fear of jobs being taken by technology. How can that fear, and other objections, be overcome?

TR: While people sometimes think that by introducing automation they will lose control, the reality is that automation allows more control. That is the big difference between manual and automation: intervention at the right time.

Arguments that an automation project cannot be justified because there isn't enough budget, or that there is resistance to change are just excuses, in my view. The risks and limitations a company runs by employing manual processes can very easily be put into numbers. And management needs reminding that treasurers are not there to process repetitive tasks; they can make a difference as more strategic players if they define treasury policy from the point of view of the whole company and not just what can or can't be done in Excel.

JL: In a study that we jointly carried out with the BCG a few years back, we distinguished the 'morning treasurer', whose focus is to make sure that all operations are squared, and everything is being executed properly, from the 'afternoon treasurer', who can then think strategically about longer-term projects, striving to optimise treasury operations. This means that we need to do everything we can to speed up and secure the less-value-added 'morning' tasks through automation, in order to free up time for the

FIG 1: END-TO-END FX WORKFLOW



treasury team to have a greater 'afternoon' impact on the wider company.

FM: Resistance to change is common. It's a troubling time right now, and one of the issues could be budget. But there are two other obstacles. CFOs know the FX risk, but for them, currency management automation is still a black box. We need to explain to them why it's important and how value can be generated, for example, by opening new markets when invoicing or being invoiced in the local currency.

The second obstacle is the CIO. They often try to maintain system orthodoxy. They mistakenly believe a TMS can do everything. A treasurer proposing a solution like Kantox may be quizzed as to why they want to add an extra layer of IT. CFOs and CIOs need to be convinced before the company can move forward with automation.

EH: Why is currency management automation software a specialisation as such? Why isn't it just piled together with FX solutions in general?

TR: I think the reach of current systems is very well determined. TMSs have a very strong focus on cash management. ERPs are very focused on business operations. Specialisation is really important, so when a MDP is deployed, few argue that the ERP or TMS could fulfil that task. They could, but MDPs have become the best at what they do.

In my view software that automates currency management deserves recognition. There are many companies providing 'FX solutions'. But this term is so broad, it can really mean anything to do with FX. You have brokers and FX consultants who offer FX related services and solutions, and FX trading platforms. That's why it is necessary to understand that currency management automation has a different type of value proposition.

JL: We all have lots of apps on our phones, each doing just one thing – can you imagine having them all combined in one? It just doesn't work. In the same way, banks and corporates will see more and more specialised software, doing only one thing but doing it really well. The challenge then is to ensure that all those apps are properly integrated, i.e. they can talk to one another automatically, through APIs [application programming interfaces]. As banks, our role is to identify and source the best apps to address our clients' specific needs, and bundle them into something both meaningful and user-friendly.

FM: We need to educate corporate treasurers because I'm not sure that all are convinced they could go further in the automation of FX processes. We need to show that the TMS is too generic; it's missing tools to identify and report risk in real time, so treasury can match its exposures to financial instruments, avoiding a lot of volatility on their underlying portfolio.

Some companies have a monolithic risk strategy, even though they have different divisions and businesses with different FX models and needs. Trying to define a single approach means focusing only on mitigating the main risks. That can be problematic. We need to show that automation helps in the application of a more targeted risk programme.

EH: Given everything that we've discussed, what is your key takeaway for TMI readers?

TR: Look at your business, think what would be the best for you, then look for the solution to enable this. Do not do this the other way around!

FM: I urge treasurers to look upon the crisis as an opportunity to revisit and potentially revamp their FX management. EACT membership surveys repeatedly show FX risk as a major concern. It's time to do something about it. Start by explaining and selling the revamp idea to the business. Then revisit and document your processes before looking for ways to deliver a proactive approach to FX management.

JL: Automation projects around FX risk management may seem daunting at first but are in reality a true opportunity to not only better manage those risks, but also free up scarce and valuable time for treasury to become more strategic, delivering greater value to the whole company. ■

TONI RAMI

JACQUES LEVET

FRANÇOIS MASQUELIER

Beyond Technology in Treasury

Leveraging Community Intelligence

By **Tom Alford**, Deputy Editor

Running an efficient, data-driven global treasury is not just a technology play: it's also about leveraging 'community intelligence' and group-wide collaboration. Sounds too involved? It's easier than you think, says Nikolai Diekert, Director, Product Management, Coupa.

It has always been the job of the corporate treasurer to manage cash, liquidity and risk in an unpredictable world. Despite the almost existential importance of the role, treasurers have often been presented with a rather simplistic toolset to help keep the lights on: the spreadsheet.

In itself it is a useful, flexible and familiar piece of technology. The problem with spreadsheets comes when treasuries have to bring financial data together to make

sense of the rapid-fire dynamics of the commercial, economical and, increasingly, political drivers of global business.

When having all financial data in one place, available and readable in real time is so critical, it's perhaps an anomaly that treasurers often struggle to gain access to the right data, running the gauntlet of functional silos, multiple yet disconnected systems, and perhaps even budgetary resistance to improvement. It certainly would be an anomaly, were it not such a common scenario.

What does make the underpowering of treasury unusual is that the tools to give it flight have been available for a long time, and are just getting better, says Diekert. "It's a long-term issue. Taking a different approach 10 years ago was the right choice, and is still the right choice today, but that decision is even more important now," he warns.

The problem is that information flows and visibility are still too slow for organisations to respond to events that often have an immediate impact. "To counter this, we need to make sure event information flows faster than the impact; spreadsheet-based decision-making simply cannot keep pace with reality."

With the effects of the pandemic having demonstrated the need and the capacity for many businesses to work remotely, he believes there is no real reason to continue avoiding enhanced connectivity. This argument is further strengthened when it is understood that the nature of recent health and financial crises has ensured treasurers' stock has risen across the organisation.

Making connections

In being able to tackle currency risk, for example, Diekert says where once treasury was perceived as residing in an ivory tower, now many more business colleagues understand and appreciate how the role can help them make better decisions. "Operational siloes make no sense when strength is so obviously found in collaboration."

While technology enabling this approach is readily available, it may be that some organisations are waiting for the right moment for a Big Bang deployment. This is a mistake, says Diekert. "You shouldn't wait until you believe everything is perfect from a technological standpoint."

Ideally, the effective connection of technology as a means of enhancing data sharing needs to be matched by the connection of people. Indeed, says Diekert, it is the successful interpretation of data, not its transfer, that is perhaps the most challenging and rewarding aspect of building and running an efficient, data-driven global treasury.

"There are correlations between local levels of knowledge that cannot be discovered unless brought into one place," adds Diekert. Where a domestic entity makes decisions based on local knowledge, certain information is not necessarily required for it to make good decisions. Yet central treasury may need this information – to inform hedging of currency exposures, for example – for its own effective decision-making.

If automation of workflow within a connected treasury infrastructure adds enormous value in terms of operational efficiency, then using this as the basis to deploy artificial intelligence (AI) and machine learning (ML) takes data interpretation to the next level.

However, says Diekert, AI and ML does not replace the professional wherewithal of the treasurer. "ML is not yet capable of solving every problem; there's a long training process ahead for the algorithms. But then treasury will be able to move to the next level of effectiveness."

Today, he notes, cash management consumes a great deal of effort, with often little time to consider its underlying risks. Once cash management is 'solved' by having all the data easily to hand, with tools such as ML enabling automated forecasts for the short term, then longer-term risks can come under closer scrutiny.

Depth and breadth

What this means for treasury is an ever-widening reach into the organisation. With few, if any, business decisions not impacting on or potentially leading to some form of financial risk, treasury can learn about any underlying risks as a means of improving its own efficacy. What's more, functions such as sales and procurement can benefit from this treasury knowledge.

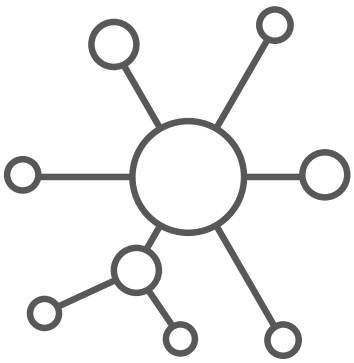
A sales contract using a foreign currency obviously has a risk attached. With treasury advice, it is possible to avoid embedding risks in contracts, such as a price pegged to an exchange rate, says Diekert. Indeed, 'treasurer as adviser' to business units such as sales and procurement aids the development of profitable international trade and supplier relationships.

Of course, absorbing information from outside the company has long been a treasury endeavour. With data often poorly structured, transforming it into knowledge for use by business can be "extremely challenging", notes Diekert.

However, the power of "community intelligence", where data is shared and can be leveraged by every stakeholder, is a key goal for Coupa, he says. An understanding of general economic indicators as a means of steering forecasting for different functions, for example, demonstrates how

> *We need to make sure event information flows faster than the impact; spreadsheet-based decision-making simply cannot keep pace with reality.*

> *I think there is a strong interest among treasurers to be part of a community that can leverage common knowledge.*



working together through data brings more effective and co-ordinated results.

The community that Diekert has in mind is not just partners, such as banks and vendors, but also the community of treasurers, with Coupa's customers able to share not just methodologies "but also real, impactful knowledge". Naturally, this is not about relinquishing competitive advantage but about tackling mutual issues, such as financial crime. "I think there is a strong interest among treasurers to be part of a community that can leverage common knowledge," he remarks.

As a key partner for its clients, Coupa provides the enabling technology but also analyses common data to generate insight for the wider treasury community. An example of this could be the provision of focused benchmarking data on foreign exchange (FX) deal or bank-fee pricing – potentially very useful in building fairer commercial relationships.

With clear agreements on precisely what data is considered, and every element anonymised, Coupa is able to apply its own knowledge and expertise to take its offering beyond technology. As part of this approach, clients are free to take part in the Coupa user-group forum. Here, not only do these open exchanges of information and experience create deeper community understanding of treasury issues, but it also helps inform Coupa's own product development, creating the most desirable and usable solutions for treasurers.

Time to act

Businesses need to be prepared for each new major challenge. In the past year or so, the world has seen how fast situations can deteriorate. Having the right data at the right time is essential, and for many treasurers the time has come to re-assess their readiness for these challenges.

With vendors such as Coupa engaging with the notion of community intelligence, Diekert believes that treasurers have an opportunity to work together to solve common challenges while leveraging the latest tools to share their knowledge and understanding with the rest of the business.

At a technical level, Coupa's implementation programme starts with a data-sourcing process to offer the earliest possible visibility, and then follows the life cycle of the transaction to conclusion. By integrating treasury into the broader business environment in this way, treasury becomes a "finance hub", enabling deeper insight into potential issues and opportunities.

In practice, Coupa offers businesses end-to-end visibility, from source-to-settlement, and an enhanced set of processes, using automation to drive efficiency while minimising risk. A well-connected treasury function can therefore operate as a hub, connecting stakeholders from different disciplines and locations. This serves to develop collaboration and help build stronger corporate teams, with each acquiring data at the point of origin, not only after decisions have been made. In this way, treasury is involved at the very start of the risk-carrying business processes.

Of course, it's up to the individual when to begin the journey towards data and knowledge enhancement. But with proactive and well-established programmes of guidance and support to help clients progress firmly embedded in Coupa's DNA, Diekert notes that two ideas become clear.

First, that treasury's increasing importance makes the risk of being spreadsheet-based almost untenable, certainly from the perspective of missing out on the many new opportunities already available. And second, that even the latest technologies work best when being driven by communities. Indeed, when treasury has data visibility, and the means and will to share its knowledge, everyone benefits. ■

To find out more about future-proofing the financial health of your organisation please visit: tinyurl.com/z5serkd9

NIKOLAI DIEKERT

Director, Product Management, Coupa Treasury

Diekert joined the Product Management team in 2017 from the BELLIN (now Coupa) Presales team. His current focus is on ensuring Coupa Treasury products meet current and future treasury management requirements. Diekert is a Certified Corporate Treasurer and studied mathematics in Freiburg and Bordeaux.

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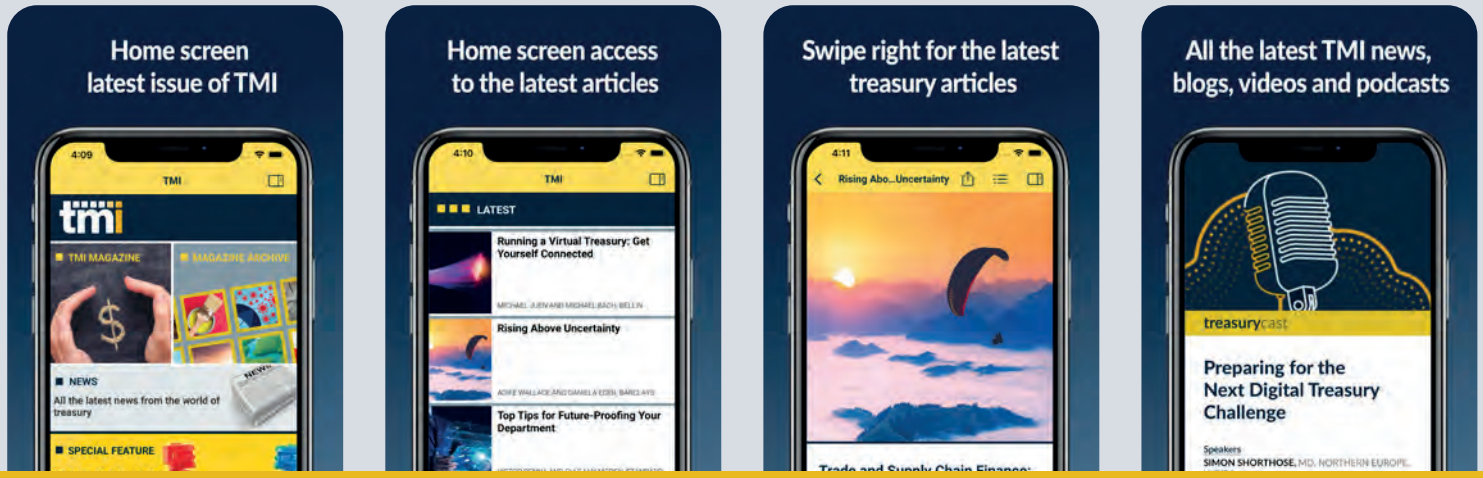


How Etihad Enhanced its Financial Controls using Microsoft AI

Etihad Airways has successfully deployed Artificial Intelligence (AI) to identify erroneous payments to suppliers. In turn, this has saved the finance team precious time by reducing false positives, while correctly identifying payment anomalies that could have been missed manually. Bhavesh Shivshanker, Head of Financial Operations, Etihad Aviation Group, gives TMI the inside story.

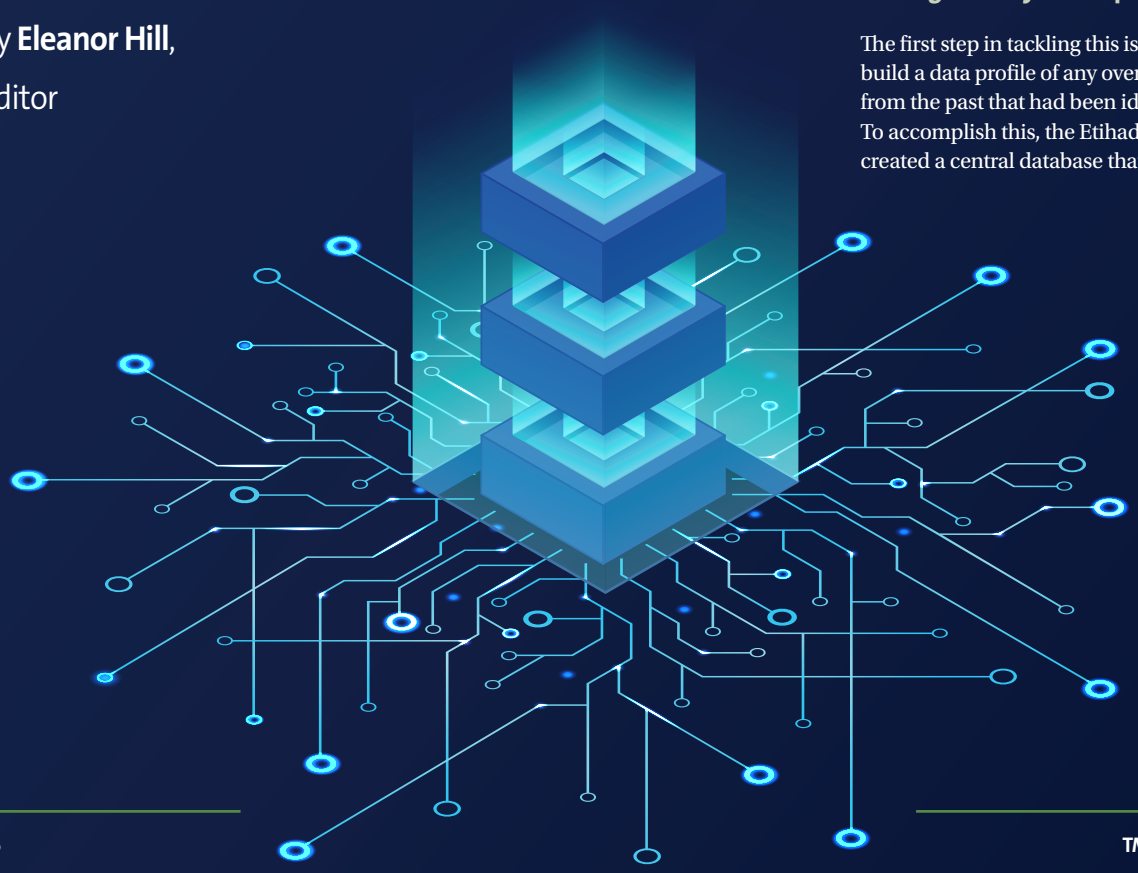
By **Eleanor Hill**, Editor

Having set up an internal Innovation Committee, the Finance function at UAE flag carrier Etihad Airways was keen to explore how technology could be applied to improve the way it operated. The aim of this exploration was to drive new and perhaps unexpected efficiencies, ranging from relieving heavy workloads through automation to improving decision making using advanced analytics. One of the pain points identified was around transaction anomaly detection, as Shivshanker explains.

"Most organisations will have questioned what more could be done to strengthen controls across their payments processes. Given our transactional volume and spend, we saw this as an area where automation and AI could really add value."

Getting visibility on the problem

The first step in tackling this issue was to build a data profile of any overpayments from the past that had been identified. To accomplish this, the Etihad team created a central database that detailed



these payments, what had been collected back and what was still out there.

Shivshanker recalls: "Our data sat across various internal teams; some with Audit, some with Business teams, some with Legal and some within Finance. The first step was to centralise and standardise. This helped us understand where things had fallen over in the past and ensure we had closed those operational gaps. It also gave us a lot of transactional training data, which we later found to be a critical step in building AI supported controls".

Deploying artificial intelligence

In search of an efficient and elegant solution, Etihad turned to one of its trusted technology partners, Microsoft. The team explained the issue to Microsoft, described the work they had already undertaken on centralising the payments data, and asked if there was a way that AI could provide a smart solution. Fortunately for Etihad, this proved to be the case.

Microsoft brought its partner Predica into the project, and together with Etihad they mapped out the existing business challenge and manual business processes. Predica is the developer that would go on to build the AI algorithm for Etihad and champion the proof of concept.

Shivshanker recalls "We quickly discovered that whilst there are many off-the-shelf tools available in the market, these often generated too many false positives i.e. stopped healthy transaction flows or were linked to specific banking platforms. Using such solutions would potentially prevent us from making real-time decisions or leave us with coverage gaps across our multiple banking partners. Leveraging our great partnership with Microsoft and Predica, we looked to an in-house solution which could mitigate some of these issues."

"The project got off to a good start thanks to the work that Etihad had already done in collating the data," Shivshanker notes. "With this type of AI, you need a set of data examples which can be used to train the algorithm. Using those examples, the AI can learn trends or markers in the data and then identify similar transactions from a much larger dataset. It does this very quickly, far faster and more accurately than a human could."

The project that the partners decided upon was a proof of concept, which was deliberately restricted to a couple of years of data so it could be quick and agile. The training data set was given to the AI, which then looked through Etihad's enterprise resource planning (ERP) system, and flagged any of a million plus transactions in there that looked very similar to the 'bad outcomes' in the training data set.

Shivshanker recalls: "To get accurate results, it's important to also provide the AI feedback. This is an iterative process whereby the AI proposes a set of results i.e. it thinks certain transactions look out of the ordinary and then a human validates. Once the AI has the validation input, it automatically refines its identification criteria. Whilst this initially takes some time, it is a powerful feedback mechanism and the workload quickly drops off as the AI learns".

Building on results

Following the two-month proof of concept period, the Etihad Finance team was delighted with the results. Shivshanker explains: "The project results went above and beyond what we had expected. Within two months, the AI was able to identify outlier transactions which, using simple rules-based detection methods, may have slipped through the net. We are also saving 600+ hours per year thanks to a significant reduction in false positives and the corresponding review workload".

Following the proof of concept, Etihad plans to move into production and run the analysis before the payments run every single day. This will see a shift away from a detective control environment to a preventative one. Shivshanker elaborates: "The AI looks at each transaction, goes back through the ERP to see if it looks like an anomaly and provides close to real-time feedback. This gives us one more layer of control before releasing payments."

Next steps

With the success of AI in tackling the issue of anomalous payments, Etihad is keen to pinpoint further use cases for advanced technology in finance. One such issue Etihad is exploring is the time-old challenge of cash flow forecasting.

"This is a fairly standard use case, but Etihad approached the POC in a novel way," Shivshanker explains. "We organised a mini-hackathon whereby historical cashflow data was shared with a group of participants, ranging from established market leaders to Fintech start-ups. We asked each to produce a forecast using AI, which was compared against actuals. This not only allowed us to quickly see whether AI could improve forecast accuracy but also compare the capability of the different Data Science teams. The results so far have been extremely promising."

Etihad is also exploring how AI can be applied in the bank reconciliation space, highlighting how many areas in Treasury and Finance can benefit from smart automation.

"These are very generic business problems and I'm sure, in the near future, every organisation will be looking to AI as a solution," Shivshanker concludes. ■

BHAVESH SHIVSHANKER

Head of Financial Operations, Etihad Aviation Group

Bhavesh Shivshanker joined Etihad Airways in 2016 and is currently Head of Financial Operations. Over the past two years, he has led several large-scale transformation initiatives aimed at improving operational performance. More recently, Shivshanker has taken on responsibility for Chairing Etihad Finance's Innovation Committee, which acts to drive the rollout of AI and RPA across the division.

Blockchain in the KYC Process

An Answer for Everything?

By **Dr Andreas Hecht**, Manager Corporate Finance – Risk Management and Reporting, MAHLE International GmbH, Certified Blockchain Expert

Know Your Customer requirements have long been a headache for corporate treasurers. Could blockchain resolve the pain points in the KYC journey? Are there any downsides to using distributed ledger technology in this instance? This article answers these important questions – and more.

Efforts to curb money laundering and terrorist financing are becoming increasingly sophisticated around the globe. As a consequence, banks, financial service providers and corporates have to carry out extensive checks on the legitimacy of their business partners in order to meet legal compliance requirements, or Know Your Customer (KYC). In a recent survey, more than 90% of corporate treasurers stated that responding to KYC requests is far more demanding today than it was five years ago[1]. The lengthy KYC processes mean that many companies have already reduced the number of their banking partners. More specifically, corporate treasurers complain about complex and sometimes poorly structured KYC procedures they have to go through before opening an account with a new bank. Such checks can take up to several months due to duplicate queries or various requirements from the banks.

While a survey conducted by a German treasury magazine in 2018 revealed that financial managers see the greatest need for digitisation in corporate banking in KYC issues[2], E.ON, a German electric utility company, offered one solution: it opened a bank account and delivered the data for the KYC checks electronically via a new electronic bank account management tool. However, this will only have real added value if many financial institutions share the same electronic solution.

Another major weakness in the current KYC process is that personal and company data are repeatedly requested by several institutions, with customers having to complete identical processes with different counterparties which produce identical results, causing avoidable expense for the institutions and annoying customers. According to a recent survey by Thomson Reuters, this outdated due diligence process generates average direct costs for financial institutions of $60m and overall is said to cost up to $500m per bank per year[3].

To address this problem the banking co-operative SWIFT is in the process of setting up a central register for KYC-relevant corporate client data. The KYC registry is an online portal for financial institutions to exchange institutional KYC information as part of the statutory due diligence process. The platform enables banks to exchange KYC data and documents with their correspondent banks in a secure, standardised and controlled manner and to access the complete and validated KYC profiles of their correspondents. In a first step, SWIFT launched the web-based registry for KYC-relevant corporate customer data at the end of 2019 for all companies that have a SWIFT connection within their group, aiming to increase efficiency and contribute to cost savings in the KYC process. In May 2020 one participating corporate said that it hoped that a platform as communication channel will be more secure and transparent than email processes, and that banks would have more confidence in the information provided via the platform, as the documents would be verified by SWIFT. The SWIFT review will hopefully also lead to fewer queries.

However, SWIFT has been criticised for its inefficiency and lack of transparency, and the solution based on an online portal of the traditional banking system also raises doubts. Concerning the general SWIFT set-up, for example, SWIFT member Credit Suisse "believes [that] interbank payment systems are ripe for disruption. Interbank payment systems such as SWIFT are old, inflexible, slow, and increasingly prone to cyberattacks at a time when banks are under tremendous pressure to cut costs and protect customer data from hackers, which blockchain could achieve". Critics of SWIFT's KYC registry state that centralised KYC utilities struggled to gain industry-wide acceptance, with over one-third of banks not participating due to cost, operational and complex technical integration issues and that such centralised models are inflexible compared to new technologies.

Promoters of blockchain technology assert that decentralised set-ups provide the basis for a truly global, efficient and secure KYC process without centralised data stores managed by third-party providers acting as (inefficient) intermediaries. The head of KYC and reference data at SWIFT has acknowledged the new technologies, stating "The [SWIFT KYC registry] platform is constantly evolving, but transferring the registry onto blockchain will be off the cards for now. We will continue to explore blockchain over different use cases, but for now the centralised solution is a good one".

How blockchain can address weaknesses of the current KYC process

Security

All parties involved must agree on transactions before they are recorded and ensure that the verified blocks are cryptographically encrypted before being appended to the chain of data records (blockchain). The decentralised database is stored on many computers in a peer-to-peer network. Since each participant or node keeps a copy of the entire blockchain instead of the information being located on a single

> *Promoters of blockchain technology assert that decentralised set-ups provide the basis for a truly global, efficient and secure KYC process.*

BLOCKCHAIN BASICS

Blocks that consist of time-stamped series of an immutable record of transaction data form the core of blockchain technology. A blockchain makes it possible to transmit information in a forgery-proof manner using a decentralised database shared by many participants, so that manipulated copies are impossible. Such a database, also known as distributed register or distributed ledger, requires a trustworthy and decentralised mechanism to create consensus on how new blocks are created and how they can be added to the existing blocks. There are various consensus mechanisms, with proof-of-work being the oldest and best known (e.g., used in the public bitcoin and, so far, in Ethereum), proof-of-stake being less time-consuming and computationally-intensive and proof-of-authority being particularly applied in the realm of private or permissioned, i.e., access-restricted blockchains.

Blockchain technology is developing dynamically and new areas of application such as smart contracts are rapidly opening up. Smart contracts are computer programmes that can make decisions if certain conditions are fulfilled, enabling a blockchain-based automated execution of 'if-then' relationships.

server, the technology is resistant to hacking – changing the data record would imply hacking each individual node as there is no single point of failure. Blockchains are therefore secure, always up-to-date directories in which digital transactions can be documented reliably and comprehensibly.

Is blockchain 100% tamper-proof? Theoretically, if a participant manages to control more than half of the participant nodes, it could modify the transaction history. In practice this never happens and has little relevance to private or permissioned blockchains with trusted nodes.

Efficiency

Paper or email-based processes for complex transactions involving many participants are slow and error-prone. A blockchain creates trustworthy and forgery-proof business transactions, so that clearing and settlement can take place more quickly. However, the performance of a public (as opposed to private) blockchain does not come close to that of a central database. For example, while the VISA payment network processes an average of 2,000 transactions per second (with a maximum capacity of 56,000 transactions per second) and the worldwide online payment system of PayPal enables approximately 150 transactions per second, the public blockchain of bitcoin processes just three transactions per second and Ethereum processes 20 transactions per second. Checking transactions and synchronising them takes time: finding a consensus in a completely distributed public (again, we are not talking about private blockchains here) blockchain system is difficult and needs certain security measures to create trust among the participants, slowing down the system's performance. This restricted transaction speed is still a major limiting factor of blockchain technology and alternative ways of increasing scalability such as parachains, state-channels etc. are promising developments.

For those who aren't familiar with the terminology, parachains improve the scalability and speed of the network. As the chains run and process all transactions in parallel, bottlenecks are avoided as with individual blockchains that process transactions one after the other. Meanwhile, the term 'state channels' refers to an 'off-chain' process with users transacting with each other directly outside the blockchain, which reduces the use of 'on-chain' operations.

In contrast to public blockchains, private or permissioned ones with several trusted nodes, mean that this performance problem does not usually exist because there is already trust between the participants. In turn, this means that time- and energy-intensive consensus mechanisms for the validation of transactions become redundant, significantly increasing transaction speeds but not to the level of central systems. Hyperledger Fabric, a permissioned blockchain project, is reported to be able to process 3,000 to 20,000 transactions per second. In general, however, the question arises as to how relevant the differences in transaction figures are in a KYC use case.

Costs

Blockchain technology significantly reduces the need for third parties or other guarantees, and the digital representation of processes is also associated with meaningful automation potential and thus cost reductions. With smart contracts this can reduce transaction costs and ensure a high level of process integrity, because subsequent deviations from agreements once made are no longer possible, or at least made considerably more difficult. In view of the redundancy of identical KYC processes and the associated costs, blockchain technology has the potential for a single KYC identification process that generates a certified data record. Instead of regularly repeating the identification process, other institutions or customers could be granted access to the trustworthy and immutable record of KYC data.

Transparency

Transparency is another important and often criticised feature of blockchain technology. Blockchains are very transparent, since any member of the network can view the entire transaction history at any time. This creates trust between the different actors in the blockchain network. In general, insight into historical transaction data can help to verify the authenticity of products or assets. In the KYC process such traceability and thus authenticity checks help to prevent fraud.

However, the desire for transparency could go too far. Blockchains are by nature open and not anonymous, but pseudonymous. While you are able to control who gains insight into past transactions, you may want to protect your privacy to a certain extent. In this respect, tools like zk-SNARKs, (Zero-Knowledge Succinct Non-Interactive Argument of Knowledge) which work on so-called zero knowledge proofs, could be a promising, but still computationally-intensive, solution. Zero knowledge proofs mean that each party in a transaction is able to verify to the other that it has a certain set of information without disclosing what that information is, unlike other systems where at least one party must know all the information. For example, individuals may need to prove that they hold enough money in their bank account to pay for a certain good, but they do not want to reveal the exact balance of their account. So, you prove this information without disclosing your full personal information such as your date or place

"Blockchains are therefore secure, always up-to-date directories in which digital transactions can be documented reliably and comprehensibly."

of birth. zk-SNARKs allow you to reach your desired level of transparency, since only the necessary and required information is published on the blockchain.

How effective is blockchain in the KYC process?

One major advantage of blockchain compared to current KYC processes is the ability to avoid redundancy in the system. Instead of conducting KYC processes repeatedly with different institutions, a company would complete the verification procedure with one bank, the result being securely stored on the blockchain. The result refers to a trustworthy and immutable data record with verified identity and business data stored in encrypted form, which the company could provide to all institutions and bodies that are obliged to follow KYC procedures. This access could be granted by means of smart contracts, the advantage of which is that a company can more easily control who accesses its data; using one-time passwords, for example, it can allow another institution to access the verified identity and business information.

In the choice between a public vs permissioned blockchain there is a tendency towards an access-restricted approach because of fewer security and privacy issues and significantly improved efficiency. The General Data Protection Regulation (GDPR), for example Article 17 – Right to erasure ('right to be forgotten'), in the European Union is another important aspect. Advocates of a permissioned blockchains state storing data directly on a public blockchain would not be GDPR-compliant, since the immutability of the blockchain hinders the fulfilment of the right to be forgotten. There are different solutions to this problem, e.g., storing information off-chain or a dynamic management of a blockchain-based decentralised data storage, subject to additional efforts and restrictions. In a permissioned blockchain, if all participants agree, a deletion of data would be feasible.

In a blockchain solution ownership of the data can remain with the user (e.g., a corporate) without any intermediary. This gives individual parties greater control over their data, excludes the possibility of unauthorised access and reduces the probability of mistakes or fraud. Smart contracts make it possible to execute control and automate operational processes. Blockchain properties such as immutability and security create trust in the data, making secondary validation processes unnecessary and further reducing the need for manual input. Conventional, centralised systems involving third parties can be slow in identifying, reporting, and solving mistakes, whereas a decentralised set-up makes the processes more efficient.

In summary, blockchain technology is capable of eliminating the main weaknesses and creating the conditions for simplifying the current KYC procedure. Compared to centralised solutions, the decentralised structure of a blockchain offers a much higher level of trust and stability and a wide range of flexibility without a single point of failure.

Parting thoughts

KYC checks on the legitimacy of business partners are long, expensive and inefficient. The process has to be repeated for different institutions resulting in similar processes producing identical results. Using a blockchain with smart contracts enables users to avoid duplication of efforts and current redundancies in the process, together with adequate access control. Overall, blockchain is not the answer for everything, but it could play a major role in streamlining the KYC procedure towards a secure, trustworthy and more efficient workflow that offers numerous opportunities and flexibility in many ways for seminal applications.

Blockchain, which is and must be constantly further developed, could not only be a gamechanger for the banking and financial industry in terms of security, trustworthiness, customer satisfaction etc., but potentially has a broader scope of application in fields that require authenticated user identification with its ability to automate many compliance processes and to manage digital identities efficiently in the digital age. ■

DR ANDREAS HECHT

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> *Transparency is another important and often criticised feature of blockchain technology.*

Note
This is an edited version of Dr. Hecht's article. The full text including references is available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3609496

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Recipe for Success

Building a New World-class Treasury during Lockdown

When Patrick Kunz, Managing Director, Pecunia Treasury & Finance BV., started at Takeaway.com, the treasury function did not exist. Building one from scratch is the dream scenario for many treasurers. But when – on only the third day of this endeavour – the world went into lockdown as a result of the Covid-19 pandemic, that dream could so quickly have become a nightmare. TMI finds out how Kunz managed to come out the other side smiling.

By **Tom Alford**, Deputy Editor

'Day one: start new project building a treasury from scratch. Day three: global lockdown starts.' It's the kind of diary entry that could drive many professionals to despair. But for Kunz, the challenges thrown at him almost as soon as he started with global food delivery service Takeaway.com only made him more determined to create a world-class treasury. And now, having integrated the Takeaway operation into that of its new acquisition, Just Eat, his approach has a fully scaled-up global seal of approval.

In a rapidly expanding worldwide business, relying on disparate and disconnected financial functions to pull together treasury data is a challenge few can sensibly sustain. Finding this scenario upon his arrival at Takeaway, Kunz knew that his role over the next few months was a matter of necessity.

The business had risen in just one decade from a promising SME (small to medium-size enterprise) into an international operation with a number of competitor acquisitions and integrations already under its belt. But without a professional treasury function, it was facing an uphill struggle to provide essential cash visibility. When Kunz challenged the Finance Director to quickly identify the company's current cash positions, the answer came in the form of a worried look.

Although he had access to all the company's multiple banking platforms, pulling that information together at short notice was not easy. While profit and loss (P&L) forecasting was robust, as befits a company with a strong financial planning

and analysis (FP&A) function, when asked to quickly forecast cash positions or calculate the cash flow effects of a revenue downturn or significant bout of late payments, the concern deepened.

What was needed, noted Kunz, was real-time cash flow forecasting. This would be achievable by harvesting all cash flows from the company's banks as the starting point, and then adding known information, such as accounts payable (AP) and accounts receivable (AR) data, from its enterprise resource planner (ERP), building that into a liquidity forecast.

Methodical approach

When tackling a greenfield project such as this, Kunz has his own three-pillar approach. Cash visibility – in real time if possible but prior-day close of business (CoB) as a minimum – and forecasting comes first. Pillar two considers the financing structure that results from the cash position. The third pillar is risk management, with interest-rate risk management bound with debt financing and, particularly for Takeaway, FX risk mitigation.

Indeed, without a hedging policy or even facilities in place, with considerable non-euro cashflows and significant costs in dollar and sterling, the company relied almost entirely on achieving natural hedges through in-country cash flows. This, says Kunz, created substantial needless FX costs.

In preparation, setting up new bank accounts was an easy quick win for him, working with Takeaway's "very proficient" IT team to finish the task in one week. By enabling separation of all the euro and non-euro invoices, it was now possible to distinguish between the group's various exposures. Payments would not now be sent to the wrong bank account, avoiding unnecessary FX conversions. A hedging policy could also now be implemented.

Takeaway had two existing banking partners providing its main cash management overlay structure. These banks were to be used for FX trading, but for "liquidity and pricing reasons" external parties were also brought in for quotes. Initially this was through a broker, and then via the cloud-based 360T platform, enabling huge savings (this alone paying for Kunz's interim costs).

Lockdown planning

"I was in the office two days and then the lockdown hit, and because of that it was unclear what the situation was going to be," recalls Kunz of his initial planning phase. Takeaway was in a marginal cash-positive position. It had some facilities in place, but these were designed for longer-term drawdowns. While many companies did draw down on facilities 'just in case', he argues that doing so, especially in the Eurozone's negative interest rate environment, created a costly cash holding.

As such, and with poor forecasting capabilities and total uncertainty regarding the rules on restaurant openings and deliveries, his main priority from the outset was scenario analysis and stress testing cash. For around one week he probed the effects of variously shifting payments and collections cycles, with revenues potentially diminishing by certain percentages, even by up to 50%.

In the first week of lockdown sales did indeed drop. However, as clarity emerged on the status of food deliveries, Takeaway saw its revenues boosted considerably as eat-in establishments remained closed. "We had one bad week, then it was up, up, up."

With Takeaway's cash position increasing rapidly into the realms of "cash-rich", Kunz' focus shifted away from stress testing. Around this time, Takeaway secured a €450m bond issuance and a capital increase from a refinancing round. It also benefited from a share increase from the takeover of Just Eat, and it was boosted by the planned takeover of Grub Hub entering the financing strategy stage.

From this position of relative comfort, Kunz could now turn his attention to building a treasury structure, with attention on bank accounts, FX risk management, inter-company financing and company positions. This took a couple of months, during which time approval was granted by the Competition and Markets Authority for the integration of Just Eat. This more than doubled the size of Takeaway.

Combined forces

Just Eat had its own treasury, with a director, manager and analyst. With

> *I was in the office two days and then the lockdown hit, and because of that it was unclear what the situation was going to be.*

Kunz previously working solo, joining forces to create a structure for Takeaway naturally made life easier. However, in being forced to work remotely, he found the communication process with people he had never met occasionally challenging. And with new ideas being proposed, change management was at times difficult too. "I was changing processes, and for some people I was relieving workload but for others adding a little." There was a natural tension here, but he says it helped enormously having the full support and backing of Takeaway's finance director.

The Just Eat treasury accepted all that Kunz had put in place. In some instances (such as the implementation of 360T) the work even overlapped. But there was a fundamental difference. Takeaway had adopted a more centralised model, with just two banks and an overlay structure that saw, for example, all cash swept to its Amsterdam euro cash pool. Just Eat was operating on a per-country approach, with 10 banks. Although more complex to run, it had a dedicated treasury team, and thus the capacity to do it. Obviously, it also had deep knowledge of the operating side of Just Eat treasury.

With various core technologies replicated between the two firms, including ERP and payments systems, both Kunz and his counterparts considered the likely complexity of bank connectivity, especially with Just Eat retaining its multi-banking model. "It made sense to implement a TMS [treasury management system], so that was on my wish list," he says.

With payment hub, in-house banking, cash flow forecasting and FX risk management functionality on the sublist, a joint proposal had been made to the Finance director to free up some budget for this, with early market explorations underway. However, with integration now taking absolute priority, and no decision having been taken at that point on the fate of the two ERPs, it was deemed prudent to wait. The impending Grub Hub deal further upheld this response, its addition (set for 2021) creating "an even more complex company".

> *Some days I would spend more than half my time on phone calls or Zoom meetings; if I'd been in the office it would have been much less.*

All good things...

Having initially scoped a greenfield treasury operation, and achieving much of what he had planned during lockdown, the merger changed things further for Kunz. Although he still had work to do, mostly on aligning operations, including locally fine-tuning a shared treasury policy, his assignment ended in July. As other functions were selecting their new heads for the merged business, he acknowledged the sense in offering a permanent role to the incumbent treasurer at Just Eat, rather than himself as an interim.

Nonetheless, he believes that it has been a deep learning experience throughout. He would have preferred to have been office- rather than home-based for the bulk of the work, arguing that face-to-face meetings enable quicker and clearer lines of communication. "You can still do your project management online, but it has to be much more formal," he notes.

Zoom meetings have earnt their place in current business practice, says Kunz, but quick updates or clarifications are just easier face to face. In particular, he missed those ad hoc conversations upon which professional life thrives, underlining too the risk inherent in written messages, where misreadings are familiar to most practitioners!

Remote working can also take up more time. "Some days I would spend more than half my time on phone calls or Zoom meetings; if I'd been in the office it would have been much less," he says. That said, with both the ERP and various communications systems fully cloud-based (Slack instant messaging was leveraged fully, he reports) most stakeholders were able to remain in the loop.

With Kunz already on a new set of interim assignments, one with Amsterdam-based design consultancy Arcadis, he has moved into established operations. Of course, lockdown and remote working is still a fact of life for many professionals, but it is encouraging to know that an effective global treasury can be built and run from home. And lunch can be delivered. ■

PATRICK KUNZ

Managing Director, Pecunia Treasury & Finance BV.

Kunz is a treasury professional with 16 years' experience in setting up and managing a wide range of treasury, risk & cash management projects. He is currently the owner and managing director of Pecunia Treasury & Finance based in the Netherlands, which lists multinationals, non-profits and SMEs among its clients. He has held of number of interim treasurer positions with companies including Arcadis, Just Eat takeaway, CarNext.com and Univé.

Before setting up Pecunia in 2013 Kunz held a number of treasury positions with companies including Metro Group and Wonen Limburg.

Kunz is a qualified financial risk manager and treasurer and holds an MSc degree in International Business from the University of Maastricht.

Bridgestone Deploys Sustainable Supply Chain Finance with External Ratings

By **Eleanor Hill**, Editor

By linking pricing to independently verified sustainability criteria, treasurers can use supply chain finance (SCF) as a way to promote environmental, social and governance goals both internally and throughout their supplier networks. Here, Julle Pedersen, Treasury Director for Europe, the Middle East, India and Africa (EMIA), Bridgestone, shares the inside track on achieving precisely this sustainable SCF arrangement.

With sustainability-linked funding and investment options becoming increasingly familiar tools for corporate treasurers, SCF stands out as an obvious area where sustainability and finance can meet. This approach made complete sense for Pedersen, since Bridgestone considers sustainability to be part of its DNA.

As a global leader in advanced solutions and sustainable mobility, Bridgestone sees environmental, social and governance (ESG) as "core in our strategy and culture," Pedersen explains. The company's sustainability strategy is driven by its framework 'Our Way to Serve.' It aims to improve the way people live, work, move and play by focusing on mobility, people and environment.

Sustainable SCF reinforces these aims and was a natural fit for Bridgestone. But finding the right way to implement such a solution took a little research on Pedersen's behalf. He comments: "We started thinking about implementing

> *RFPs in this space can be quite treasury-centric, but bringing everybody together enabled us to improve the solution and achieve full buy-in from across the company.*

SCF around two years ago. During that exploratory phase, I could not find a case study from a company that had leveraged external ratings as part of their sustainable SCF programme. Up until that point, most leading initiatives I'd heard of were internally rated and somewhat subjective. We already had our global sustainable procurement policy endorsed by business sustainability ratings firm EcoVadis, and I realised we could link the two together so everything began to take shape from there."

A blockbuster Request for Proposal

With the concept of sustainable SCF now tangible and credible, Pedersen set about connecting a coalition of stakeholders within Bridgestone to be part of the project. Pedersen notes: "Even back at the initiation phase, when we were running the RFP, we had IT, procurement, the back-office service centre, and myself involved – making sure that we had full buy-in from all stakeholders. RFPs in this space can be quite treasury-centric, but bringing everybody together enabled us to improve the solution and achieve full buy-in from across the company."

The initial RFP went out to around 12 financial partners. Some RFP participants were coalitions between fintechs and banks, others were pure bank propositions, and there were also some lone fintech participants. The latter dropped out fairly quickly, though, Pedersen notes and in the final reckoning, all the shortlisted contenders had a bank and a fintech or simply a bank behind them. After detailed scrutiny of the proposals, Pedersen opted to go with the partnership of J.P. Morgan and Taulia for the sustainable SCF programme, which uses a pricing matrix linked to EcoVadis data.

"We operate in an SAP environment, and we believe that Taulia's integration towards SAP is the best in the marketplace," Pedersen explains. "This integrated approach meant that we could eliminate the need for any file transfer testing. An additional benefit was the value delivered through Taulia's supplier portal – suppliers can use the platform to have full visibility of their invoices and the status of individual invoices in our process. Once onboarded, they can simply click if they want to have the early payment. It's as easy as that."

On the sustainability side, Pedersen says treasurers should now expect most of their banking partners to be able to deliver financial products that have an ESG link. He notes: "While we were driving the discussion on sustainability, I felt that all of the big banks were, in fact, capable of delivering what we required on the sustainability side. Even though none of them had done something quite like this before they all were more than keen to do it, given the obvious scalability of the approach." So, while sustainability was a key factor in the RFP, it did not actually end up differentiating proposed solutions. Indeed, the final solution pitched by the short-listed candidates was largely designed by Bridgestone.

Implementing and onboarding

With the J.P. Morgan and Taulia partnership selected, Bridgestone went live with the sustainable SCF programme in December 2020. While it is still early days, a great deal of positive progress has already been made.

"The good news is that the suppliers are truly engaged with the sustainability element, I haven't heard a single negative pushback on the sustainability side," Pedersen reports. "Of course, the implementation approach is designed in such a way that we're talking to the bigger suppliers right now, and the smaller

JULLE PEDERSEN

Treasury Director, Bridgestone Europe, the Middle East, India and Africa (EMIA).

Pedersen has more than 20 years' international experience covering all aspects of the treasury function at regional and global level.

He believes today's treasurer to be a true business professional who can bring added value to boardroom discussions on issues such as working capital management, capital allocation, and business modelling related to footprint optimisation.

Pedersen has recently been focusing on improving Bridgestone's sustainability initiatives, which include a pioneering supply chain financing programme for his region of responsibility.

suppliers will be engaged slightly further down the line. But it's all been very positive so far."

One of the benefits of the Taulia and J.P. Morgan partnership is the easy, digitised onboarding process. "Taulia has entirely digitised onboarding to the platform and is completely aligned with J.P. Morgan processes. As with any supply chain financing solution, you need to make sure that the bank[s] backing the solution are comfortable with the documentation that is in place in the front end. Having J.P. Morgan joined up with Taulia at the back end, and comfortable with the documentation, is a significant additional benefit."

Linking pricing to sustainability

A critical feature of the sustainable SCF programme is the direct link between pricing and sustainability. J.P. Morgan has set up a pricing matrix that works in both directions, providing more favourable pricing for suppliers that are verified as hitting certain sustainability goals.

"We have set up the pricing matrix in a way that it incentivises suppliers to improve their EcoVadis rating – the higher the rating, the higher the sustainability discount. If a supplier initially doesn't have the EcoVadis rating they pay the base rate on a temporary basis. All participating entities are expected to achieve a rating within reasonable time as we consider belonging to the programme a privilege offered to our partners" says Pedersen.

The biggest positive step in terms of the pricing happens when the EcoVadis rating is achieved. This is to promote transparency. "We consider transparency to be one of the most important elements of the programme as the external EcoVadis rating process unearths any issues – with visibility to all necessary stakeholders – and enables us to work together on the challenges with our supplier."

Beyond a supplier obtaining a rating from EcoVadis, there is another big step in financial benefits available if/when a supplier achieves a 'good' level of EcoVadis categorisation. Supplier data is reviewed twice a year by the ratings firm, and J.P. Morgan has established a data link with EcoVadis whereby they can both read the findings directly from the database. "We want to drive everybody to that 'good' level at a minimum, and if suppliers go up a level they will achieve further improvements in terms of the financing rate," Pedersen says.

Everybody wins

As well as providing pricing incentives and encouraging suppliers to improve their own EcoVadis ratings, the sustainable SCF programme brings benefits for other stakeholders. For Bridgestone itself, there is the working capital benefit as it generates funds to spend on sustainable projects. J.P. Morgan also gets a win, in terms of the new business that the programme brings. The bank is also furthering the reach of Bridgestone's ESG efforts by donating to an ESG organisation as part of its commitment to the programme. "Last but not least, there is the sustainability aspect, which is a win for us all – for future generations and for the planet," Pedersen concludes. ■

"There is the sustainability aspect, which is a win for us all – for future generations and for the planet"

Schuldschein: Helping SITA Rebuild the Airline Sector

By **Tom Alford**, Deputy Editor

When global air transport infrastructure provider SITA was seeking to extend its cash buffers, Germany's Schuldschein market caught the eye of its Group Treasurer and Finance Director, Andrea Sottoriva. TMI talks to him about how issuing debt mid-pandemic has been a positive experience for all.

In a challenging economic environment, a significant cash holding is advantageous, yet market unpredictability still weighs heavily on its confident deployment. Arranging for a suitable buffer might see some listed corporates tapping into the capital markets, but this may seem unjustifiably demanding and expensive for what's required. Financing options in this context may appear limited but there is an alternative source that many Corporate Treasurers are yet to consider: Germany's Schuldschein market.

Similar to a traditional bond but less expensive and administratively demanding for issuers, Schuldscheindarlehen (SSD), or promissory note loans, are privately

placed instruments that do not need to be registered at a stock exchange. As such, while the market is recognised mainly as catering to unlisted mid-sized DACH-based corporates (German, Austrian and Swiss), it has been slowly attracting attention in recent years from much larger players. Not least among these are Germany-based household names such as Porsche, Lufthansa, Bosch and TUI, and non-DACH corporates such as Port of Rotterdam, Sweden's Vattenfall, and French retailer Auchan.

Although Scope Ratings have reported that the Covid-19 pandemic has significantly disrupted SSD issuance volumes, it is predicting the final tally for 2021 placements to exceed 2020's €19bn. This, it says, is being helped by a raft of debutant issues, many being oversubscribed as investor confidence in this niche market "remains high". One successful inaugural issuer in 2021 was SITA – the world's air transport IT and communications network provider.

Cash drivers

SITA can be found in almost every country that has an established airport. Owned by more than 400 airports and airlines, SITA currently still operates as a hybrid organisation, marked by the coexistence of not-for-profit and for-profit business units, making it a somewhat complex entity for investors to grasp.

That said, for Sottoriva, SSD has proven to be an excellent source of diversified financing. But then, it does present as a rather robust proposition. SITA has no immediate need for cash – it has a solid cash balance alongside established credit facilities with seven banks – and its own liquidity analysis reveals a cash buffer of up to two years.

However, while many firms would be delighted with this state of affairs, extending SITA's buffer into the medium- to long-term (three to seven years in this case), and diversifying its sources of financing, was deemed prudent in a market environment that has hit the airline industry particularly hard.

"We decided to go to the Schuldschein because it is a private placement and offers us complete confidentiality," explains Sottoriva. Indeed, unlike traditional bond issuance where all parties are informed, a Schuldschein placement invites only a select group of potential investors to participate. This club-like feel "was good for the moment" he says. Additionally, from an administrative point of view Schuldschein is less demanding than its closest cousin, the US private placement (USPP), and SITA wanted to leverage the familiarity and European 'home advantage' offered by Schuldschein for its debut issue.

First steps

In practical terms, the process, described by Sottoriva as "highly structured", involved two banking partners: Société Générale, because it is close to SITA; and UniCredit because it has a strong presence in Germany. "We are a company able to self-fund, even during a very difficult period such as now. But we mandated the two banks to help us prepare a long list of documents to communicate our story to investors," explains Sottoriva.

The story-telling aspect, he reports, is vital. As an unlisted firm, and therefore having no official rating, it was important to build a crystal-clear explanation of SITA's complex business model, making sure investors had a firm grasp of its strong credit history, including how its free cash flow has doubled over the past five years.

From a banking perspective, Stanislas de Calonne, Senior Relationship Manager, Swiss Corporate Clients, Société Générale, says that despite the pandemic having seen "many banks closing the door on the airline sector", SITA had already marked itself out as a strong client in terms of it being able to ride out the crisis. Alongside a continuous relationship of some 15 years' standing, this enabled the bank to confidently offer its full support for SITA's Schuldschein issuance.

It certainly helped that there was "a good team spirit" between the two banks and SITA, and it was this, de Calonne says, that assisted SITA "to succeed in the worst possible context". A major part of this accomplishment was being able to explain the "special animal" that is SITA, with its complex business model and legal structure, to potential investors.

Indeed, before the first investor call, both banks were charged with building a detailed Issuer Profile. This 30-page document offered a bank's eye view of SITA, exploring areas such as its 72-year history, its current strengths, competitors and market position.

At the same time, SITA also produced an Investor Pack, complementary to the bank profiles. This detailed its reasons for going to market, offering an honest view of how it has fared during the pandemic, and providing a flavour of its new three-year plan.

Alongside a view of the impact of Covid-19 on its financials, it also needed to explain how it can help the wider air transport sector restart and reshape. "This is a point of change for us as an industry; it gives us opportunities," notes Sottoriva.

As a key software provider, he explains that SITA is ready with a number of advanced applications, including biometric touch-free tools to help airline passengers move through airports safely and swiftly. With strong financials and a robust sector recovery plan, the story for investors was compelling. On 26 January 2021, the first investor call took place.

> *In a challenging economic environment, a significant cash holding is advantageous, yet market unpredictability still weighs heavily on its confident deployment.*

To market

SITA is a USD-reporting firm but it was open to USD, Euro and CHF on its €75m Schuldschein launch. With mid- to longer-term plans, it presented options of three-, five- and seven-year tenors to the wide range of mainly institutional investors invited by the organising banks to virtually meet the SITA team.

Although the presentation was scheduled to be followed by a 15-minute Q&A, such was the interest that this eventually extended to the maximum 45 minutes. In fact, says Sottoriva, the detailed questioning kept coming right up until the book was closed on 23 February. Unsurprisingly, the issue was oversubscribed, SITA eventually raising €95m.

The issue has not only yielded immediate financing, but it has also enabled SITA to build new relationships with other potential investors. These include a number of banks which, while deciding not to take the Schuldschein route, have discussed opening new credit facilities for SITA.

"The great advantage of this process is that we have started being known in the market," comments Sottoriva. It has also provided a valuable learning curve for possible future issuances (USPP has not been ruled out). "We know that building a good credit story, answering every question in detail, and going deep into our business model, were fundamental to our success in this market."

The experience has also alerted SITA to the need to keep investors up to speed. Prior to its first Schuldschein issuance, it did not have an investor relations (IR) function, keeping a fairly informal exchange with existing investors. As Group Treasurer and Finance Director, Sottoriva was the key contact point for investors throughout the issuance process, and he soon realised that regular communication between parties is both useful and expected. SITA has now onboarded an IR specialist to maintain the vital flow of information.

Treasury to the fore

While Sottoriva describes SITA's first Schuldschein issuance as "very positive", he recalls that the pressure of response times for investor questions was quite intense, typically with a 24-hour turnaround on detailed and complex commercial and financial explanations. "You need to be prepared, fully dedicated and very open with your responses," he advises.

With many investor questions naturally being business-driven, it was important for treasury to understand and communicate the precise nature of SITA's business model. The move into Schuldschein presented an opportunity for treasury to undertake a rare deep dive into SITA's financials, enabling it to unravel its longer-term planning and outlook.

One of the most pressing questions from investors, says Sottoriva, was how, given collapsing airline passenger numbers, SITA could survive financially. "By digging into our numbers we could explain the revenue drivers and margins, and communicate the strength of treasury within finance and across the organisation."

There is no doubt that SITA's debut Schuldschein issue has been a great success. It has enabled the company to create a significant buffer in difficult times which will enable the roll-out of new technologies that will ultimately assist the airline industry in getting back into shape as soon possible.

It has opened up new relationships with the financial community, and given the business the perfect opportunity to look in on itself and start reshaping and planning for its own future with a new and more open approach to stakeholders.

But more than that, it has set treasury on a path marked by closer ties with the business. It has created a mutual understanding that can only be to the benefit of all. If SITA's experience is anything to go by, Schuldschein is more than just an alternative source of financing. ■

> *"This is a point of change for us as an industry; it gives us opportunities."*

ANDREA SOTTORIVA

Group Treasury Director, SITA

Sottoriva has been with SITA for the past 14 years and held positions in regional finance management for Southern Europe, cash management for Europe, and global treasury before taking on his current role. He is based at SITA's head office in Geneva where the company's global presence involves retaining bank accounts in 153 countries, paying employees in 137 countries and in 98 currencies, and dealing with suppliers in 205 nations.

Sottoriva, who has a degree in Economics, previously worked at Ernst & Young, Banca Intesa, Salomon Brothers (Citigroup), and General Electric Capital.

Building a Better Cash Forecasting Toolkit

Without effective forecasting, companies are essentially flying blind into the future. We look at the role of new technology evolving to help tackle this challenge.

By **Tom Alford**, Deputy Editor

While much of the finance function has digitised in recent years it's fair to assume that most cash forecasting activity, even in very large corporates, is still spreadsheet-based. The spreadsheet is often the default tool for many planning, forecasting and data modelling activities due to the fact it is available to everyone and used for so many other activities as the aggregation point for data from a host of different systems. As Conor Deegan, CEO of cash forecasting provider CashAnalytics, says, "a spreadsheet is the easy choice".

However, despite that easy familiarity, inevitably with spreadsheets, the cash forecasting process is often manually-intensive and time-consuming. And not only are they difficult to scale for a growing business, they can also be error-prone. As Paul Smithwood, Director of Product Development, Data & AI, Bank of America, notes, errors that are not detected can lead a company to believe it has materially more or less cash than expected. If that company then makes decisions based on those erroneous numbers, at best finding the offending cell is like looking for the proverbial needle in a haystack, at worst it can prove costly.

While some power-users will have set up macros (which come with their own issues) to automate parts of the process, generally it would be fair to ask, why not just get something better?

In Deegan's experience, the reason many companies don't evolve past the spreadsheet is that the other systems they may look to help manage the forecasting process – such as enterprise resource planning (ERP) and treasury management

systems (TMS) – are designed for completely different types of activities, "and aren't fit for the purpose of anything other than basic forecasting". The case study in box 1 illustrates this point.

Smithwood comments: "I see a lot of clients looking up future-dated invoices or payment runs and just plugging estimated receipt dates and values directly into the forecast, or making basic calculations from a rolling average from the last couple of weeks of cash flow, and that is their forecast,". Clearly forecasting needs a better vision of the future.

New vision

Enhanced technology is perfectly positioned to support cash forecasting in three key areas, notes Deegan. First, in the collection, management and manipulation of the data required to start the process. "In the majority of the projects we have worked on, the time spent on 'cash forecasting' prior to the implementation of CashAnalytics was often more about low-value manual activities rather than true forecasting or analysis," he comments. "Technology can take this work off the table and quite quickly solve most of the base-level operational problems experienced."

Second, technology can transform the process of actually creating the forecast itself. Deegan comments: "The data collected from other systems and sources is just the starting point. The assumptions and adjustments made can transform this raw data into meaningful cash forecast data." He continues: "In spreadsheets, activities such as analysing customer payment

CONOR DEEGAN

CEO, CashAnalytics

BOX 1 CASE STUDY: FLEXIBLE FRIEND

Flex Group is a diverse multinational technological manufacturer. It has over 100 manufacturing and service sites across 30 countries. Revenues in 2020 were over $24bn. Alongside its financial planning and accounting (FP&A) 13-week rolling forecast, executed quarterly, sits its weekly treasury forecast.

The main difference between the two, explains Anita Bubna, Senior Director Treasury, Flex Group, is that to achieve the necessary visibility of cash, the treasury report has to be "super-granular and more accurate".

However, the challenge is gathering accurate, real time, granular data from several source systems that house the information on collections and payments for the forecasts and statements from banks to show actuals.

In an ideal world, data must be captured globally by currency and bank account from different systems. Although running a treasury management system (TMS), Bubna says it does not offer the level of flexibility needed for its own forecasting approach. Uploading large amounts of forecasting data from multiple systems is, she admits, sometimes "beyond the system's capabilities". For a business such as Flex that uses a mix of factoring, supply chain finance and asset-backed securitisation, insight into its collections process can be complex, she says .

With no clear means of capturing the source of specific receivables (nor where anomalies may exist) – and with pressure on forecasting accuracy and timeliness increasing – Flex's multiple source systems, constrained data handling capacity and limited aggregation, granularity and analysis, led Bubna to seek a better solution.

As a formally trained software and systems developer, she was under no illusion that a quick fix was likely. "Don't think that simply by moving from a spreadsheet to a new system that all your problems will be solved," she cautions. "From my experience, even today's systems tend to be fairly rigid."

Any incoming system had to have the flexibility and granularity to meet Flex's well-defined requirements. Unable to find the right platform on the market, a different tack was necessary. "At Flex, we are now working on a system – a one-stop-solution – to aggregate all data from source systems and adjust the forecast dynamically as the source data changes," she reports.

This project is based around a strategic partnership between Flex, a trade finance and working capital asset platform vendor, and a blockchain-based digital asset servicing platform provider.

To help the process, while Flex's TMS already consumes statement data, either through SWIFT or host-to-host connectivity, Bubna has ensured bank application programming interfaces (APIs) are being deployed wherever possible to leverage the benefits of real-time updates when generating forecasts.

The vision here is that by enabling Flex's customers, suppliers and partners to connect (using APIs or standard connectivity) on to the same platform, a procure-to-pay and order-to-cash view is created in one place. This makes the platform more like an eco-system, says Bubna. With all stakeholders on the same platform, related data can easily be validated by counterparties. Should a dispute on collections or payments arise, the collaborative and accessible nature of the platform – and "the same version of the truth for all" – will help rapid resolution.

With 30 countries to cover, the platform roll-out started with a small number of entities, customers and API-ready banks. With obvious benefits across the board, the team is now scaling up. Live data exchanges with customers, suppliers and banks will soon be augmented with data feeds from other partners, such as supplier finance programme providers, to further enhance Flex's cash forecasting capabilities.

Once the data volumes and quality are at a sufficient level, advanced tools such as machine learning will be introduced, says Bubna. "We have all the building blocks ready so this part should be relatively straightforward – and frankly it's the fun part of the whole exercise." With considerable success under her belt to date, she adds that she is willing to discuss the project in depth with other treasurers.

behaviour, and using this learning to adjust current invoice data to give a more realistic view of cash collection timing, is very difficult. So are other forecasting tasks such as transforming budgets and business forecasts into cash forecasts. Both can be greatly simplified using technology that is specifically built for cash forecasting, as opposed to generalist tech."

The third main area of support is where targeted technology enriches the analysis and reporting on the data. For example, how easy is it to carry out even quite simple actual-versus-forecast analysis in a spreadsheet, or drill down to transaction level of detail through a consolidated spreadsheet report? It can be done, notes Deegan, just not easily. "This type of analysis is a by-product of using a technology solution to support forecasting activity."

Definition

But is there a danger that, as forecasting complexity increases (through, for example, the adoption of tools capable of intricate modelling), treasuries risk so-called 'analysis paralysis'? "With every process using large amounts of data, this is always a risk; there's always more you feel you can do," Smithwood notes.

It's important to accept that, with so many variables and unknowns, a cash forecast can never be 100% accurate. Indeed, he says while it's prudent to try to improve forecasting accuracy, "it should only be to the point where the business is comfortable, from a risk standpoint, with its range of results".

> *Two of the most important impacts of better cash forecasting, whether driven by technology or not, are a reduction in reliance on external funding sources, and improvements in working capital.*

For Deegan, forecasting objectives, together with reporting and analysis output must be very clearly defined upfront. "While access to more analysis is never a bad thing, analysing the wrong thing, or not knowing what to do or how to interpret the output, is always a bad thing," he cautions. "Analysis paralysis is simply a poor use of the technology, not a fault of the solution itself."

Wider appeal

Assuming the correct setup and procedures are in place, two of the most important impacts of better cash forecasting, whether driven by technology or not, are a reduction in reliance on external funding sources, and improvements in working capital. Both are achieved through the more efficient use of cash flow within the normal business cycle.

However, says Smithwood, cash forecasts have many stakeholders – including various subsidiaries, and functions such as procurement, collections, AP/AR, tax and payroll – with treasury usually extracting forecast data from each. Often these functions believe there is little benefit derived from what's required of them, even seeing it as an imposition by treasury.

But, warns Smithwood, without buy-in from these stakeholders, treasury cannot do its job effectively, and the whole company suffers as a result. He suggests gaining CFO-level support to create incentives for these teams to acknowledge the value of their own input.

Some of the best forecasting processes he's seen incorporate specific KPIs, measuring, for example, the accuracy of each stakeholder's own forecast data,

PAUL SMITHWOOD

Director of Product Development, Data & AI, Bank of America

ANITA BUBNA

Senior Director Treasury, Flex Group

ERIK TEIKEN

Interim treasurer and treasury consultant

BOX 2 CASE STUDY: SEEDS OF CHANGE

It may come as a surprise, but not every company has embedded cashflow forecasting into its procedures. Interim treasurer and treasury consultant, Erik Teiken, has been working with a small, Netherlands-based seed production company that has had no formal forecasting process at all. The only point at which it had cash visibility over its c.€300m revenues was when month-end bank statements were delivered.

With operations spread across 30 entities located across the world – many in emerging territories such as Guatemala and Vietnam – accessing its cash has been a constant issue. Indeed, unable to access cash on a regular basis in many of its outposts, the company has been forced to source liquidity from its Dutch banking partners. With expensive R&D part of its cost-base, it found many drivers for action.

With Teiken's guidance, it is now seeking to control its cash, and limit fraud. Part of the overarching solution is the implementation of a TMS. A key selection criteria here is functionality to facilitate qualitative cashflow forecasting.

To kick off the project, first Teiken undertook a close analysis of existing processes and business drivers. His research found many points of concern, including a revelation that every single entity had its own local bank.

In addition to running an RFP for the TMS, he therefore instigated one for primary banking too. With the aim of consolidating "an impossible to manage" 55 local-bank relationships down to three or four global providers, he anticipates significant bank fee savings along the way. More importantly, with cash management finally centralised, lack of local forecasting knowledge ceases to be a problem.

Teiken has already proposed some interim cash forecasting templates, but ultimately the aim is to exploit the capabilities of the new TMS. Vendor presentations to date have revealed at least one weaker offering in this respect, he reports. Although that system has flexibility, "it takes more effort to achieve the same results".

A specialist forecasting system vendor is also being considered. Its system is able to drill down into the general ledger, extracting and classifying data for forecasting. "That it would present a powerful opportunity to leverage both automation and machine learning to gain considerably more insight from payments analysis," notes Teiken. With the three TMS vendors unable to compete at this level, he has proposed that the company adopt a best-of-breed tactic, adding the specialist system to the shopping list.

With selections finalised, implementation will be rolled out in stages, Teiken having proposed a project roadmap. A region-by-region and module-by-module approach will be adopted. With straight-through processing favoured wherever possible, primary bank connections to the TMS, preferably using APIs, will be the priority. Payments and cash position data, and then activities such as netting, will follow.

Once the fundamentals are in place, a limited set of local banking relationships will be connected, with automation underpinning the whole centrally-managed cashflow forecasting process. As Teiken comments, "it will be a major step forward".

with results being reported up to the CFO. By escalating that data, in simplified form – perhaps through a dashboard – a clear view of the strengths and weaknesses of each forecast is delivered.

Next level

Due to the variety and depth of activities that ultimately feed into cash forecasting, the tools used to support it will also need to possess a depth and variety of functionality to truly take the process to the next level.

Banks hold the majority of data that their corporate clients use to forecast. They should be making it as easy as possible to access this data to aid cash forecasting. "Rather than forcing our clients to manually extract data and try to manage the process in Excel, we have built a forecasting solution called CashPro Forecasting that sits within our online banking portal that automatically connects to that data," explains Smithwood. But clearly some clients want to push the boundaries, and for these, he says embedded analytics such as machine learning (ML), are a consideration.

With more bank and fintech providers delivering these advanced technologies, typically as a cloud service, the valuable information they can offer is increasingly attainable by smaller firms, says Smithwood. As might be expected, the quality and efficacy of software varies, and full evaluation of any new tool, comparing output to actuals, is advisable.

To initiate a programme of technological improvement, pragmatism is essential. As a simple guide to action:

- Define forecasting goals, including how far out it needs to go to be useful.
- Critically assess what data is really needed to support these goals.
- Clinically differentiate between essential and nice-to-have system capabilities.

While some specialised forecasting tools may not be appropriate for all companies, there is a clear case for most to move beyond the limitations of the spreadsheet. Indeed, where complexity and risk is rising, every finance professional can now choose to base their decisions not on the output of generic risk-laden software, but on insight derived from solutions optimised for their own unique needs. ■

To find out more on this topic, please see the infographic which accompanies this article:

http://tiny.cc/d07huz

Greece is the Word

Setting up a National Treasury Association

By **Ben Poole**, Columnist

The newly established Hellenic Association of Treasurers (HAT) aims to support a vibrant community of Greek treasurers, both at home and abroad. Here, Alexandros Bellos, board member and Co-Founder of HAT, who is also Senior Treasury Manager at PVH Corporation, is joined by another HAT board member, Marianna Polykrati, Group Treasurer at Chipita S.A., to explain the association's key areas of focus for the year ahead.

National treasury associations play an important role in both professional development and expanding the network of peers that treasurers can engage with. Whatever challenges or projects you might be facing within your organisation, there is usually someone who has been through something similar and can offer advice or support. But what do you do if your country doesn't have such an association in place? That was the challenge facing Greek treasurers until the Hellenic Association of Treasurers (HAT) was officially founded on 8 December 2020.

The concept for what would become HAT began around four years ago, explains Bellos, when President and Co-founder of HAT, Alexandros Koliavras, during his role as Group Treasury at Philips, collaborated with the Chairman of the Dutch Association of Corporate Treasurers (DACT). This exposure, coupled with the continuous 'brain drain' that Greece was facing in the years following the financial crisis where many young, bright minds left Greece, spurred Koliavras into thinking about forming a similar association. A national association that could leverage the international knowledge and experience of the Greek treasury professionals around the world, establish a 'brain gain' for the country and put Greece on the treasury map. The seeds of the idea for HAT had been planted, but it would take a while before the green shoots of the new association would emerge.

"Koliavras later advanced his career as a Global Business Advisor for the Group Treasury of ING, where he partnered with Dimitrios Chasapopoulos and Chariton Papatriantafyllou at the bank," explains Polykrati. "The three of them built the fundamentals of the association, and together with Bellos and Aris Nafpaktitis they founded the association and then I also joined the initiative. We formed the board and started working together during the pandemic."

The need for a Greek treasury association has been driven by the growth and increasing sophistication of corporations in Greece, according to Polykrati. "Now with the worst of the financial crisis behind us, Greek companies are starting to grow and develop. Finance departments are transforming and becoming even larger. The treasurer's role in Greece is starting to expand and to have more substance. The timing of this new association is perfect."

A hybrid approach

HAT's vision is to ensure that treasury, in all companies, evolves into the department where all financial risks are monitored and managed in a specialised and professional way. Its mission is to unite all Greek treasury professionals, whether they are based in the country or abroad, and there are several interesting steps that the association is taking to achieve this.

Bellos notes: "From the start, we established this association for all treasury professionals, those who are focusing on the corporate world and also those in financial institutions. We want to include everyone."

Polykrati adds: "Essentially, we are operating a hybrid model, in the sense of including corporate and bank treasurers together, but it's also hybrid in other ways. For example, we have Greek members from the Greek market, but also have Greek treasurers working overseas. This gives us a broad knowledge of, and experience in, different cultures, and we are also gaining knowledge of completely different stages and maturities of treasury functions. Add in the treasurers' roles within banks alongside that of the corporate treasurers, and you get a really interesting mix. This is something that can be beneficial for sharing different best practices."

ALEXANDROS BELLOS

Board Member and Co-Founder, Hellenic Association of Treasurers. Senior Treasury Manager, PVH Corporation

Assembling the work streams

With the vision and mission of HAT established, thoughts then turned to setting up working groups within the association to look into specific treasury topics. Built by treasurers for treasurers, these working groups have already identified some core issues to explore.

"We have been scanning the market to see which areas generate the most interest for our members," says Bellos. "So far we have identified that there should be a working group on cash management and treasury infrastructure. There should be another focusing on corporate finance and risk management, as from the first interviews we understood that financing was one of the most addressed issues for our members as well as FX [foreign exchange] risk management. Another group is looking at treasury policies and regulations, such as KYC [know your customer] compliance, to help solve the day-to-day headaches treasurers face, IBOR transition and national and European policies and directives that affect treasury to help treasurers prepare for the changes in the tax and regulatory landscape as well assisting them to achieve best in class treasury governance" and so on.

Alongside these traditional challenges for treasury, HAT is also examining emerging challenges that treasurers should also be focusing on, such as environmental social and governance (ESG) issues. Polykrati explains: "One of our working group topics is sustainability. This covers the whole range of ESG, not just 'green' issues. We already have members who have expressed interest in this, and we are now in the process of recruiting members who will be forming each working group."

Accelerating growth

Despite being a legal entity for just a few months, HAT already has 58 members. Looking ahead, the association has plenty of ideas for growing the community during the year. To support this growth and development, the association has formed committees, to monitor the association's operations, identify issues for review, gather and evaluate information and recommend courses of action. The association is currently

MARIANNA POLYKRATI

Board Member, Hellenic Association of Treasurers. Group Treasurer, Chipita S.A.

on-boarding the members to assist on the day-to-day functions.

"We just had our first general assembly, which was all in Greek," says Bellos. "As the members come both from Greece and abroad, the association's language shall be bilingual. Greek shall be the starting point as it is the unifying link amongst our member base, and switching to English whenever and wherever needed, for a more international outlook as we develop and grow to accommodate the global know-how and the local market knowledge. "

Attracting more Greek treasurers will be down to HAT's ability to sell the benefits of the association to potential members. Peer interaction is one of the main attractions. "To be able to have access to 100 treasury peers, whom you can share information with and ask questions of, is a big selling point," notes Bellos. "Then, through this interaction, you can also gain visibility. You might write an article for, or make a presentation with, your peers and through those activities everyone will get to know you."

With plans to create a bespoke platform for member interaction, and content generation that is as tailored as possible to the needs of the Greek treasury world, HAT has a busy and exciting year ahead. Visit www.treasury.gr to find out more or to join the association. ■

Regulatory Round-up with the EACT

By **Tom Alford**, Deputy Editor

The European financial regulatory environment is one of the most homogenised in the world and yet it still forces corporate treasurers to stay constantly alert for local nuances, revisions and wholesale changes. With the current European Parliament's term running from 2019 to 2024, now is a good time to cast an eye over what is and what will be in terms of financial market regulations. Tarek Tranberg, Head of Public Affairs & Policy, European Association of Corporate Treasurers (EACT) is our guide.

If 2020 was largely defined for businesses as a year spent firefighting the economic fallout of the pandemic, and figuring out how to work remotely, the European regulatory landscape was about making adjustments to ease the pressure while staying true to objectives and laying the groundwork for the coming years, says Tranberg.

Amid the communications concerning long-term issues such as sustainable finance and the EU's retail payments strategy, the regulators stepped up to the plate with some quick fixes to existing regulations to ease the burden on banks and companies. Their efforts, for example, relieved some of the pressure on bank capital requirements, freeing up some buffers to enable cash to trickle more fluidly into the wider economy.

The policymakers and regulators have acquitted themselves reasonably well as firefighters. Existing regulations, particularly those relating to banking capital requirements, have so far enabled the financial system to largely withstand the shocks of 2020. Only the possible increase of the European stock of non-performing loans is raising any concern.

But now they are shifting up a gear to take plans forward in 2021/2022 – and several themes are likely to impact treasurers.

Payments alignment

From a regulatory perspective, payments can be framed within the wider context of the EU's desire to develop more independent payment and settlement capacities, says Tranberg. This thinking stems from the on/off Iran sanctions-borne realisation that the US pretty much controls market flow through Visa and Mastercard payment processing.

An attempt to create an alternative way of settling payments came through the EU's Instrument in Support of Trade Exchanges (Instex) payments platform. This further highlighted the lack of a fully integrated European payments market, even when banking with the same bank across different geographies.

Today, European payments strategy is focused on creating a true single market for payments by bringing down barriers for cross-border payments, promoting instant payments and related innovative solutions, and ensuring interoperability between national schemes.

The strategy has, through the concept of Open Banking, introduced a host of new payments services providers (PSPs), but not all are regulated equally, notes Tranberg. This has persuaded the EU to look again at the second Payment Services Directive (PSD2), with a review scheduled to start at the end of 2021. "They will be looking at the degree to which Open Banking can be extended to other types of accounts, how entities that are not covered under PSD2 can be brought into the rulebook, and to what extent APIs [application programming interfaces] can be standardised to enable greater integration of the payments market," he notes.

Another part of the strategy will look at reviewing the Settlement Finality Directive to potentially give quasi-bank e-money institutions (such as Revolut and TransferWise) access to central bank payment infrastructures. Currently, deposits from customers of these institutions must be held in a commercial bank account. Settlement access will open up the market to these players and, it is intended, spur competition.

The European Commission (EC) also plans to boost uptake of the SEPA Credit Transfer (SCT) instant payment scheme, says Tranberg. This may take the form of mandate. The aim is to ensure cross-border payment flows within the EU and beyond function as easily domestic payments.

Sustainability framework

The exploratory work is driven partly by the will to standardise the market. This also manifests in quite an advanced way in Europe's regulatory response to sustainable finance. The primary legislation that creates the framework for the EU taxonomy is now in place. The Taxonomy gives the market a standard classification system for sustainable economic activities.

In process now is secondary legislation to establish delegated acts, adding detail to primary legislation with technical screening criteria for two of the six taxonomy objectives – climate change mitigation and adaption – now being finalised, notes Tranberg.

As a phased-in requirement, from January 2022 corporates will have to report under the taxonomy's disclosure rules the extent to which their turnover is derived from taxonomy-compliant activities, and the extent to which their capital and operational expenditure is mapped against taxonomy-compliant economic activities, both under the two technical screening criteria. "While many corporates are aware of this, I'm not sure all are as prepared as they perhaps should be," Tranberg comments.

This represents the flip side of new reporting requirements that have been applicable since March 2021 for the investment community under the Sustainable Finance Regulation. Without sufficient information regarding

> *"If 2020 was largely defined for businesses as a year spent firefighting the economic fallout of the pandemic, the European regulatory landscape was about making adjustments to ease the pressure."*

TAREK TRANBERG

Head of Public Affairs & Policy, European Association of Corporate Treasurers (EACT)

the sustainability components of an investment manager's portfolio to be able to submit full disclosure, corporate disclosure requirements were inevitable.

With the Taxonomy as the centrepiece, everything links back to it, explains Tranberg. This connection is driving the EU's push for a green bond standard; a legislative proposal likely to appear by Q3 2021 and set to create a framework under which issuers can demonstrate Taxonomy compliance and claim eligibility for the EU Green Bond Standard label.

"The green bond market will probably see a significant boost across the EU in the next year or two," he notes. Indeed, it is part of the €750bn European Recovery and Resilience Facility designed to tackle the consequences of the Covid-19 pandemic, with a commitment made by the EC to raising around one third of the overall amount in EU green bonds.

'This commitment will bolster the initiative, but the EACT has pushed the EU for green bond programme flexibility. This would allow issuance where the activity being funded is not fully Taxonomy-compliant, and enable green bond labelling of a general corporate purpose bond. As Tranberg explains, most corporates don't raise funds for specific projects but rather channel the funds raised as required. "The notion of having to ring-fence funds for a specific purpose is not always the most practical and is probably one of the reasons for low uptake." Flexibility will encourage greater activity.

Crime detection and prevention

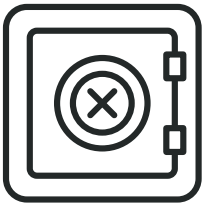
Financial crime remains an issue globally, and in early 2021 (late April/early May) the EC will be proposing reforms to the EU's anti-money laundering (AML) framework. The twin focus will be on the establishment of a European supervisory authority for financial crime, and on plans to harmonise current requirements across all 27 member states.

The supervisory authority is viewed in part as a response to events that unfolded in 2019, when €200bn of 'suspicious transactions' in Estonian branches of Danske Bank were uncovered, and then 2020's Wirecard fraud in Germany in which €1.9bn in cash 'went missing'. Both incidents are what Tranberg perceived as the "abject failure of the national regulator to spot money laundering within a sizeable payment processing entity".

The new authority is to create harmonised oversight of significant financial institutions, along the lines of the European Central Bank's single supervisory mechanism for banks. The largest entities will fall under direct EU-level supervision, smaller ones can be dealt with nationally, but national supervisors may still seek EU-level help where suspicious cross-border activity arises. While there is little intention of corporates being brought under direct supervision for the time being, the intention to tackle financial crime is evident.

A second pillar of response aims to turn what are currently EU directives on AML, allowing a degree of latitude for transposition into local law, into regulation, where no such freedom is given. "This is potentially a major upside for corporates, giving one set of rules for all member states for AML, KYC [know your customer], and customer due diligence requirements," comments Tranberg.

An additional element that should be considered as part of these reforms, which could facilitate customer onboarding, bank account management and KYC processes, is a wider use of unique legal entity identifiers. Creating legal obligations for use of the global Legal Entity Identifier (LEI) system – for example in EU AML rules – could deliver significant benefits for corporates in tackling KYC-based pain alone.



Banking back on track

Meanwhile, banking and financial services sectors will see the delayed review of Basel III's capital requirements directive swing into action in 2021. The EC had its proposal lined up for May 2020, but with the Basel Committee postponing implementation of outstanding phases by one year, Tranberg says the EC was spared a rush to push out the legislation immediately. Q3 2021 is likely to be the new date in the diary, he says, adding that "it remains to be seen what lessons will be drawn from the crisis in how the Basel standards will be implemented".

One current exemption in bank capital rules in Europe – the credit valuation adjustment (CVA) exemption – reduces the capital amount required to be held against corporate hedges. When rules are revised, Tranberg urges treasurers to check that all such exemptions are retained. "If the CVA exemption were to be removed, the cost of hedging would overnight become significantly more expensive for corporates," he states.

Again, the EACT has the EC's ear on such matters, making it abundantly clear that removing the CVA exemption would have a negative impact on a corporate sector trying to manage volatility created by the pandemic.

From a purely corporate perspective, concerns have also been expressed about the capital treatment of some derivatives exposures by banks. Of most concern is

> *The green bond market will probably see a significant boost across the EU in the next year or two.*

the weighting of capital requirements that banks must hold against, for example, exposures to unrated corporates, certain instruments (such as trade finance instruments), and specialised corporate lending facilities. If the rules go the wrong way, they could impact either bank willingness to provide these services to corporates or the cost of doing so.

Basel revisions will also introduce an 'output floor' on capital calculations. With banks required to use a standardised model for calculating capital, but given freedom to use internal models, an output floor will mean that whatever the outcome of an internal model, it cannot be lower than 72.5% of what the standardised approach gives. "For many banks, capital requirements may rise, which will lead some to conclude that business will be more expensive and that they will not be able to lend as much," notes Tranberg.

Converging capital markets

Capital markets regulations are set on a pathway to build a fully integrated capital market for member states, with a more wholesale overhaul of MiFID II slated for 2021/2022. This could include changes to market structure, the transparency framework, and possible introductions of fresh trading obligations for new asset classes.

Notable for corporates would be any new requirements for foreign exchange markets. Bond trading is also under a watching brief. With a significant trading volume of European shares shifting from London to Amsterdam in recent months, some see the logic (perhaps more with a political mind than a financial one) of forcing euro-denominated bonds to be traded on European exchanges, says Tranberg. "It may not fly but treasurers should at least be aware."

With consolidation of post-trade market data pricing across the EU markets for some instruments, a "low hanging fruit" here could be the creation of a consolidated tape of data for the corporate bond market, he says. However, there are technical challenges to overcome in the provision of instantaneous data across such a wide geography, notably the latency inherent in data consolidation and distribution. Apart from that, there are also wider issues to tackle, such as how the provision of such a tape would be put out for tender.

Advancing technology

Technology is obviously now a key part of the corporate financial landscape, and the EC's digital finance package, adopted in September 2020, lays the groundwork for many new ideas. It incorporates a digital finance strategy with legislative proposals on crypto assets and digital resilience. With several established regulatory sandboxes and pilot schemes, the aim is to encourage innovation while preserving financial stability and consumer protection, says Tranberg.

One of the goals is to build a policy framework for artificial intelligence (AI), which includes proposals for a civil law on liability for AI in case of damages. Of more immediate impact will be the proposed common legislative approach to crypto assets and the development of Central Bank Digital Currencies, with the ECB already exploring the notion of a digital euro.

The EACT was active during the ECB's consultation phase, noting that it would be an interesting prospect for treasury, with digital currencies likely to ease corporate aversion to holding cash. However, it also emphasised the lack of coverage by current AML rules for the structuring and use of crypto currencies.

With the ECB's explorations of a digital euro likely to yield a go/no-go decision by Q2 2021, Tranberg believes a green light will herald a period of testing and adaptation of the accompanying regulatory framework.

Elsewhere, the financial authorities are closely monitoring the operational resilience of the sector as it may be impacted by outsourcing of critical infrastructure. The Digital Operational Resilience Act is under negotiation within European Parliament and Council. It considers how financial institutions are able to outsource, for example, to a cloud provider, and what requirements, in terms of negating any institutional exposure, must be fulfilled when this course of action is taken.

Post Libor preparations

One change that is reaching a regulatory conclusion is the transition away from the London Inter-bank Offered Rate (Libor) to new risk-free rates (RFRs), with amendments and exemptions to the EU Benchmarks Regulation, including

> *It remains to be seen what lessons will be drawn from the crisis in how the Basel standards will be implemented.*

derivatives fallback protocol, on the table. However, among RFRs, Tranberg notes that there are no full alternatives to Libor yet in terms of how they are structured and whether they are future-looking or based on historic transactions.

With the current crop of RFRs being based on the overnight swap market, although based on actual transactions, they do not provide a look into the future. "Even if they will do – and the UK is exploring a compounded SONIA [Sterling Overnight Index Average] that is forward looking, and the EU is contemplating a forward-looking compounded rate – the issue is that the compounding formula is likely to be based on an historic median."

While there are differing views as to the helpfulness of using historic data to project the future (and to what extent it is better or worse than Libor), the reality is that Libor is going to disappear. However, ICE Benchmark Services, the Libor administrator, has consulted on the cessation of the various rates and has said it will keep some tenors of USD Libor running until June 2023.

Although other Libors will cease on 31 December 2021, the predominant exposure of corporates is medium term and USD Libor. The ICE extension is thus "helpful", allowing a significant number of contracts to run off before transition, notes Tranberg.

For those that are not covered, the Benchmarks Regulation Review of 2020 saw the EC put its statutory fallback mechanism in place. This allows for the smooth transition of contracts still open at Libor cessation. The statutory fallback rate applied may not prove to be the most attractive, but it is intended only as a backstop and will not override any fallback privately agreed between corporates and their bank or other counterparties.

The Benchmarks Regulation Review of 2020 also sought to tackle overly restrictive third-country rules for a subset of non-EU indices. When these rules were drafted, the assumption was that many jurisdictions across the world would implement similar legal frameworks, says Tranberg.

With most actually relying for their benchmarks on International Organisation of Securities Commissions (IOSCO) principles rather than legislating domestically for them, the lack of equivalent or recognised frameworks in these jurisdictions makes it difficult to grant non-EU benchmark administrators access to the European market.

Aware of the problems this would cause, a transitional concession was made in 2020's review enabling European users to continue using non-EU benchmarks for a further two years. This will allow time for the third-country rules to be tamed. It also carved out spot foreign currency (FX) benchmarks for use even after the end of the transition period. This is particularly important because at that point, FX benchmarks for non-deliverable currencies would cease to be available for European users.

Tax in the spotlight

Last but not least, corporate, financial and digital tax regulations are subject to international and European workstreams. International affairs are conducted at the Organisation for Economic Co-operation and Development (OECD) level and include initiatives such as the base erosion and profit shifting (BEPS) project that seeks to disrupt multinationals exploiting gaps and mismatches between different countries' tax systems. So far, the BEPS framework has seen more than 135 countries collaborating to end tax avoidance.

The OECD is also engaged in discussions on a digital levy. Progress held back under the Trump presidency may yet see forward motion under the Biden administration. In the light of the difficulties at OECD level, the EU has stated that if progress is not made, it will consider creating its own digital tax, applicable to firms profiting from European data and citizens. While this is aimed at Big Tech firms, how far it reaches into the e-commerce and even financial services sectors remains to be seen. Treasurers should keep a watching brief.

There is movement too at EU level in the quest to mandate corporate public per country reporting of tax payments and profits. If implemented, it would require any corporate – European or otherwise – that has significant operations in the single market to disclose, on a country-by-country basis, its profit levels and tax payments.

Additionally, for both listed and non-listed businesses with a consolidated global turnover of more than €750m, disclosures could be required in the EU of the level of tax paid and profits made, on an aggregate basis, outside of the EU. The same reporting would be required where business is conducted in any jurisdiction that is classified as a non-co-operative tax jurisdiction.

Financial regulation is necessarily a complex and challenging affair. What's covered here just scratches the surface of existing and planned activity at a European level, often with legislative and regulatory tentacles reaching around the world.

For treasurers, awareness and understanding of it all, and formulating the most appropriate responses, may seem like a full-time job in itself. National treasury associations and bodies such as the EACT, play a vital role not only in advising the community but also in advocating during consultation periods. For more information on any of the topics covered contact: tarek.tranberg@eact.eu ■

> *Financial regulation is necessarily a complex and challenging affair.*

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Smashing Banking Boundaries and Building Tech Bridges in Europe

By **Eleanor Hill**, Editor

From answering a Barclays recruitment advert in a music magazine some 30 years ago, Helen Kelly's successful career with the bank has now seen her appointed as Managing Director, Head of Europe for Barclays Corporate Banking. Here she reflects on her professional journey thus far and explores some of the key challenges facing European treasurers today.

Eleanor Hill, Editor, TMI (EH): ***Congratulations on your new role. How has your career progressed to this point, and what attracted you to this position?***

Helen Kelly (HK): Thank you. Believe it or not, I've been with Barclays for more than 30 years now. It all started when I was 18 and replied to a Barclays recruitment advert on the back of *Smash Hits* magazine. So, with the job lined up I travelled from a small town in Northern Ireland to the fabulously diverse city of London, which was fantastic on both a personal and professional level.

After joining, I swiftly moved into large corporate banking and client coverage roles, and I particularly enjoyed working with multinationals on their cross-border banking needs. My move to Ireland came in 2004, when I was asked to build our Corporate Banking franchise in Dublin. The business had been in Ireland for around 35 years at that point, mainly focused on large Irish corporates, but with the huge influx of foreign direct investment into Ireland there was the opportunity to build out our capability to target multinationals.

That growth strategy is nicely mirrored in what we're now doing within Europe today. I joined the European Corporate Banking leadership team in 2017, and we're

investing heavily in new capabilities for clients operating in European geographies. At the same time, we are building stronger, deeper relationships with clients – and this opportunity for mutual growth is incredibly exciting.

***EH:* Tell me a little bit about the bank's European history. And what about your goals for the next 12 months – where is Barclays Corporate Banking within Europe heading?**

HK: The Barclays group has a long-standing heritage in Europe. We've been in France, for example, for 100 years. Europe has also been an area of focus for us many years, in particular in the corporate space. The advent of Brexit provided an opportunity to reaffirm and build on our commitment to Europe by founding a European bank, headquartered in Dublin, to ensure that we are well placed to support European corporates on the ground. We will continue to invest in this European network in the months and years ahead.

A central pillar of this investment is the roll-out of our new corporate banking platform, which covers nine European Corporate Banking countries in a single interface – and we are looking at further expanding this reach. Our clients currently benefit from the same experience in each country via our simplified European platform.

***EH:* What are some of the challenges that corporates are facing in Europe as the pandemic rumbles on? How are banks supporting them through these tough times?**

HK: Let's take a look back at 2020 to set the scene. There were three main macro challenges treasurers faced. Obviously, when Covid-19 was first declared a 'pandemic' we saw a global liquidity crunch, there was significant FX [foreign exchange] market volatility, and numerous central banks decided to cut interest rates.

The low interest rate environment presented an opportunity and a threat, depending on a company's capital structure. As we head into the second half of 2021, interest rates remain low, but inflation has become more topical and will remain very important and appropriate hedging will be vital.

Corporates, like governments, are also working hard to 'build back' from the pandemic – and they want to achieve this in a sustainable way. So, environmental, social and governance [ESG] initiatives are proving popular and banks are innovating in this space.

Another trend is that business models have had to evolve as a consequence of both the pandemic and growth of digital channels. We have seen lots of traditional business-to-business organisations exploring e-commerce and direct-to-consumer (D2C) sales, for example. In turn, this is incentivising treasurers to be more involved in discussions around payment and collection instruments.

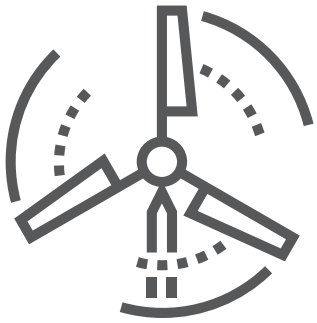
***EH:* Tell me more about corporates' ESG expectations. How has the discussion moved on in the past 12 months, for example?**

HK: As we all know, ESG has been topical for a while; what's changed since early 2020, however, is that sustainable business is now a board-level imperative. Another interesting trend is the broadening of the ESG conversation beyond the typical 'E' talk towards the social and governance aspects.

Across Europe, treasurers are looking to their banking partners to

HELEN KELLY

Managing Director, Head of Europe, Barclays Corporate Banking



> *ESG has been topical for a while; what's changed since early 2020, however, is that sustainable business is now a board-level imperative.*

provide sustainable cash and liquidity management solutions. As a bank, we have responded with a range of innovations – from green bonds to sustainable trade finance solutions. As well as creating exciting financing solutions to support clients on their sustainability journeys, we also continue to raise awareness of emerging ESG challenges and opportunities, while upskilling our own staff to enable them to think outside the box on ESG. After all, ESG in financial services is about so much more than financing solar or wind farms!

***EH:* Absolutely. I wanted to come back to the digital tools topic we touched on earlier. With remote working during the pandemic, treasurers have quickly adopted a certain level of digitisation. But do you think there is scope to go a little bit further here?**

HK: Remote working has flagged that many corporate workflows function better without paper processes. Digitisation and automation have become king and tools such as digital signatures are making remote work easier and more efficient. As a knock-on effect of global lockdowns, tools such as application programming interfaces [APIs], robotic process automation [RPA], and artificial intelligence [AI] have also come into their own in the corporate treasury sphere. Innovative corporates are applying these technologies, often in combination, to solve problems and to make processes more efficient. Relying on spreadsheets really doesn't cut it these days! This is especially true in the world of transactional FX, which is often manual. By leaving spreadsheets behind, treasurers can manage exposures in multiple currencies on a fully automated basis – eliminating the risk of manual errors and freeing up the team for more strategic tasks.

These smart technologies have the potential to unlock massive efficiencies for treasurers. I've never met a treasury team that doesn't have a large number of projects on their desk, and you could never accuse treasury functions of being overstaffed. But so many of these projects are ideal candidates to be automated with RPA or AI. Further digitalisation is very much the future. There are always processes that can be optimised.

Real-time cash visibility is also swiftly becoming a treasury fundamental. With the right technology set up and bank functionalities, the real-time environment can enable instant tracking and tracing of payments and, in turn, can enhance the accuracy of cash forecasting, for example.

***EH:* How is Barclays investing in its own tech capabilities?**

HK: On the cash management side, we're currently implementing SEPA Instant Credit Transfer [SCT Inst], and within that we will have some exciting API capabilities. For example, until now our clients have been interacting with us through a File Gateway, but this is also now being replaced with APIs – to enable seamless, real-time connectivity.

Looking at our tech capabilities more broadly, we also announced a few months ago that we're moving to the CGI Trade360 platform. This is all about delivering cloud-based functionality for our trade clients, providing greater visibility over corporate supply chains. The cloud has become far more important for clients as a result of remote working, which is really exciting when combined with the fact that we have an established network of trade experts right across Europe in corporate banking – those two things go hand in hand.

Finally, and perhaps most importantly, we are focusing on protecting clients against banking fraud and cybercrime. We are consistently investing in our own systems, but we also regularly run cybersecurity training sessions for our clients – helping them to stay abreast of the latest threats.

***EH:* Finally, how can treasurers make the most of all this technology that is now available to them?**

HK: With the increased importance of data and digital models, treasury teams must evolve in order to use the technology, and more importantly, the data, to its full extent. As well as bringing in the right tools – whether through their banks, vendors, or internal IT departments - treasurers also need to upskill their human capital in order to enable proper interpretation of data and the ability to produce actionable insights. On top of this, continually educating your people is never a bad idea – it challenges them and enables them to uncover insights into new growth and efficiency opportunities, which in turn feed back into the wider business. ■

> *Remote working has flagged that many corporate workflows function better without paper processes.*