GLOBAL DIGITAL FINANCE

2020 | Annual Report

A WORLD RAPIDLY GOING DIGITAL

Digital Assets Coming of Age

Global Digital Finance

Annual Report 2020

INTRODUCTION

PATRON INSIGHTS

REGULATION & POLICY

VOICE OF THE COMMUNITY

GDF EXECUTIVE REPORT

ADVISORY COUNCIL & WORKING GROUPS

TALENT & GOVERNANCE

Foreword

A World Rapidly Going Digital

Lawrence Wintermeyer
Executive Co-Chair & Guarantor
GDF

Simon Taylor
Co-Chair & Guarantor
GDF

The outbreak of the global pandemic created a humanitarian health crisis, which quickly led to an economic crisis of untold proportions, with government bailouts and stimulus, and the race to deliver a vaccine.

March saw one of the most dramatic stock market crashes in history with a 26 percent pull back over four trading days, taking with it safe harbor assets like gold and new assets like crypto. Unemployment quickly hit record highs and governments rushed legislation to print money to help citizens and businesses though the crisis, pumping liquidity into the system. COVID-19 had arrived and brought with it profound changes to our global community including lockdowns, social distancing, and the wearing of face masks. Home working, and for some home schooling, became the norm.

When GDF held a COVID-19 mini summit in March to convene members to share their experience of working through the pandemic, there was already early evidence of Zoomitis as team members lost track of a fixed workday working from home. We continue to be vigilant and keep an eye out for community members who show signs of mental fatigue and stress as a result of these circumstances. We pay our respects to members of the community who have been severely affected and experienced loss.

Thankfully, there is a light at the end of the tunnel for the pandemic with several vaccines approved and the monumental job of vaccinating the public in 2021.

The change in our ways of working for us “digitalists” was much less difficult than for those working in more traditional sectors, many of whom must report to a workplace to earn a living, if their sector is still functioning and they are still employed. Digitalization was not just important, but a survival tool. It has allowed communities to collaborate even when they are separated.

Responding to Requirements

We have seen the community respond to the needs of the sector, demonstrated in the delivery of the InterVASP Messaging Standards. Conversation on the status of implementation of the Travel Rule kicked off in February at the FATF plenary at the OECD in Paris. The Joint Working Group (JWG) steering committee, comprised of leaders from GDF, the Chamber of Digital Commerce, IDAXA, Xreg Consulting, and technical service providers, led the discussion. They presented the status of IVMS101 Standard, which they then approved in May.

The industry collaboration in developing IVMS101, along with the industry engagement model supported by FATF, is groundbreaking. IVMS101 was developed by the global industry in an open source forum. It was produced in a record 17 weeks and adopted by the industry participants all within a 9-month period. This demonstrates how effectively the crypto and digital assets sector can come together to respond to regulatory requirements.

2020 saw Central Bank Digital Currencies (CBDCs) projects take prominence. The Bank of International Settlements (BIS) published research in August and identified 32 different CBDCs projects around the world, all intended to compliment cash. Regulatory focus on stablecoins increased, with the Financial Stability Board (FSB) call for regulation, supervision, and oversight of "global stablecoins".

In July, GDF held its first ever conference (virtually) with a stellar line up of members and community friends, central bankers, and regulators, to discuss the emerging state of digital coins and currencies. GDF published The Age of Public Digital Currencies: A Guide to Issuance—a digestible account of everything you need to know to launch a public digital currency.

Stock markets recovered and boomed throughout 2020, and bitcoin hit record highs. Private market investors and institutions were buying bitcoin, driving the price to just under $30,000 on the 31st of December with a total market cap of just under $1 Trillion. The crypto derivates market exploded offering a range of hedging instruments for crypto funds and sophisticated investors and is estimated to be double the size of the spot market.

The DeFi market was quietly building momentum in Spring and by August had a market cap of $7 billion, more than doubling to $16 billion by December 31st. In H2, GDF conducted a DeFi roundtable followed by a virtual conference to focus on the emerging DeFi solutions landscape, it's architecture, investor opportunities, and safeguards. The GDF membership has launched a DeFi working group to further develop the "DeFi standards landscape" and extended the invite to the global DeFi community.

Keith Bear and Michel Rauchs' Enterprise Blockchain report for GDF identifies the important consolidation of the prominence of the "Big 3" solutions: R3's Corda; IBMs Hyperledger, and Ethereum. It provides a framework architecture for the ecosystem and identifying that the financial services sector leads the development of this domain - the future infrastructure for the industry – across all other industry sectors.

2020 showed us the importance of enterprise-grade infrastructure in enabling the adoption of digital assets to unlock value in private markets. GDF members launched the Private Markets Digitization Steering Group, focused on developing a reference architecture and proof of concept for digital securities trading and custody. The group consists of over 25 financial top tier financial institutions, and highlights GDF members' ambitions to move the community to develop open source member-led solutions beyond codes and interoperable standards.

Engaging with Regulators & Policy Makers

GDF convenes a quarterly Regulator Forum for code, policy and framework purview. from over 30 regulators and agencies. The FSB and BIS continue to provide welcome read-outs at GDF quarterly summits, which offer working group members an open public plenary forum for industry feedback on codes, standards and papers.

GDF in Numbers

10 **Codes of Conduct**

6 **Reports, Whitepapers, & Taxonomies**

360 **Community Members**

700+ **Working Group Participants**

> The work GDF conducts through its members and participants is crucial as a platform to shape and be a voice in the safe growth of digital assets.

GDF Member Survey 2020

GDF has responded to several regulatory consultations this year and has worked on member-led advocacy initiatives across supranational agencies, jurisdictional regulators and central banks. In H2, the GDF team mobilized a patron member working group to focus on the technical work and advocacy for the EU's Market in Crypto Assets proposal which appears to be the most comprehensive crypto and digital assets regulatory framework to be issued to date. As 2020 closes out, the members ready themselves to respond to the U.S. Treasury FinCen consultation issued at the end of December, which raises issues with self-hosted wallets and the threshold for transferring money.

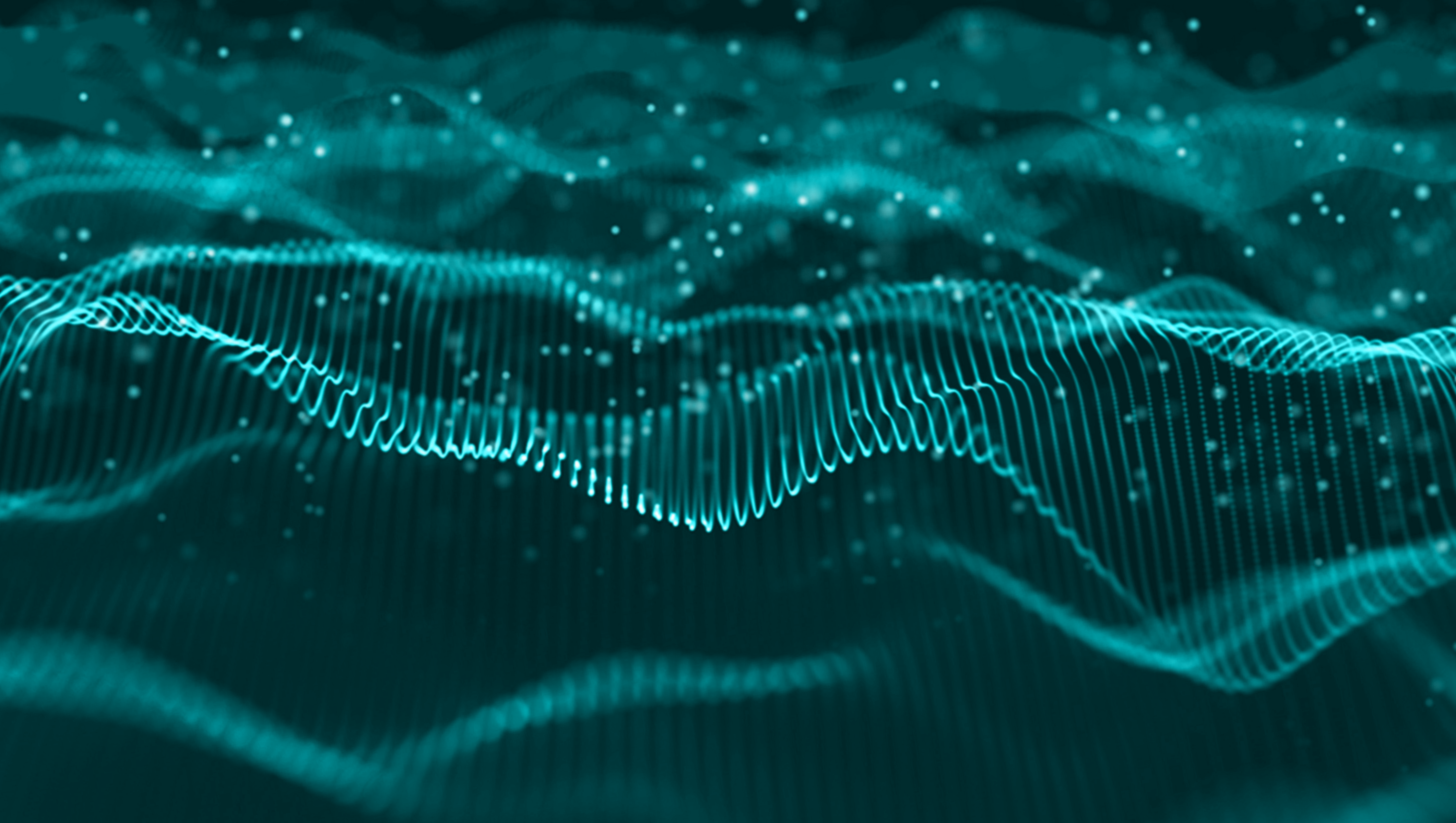
GDF hosted a roundtable for leading FinTechs offering cryptocurrencies and derivatives to retail customer to focus on the need for better consumer protection and investor self-certification. Following the FCA's ban on retail market access to crypto derivatives scheduled to take effect in January 2021, the GDF community will lead further advocacy and work on retail standards and certification will be developed in the new year.

2020 saw member working groups deliver new codes, papers, and standards. We hosted more than 100 conference, webinar, and media events profiling members and the community. We ran roundtables on cryptoassets and sustainable finance to provide input to the UK Fintech Review, which yielded a positive response from the UK Chancellor.

We continue to promote the engagement between a highly mobilized community, regulators, and policy makers. The progress we are seeing across the sector is not simply fated. It is the result of the community's persistent leadership in innovation and conduct, and advocating open collaboration between key stakeholders. GDF has created an exceptionally well-placed and globally recognized forum for enabling this collaboration.

In an extraordinary year of many dimensions, 2020 will be remembered in our community as the year digital assets came of age in a world rapidly going digital.

PATRON INSIGHTS



The Importance of Regulatory Collaboration

Sustaining Industry Leadership

It has been an important year both for 100x Group and the whole industry. We witnessed a remarkable bitcoin rally, sustained our business amid lockdowns and travel restrictions, and adapted to regulatory efforts to help manage the transformative technology to which we are all dedicating our professional lives. Every successful company goes through different phases of transformation, and this year has been crucial for 100x in redefining our objectives and priorities around one overarching goal: ensuring our industry leadership is sustainable in an increasingly regulated world.

We are in pursuit of much more than world class security, technology, and product innovation for the BitMEX platform. From a macro point of view, 100x strives to bring analogue financial services into the digital age. This requires a willingness to be an advocate for our users and our industry to audiences far and wide especially sceptical ones and to listen as well.

Credible leadership of this kind is enabled by upholding a gold standard of compliance and proactive engagement with regulators so that as many people as possible can benefit from the services that our industry can provide. Practically speaking, for 100x, being licensed in one or more IOSCO jurisdictions is an essential component for a sustainable future, but further regulatory engagement is required.

The overarching principles of GDF and initiatives like the V20 Summit provide a great roadmap for engagement with regulators and the industry. In my mind, it's success boils down to making ourselves visible, accessible, and accountable, so that our industry isn't as easily caricatured as being in the shadows.

Many observers are aware of our current regulatory challenges, and our commitment to developing a robust compliance culture and program started way before 2020. The years of work in developing what we believe to be the right standard of what is required is clearly visible. The recent hiring of Chief Compliance Officer Malcolm Wright, Chair of the GDF Advisory Council, further reinforces our commitment in this area.

At 100x, we are committed to even more engagement because the future depends on positive and earnest collaboration between both regulators and industry, and strengthening regulatory understanding of virtual asset service providers. We must continue advocating for common-sense, right-size regulation to protect users, while keeping bad actors out of the system. And most importantly, we need to explain the incredible benefits of a world with more digital finance, lest we collectively accept the limitations inherent to our traditional systems.

We look forward to working with all of you to make GDF an ever more present voice in representing the industry as we look to establish new standards of collaboration and consultation between VASPs and regulators in this crucial time for our industry.

Vivien Khoo
Chief Operating Officer
100x Group

Driving DeFi With Stablecoins

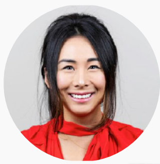
Stablecoins are clearly meeting their moment. Since the beginning of 2019, total stablecoin volume has increased from $2.6B to over $27.6B. What is equally clear is that most of that growth can be directly attributed to the proliferation of Decentralized Finance.

DeFi is a broad term used to describe financial applications run on blockchain networks using smart contracts. These applications have not only replicated traditional financial activities such as borrowing, lending, investing, and savings, but also spawned innovative concepts such as yield farming and liquidity mining. Anyone with an internet connection can access these protocols, allowing the unbanked and underbanked to participate in financial markets, put their assets to work, and access high yields.

Most DeFi applications are run on Ethereum, the most actively used blockchain in the world, and rely on an ERC-20 token. Participants can deposit their tokens directly into the DeFi protocols or create liquidity markets on an automatic market maker to earn fees or yield on their deposits. Although most DeFi protocols allow participants to redeem their assets at any time, some have restrictions or limitations on withdrawals. In either case, while the tokens are "locked up," they are subject to market volatility and can lose (or gain) value if the price of the underlying assets change.

For this reason, stablecoins such as USDC are an increasingly popular token of choice in DeFi, and form the foundation of the whole system. Given their inherent price stability and (often) deep liquidity, stablecoins allow participants to minimize market volatility risk (as compared to other ERC-20 tokens), and are a common base in AMMs like Uniswap pairs. In fact, stablecoins are the second, third, fourth, sixth, and seventh largest volumes on Uniswap.

Stablecoins have tremendous potential to disrupt traditional systems in a number of ways. DeFi is just one example. As additional use cases surface – and they undoubtedly will – expect to see stablecoins continue their rapid growth.



Amy Luo
Senior Counsel
Coinbase

Paul Grewal
Chief Legal Officer
Coinbase

Collaboration Models Form the Basis for Future Success

Sound collaboration agreements are at the heart of FinTech. Arrangements which capture the essence of commercial collaborative intent can be complicated to achieve. However, models to support longer-term relationships between FinTech and banking are evolving.

To successfully document collaboration, Joint Venture (JV) arrangements are often used, providing for shared ownership of an entity or a project. The terms of the agreement will cover certain essential provisions, including capital contributions, allocation of liabilities, valuation matters and determination of profit-sharing, as well as governance, exclusivity, confidentiality, tax matters and more. That said, traditional JV structures may not always offer that which is required for successful longer-term collaboration between parties—lack of proper sponsoring, or a failure to integrate may result in disintegration once the initial excitement has faded.

Multi-party consortia JVs have more recently come to the fore in the digital finance space. These generally involve a number of institutional incumbents often proposing to co-ordinate the interoperable development of a market solution alongside FinTech and other technology service providers. However, the approach is still a work in progress. There are certain inherent tensions in establishing collaborative working groups between commercial competitors and consortia arrangements are often criticised as suffering from an inability to make decisions. There are also potential anti-trust concerns. Balance and compromise have to be found between the co-ordination required for effective interoperability and the need to leave sufficient flexibility to enable competition to flourish.

Beyond JV arrangements, we have seen increasing development in collaboration through services arrangements, including banking-as-a-service and software-as-a-service frameworks and white-label banking. These structures enable licensed entities such as banks to work with FinTechs bringing technology and software, usually framed as an "outsourcing" arrangement. The contractual basis is absolutely key and the regulatory implications for the regulated party have to be accommodated in a detailed manner, but with sufficient flexibility for future innovation. We have also observed a steep increase in M&A in the fintech space through 2019 and early 2020. To properly achieve the parties' intentions, these deals require a clear understanding of the objectives of the acquisition and an experienced legal team to implement the terms.

Sound collaboration between tech and finance is crucial to the success of the industry, but it is a process that is still being established. The commercial realities of these relationships require technical understanding, extensive documentation, risk mitigation and dispute resolution mechanics that are flexible enough to operate in the ever-changing regulatory landscape. Once the parties have a clear understanding of the objectives of their collaboration, using an experienced legal team to implement the terms will significantly ease the process. Commercially-minded and adaptable legal advisory teams such as those at DLA Piper can help parties to navigate these new business relationships, supporting long-term collaborative success.

Martin Bartlam
Partner
DLA Piper

Bryony Widdup
Partner
DLA Piper

Diginex: The First Digital Asset Ecosystem to be Listed on Nasdaq

In 2020, Diginex launched **EQUOS.io**, an institutional-grade cryptocurrency exchange built for professional and individual investors alike. With Diginex's listing on Nasdaq ($EQOS) in October of 2020, EQUOS became the first digital asset exchange to be listed in the U.S., under the oversight of the Securities and Exchange Commission.

Being the first Nasdaq-listed exchange EQUOS operates to the highest levels of transparency and regulation, but also reflects our dedication to be a source of trust and credibility for our clients.

Diginex executed on a significant product roadmap in 2020; having launched the EQUOS Exchange, developed an independent spot trading market serviced entirely by external market makers, rolled out a BTC Perpetual Futures contract with fair and transparent liquidation processes, and announced the pending introduction of Borrowing & Lending capabilities to the product suite.

Looking ahead to 2021, Diginex will continue to focus on developing institutional-grade infrastructure and product build-out to address the significant opportunity that is seen in crypto derivatives and digital asset securitization.
In developing the first pure play digital asset ecosystem, we are excited to see continued traction for our capital markets offering (EQUOS Capital), multi-venue algo trading platform (Access), asset manager (Bletchley Park), and both cold and warm custody solutions (Digivault).

The Digital Asset opportunity was massively expedited in 2020, with the advent of a global pandemic and governments' fiscal and monetary responses. In what is set to be a defining year for the industry, we look forward to working with our partners and regulators to ensure the continued evolution of the asset class as it transforms the financial services industry.
With continued momentum for institutional participation, Diginex is well positioned to support the ecosystem through its transition toward mainstream adoption.

Richard Byworth
CEO
Diginex

The Global Digital Communion

The global pandemic has revealed fissions and fractures in the global technology infrastructure significantly impacting the ways in which we live and work. Despite advances in digitalization and the rapid pace of technology development, many aspects of business - and society more broadly - remain largely analog, or at best are on the bottom rung of the digital ladder.

To vastly improve the global digital landscape, we need striking advances in digital public goods: the open-source software, data methods, standards and protocols benefiting all nations and people. There is no shortage of needs to address in the world, across financial inclusion, digital identity, healthcare, education, and tax/fiscal systems, to name a few. Digital public goods are by definition reusable, not deployed by states in solitude and are increasingly solving network problems with technology that is both innovative and advanced. These emerging digital systems serve the interdependency of multi-stakeholders, reflecting important notions of mutual technology reliance.

However, as rapidly as technology is advancing, associated governance systems have been slow to adapt. We face a dire need for new governance models, with smart policy frameworks, propelled by a variety of actors, across government, industry, philanthropies, academics, multilateral organizations, and civil society. A new global digital communion is needed, as no single institution can govern the global development, deployment and adoption of digital public goods.

This is especially true in light of the plethora of obstacles present, including material issues with intellectual property, finance, data privacy/security, and new incentive mechanisms to entice multi-stakeholder engagement with new digital technology systems. Successful digital systems adoption will rely on more than the hand of government mandating stakeholder engagement, but it will offer new ways of working – and living – that invite participants eager for a seamless digital experience.

A global digital communion would have dramatic, positive effects on our communities as we emerge from the pandemic. Continued advances in digital technology are needed, for sure. But we must also address this stark global governance gap to truly benefit from digitalization.

Jeffrey Saviano
Global Tax Innpvation Leader
EY

Hogan Lovells Blockchain Hub

Your global guide to developing regulatory requirements within the financial services industry sector & beyond

Hogan Lovells

Blockchain technology could revolutionize supply chains, agreements, contracts, currencies, and more. With the Hogan Lovells Blockchain Hub, you can take advantage of the technology's huge potential and disruptive impact, while avoiding falling foul of ever-developing regulatory and legal requirements.

The finance industry is arguably one of the sectors to be the greatest beneficiary of blockchain technology. With characteristics of an immutable ledger, real-time tracking, and a single version of the truth, it is ideal for the future of the financial services industry. Some of the ways blockchain technology can support financial services companies are in the exchange of cross-border payments and P2P transfers, securities trading, Know Your Customer – client identity verification, record-keeping, and crowdfunding, among others. The immutable ledger will be able to trace every transaction and be able to ascertain what is valid and invalid. At the same time, it will be able to prevent the duplication of records and operate at a speed the industry has yet to experience or truly monetize on.

While the benefits of blockchain technology outweigh the challenges, the legal challenges cannot be ignored and will need to be thoughtfully considered and addressed promptly. Many of these challenges stem from new and evolving multi-jurisdictional regulations. Governments adopt individualized, unique regulations on blockchain and digital assets, such as GDPR, and these will affect blockchain configurations and how you conduct business domestically and globally.

Our Blockchain Hub and lawyers can assist financial services industry players in navigating the regulatory landscape and latest legal developments, ensuring that efforts and adoptions are compliant with any current and future regulatory and business needs.

The Blockchain Hub covers:

- 300+ regulators
- 120+ jurisdictions and supranational organizations
- 20+ applications, topics, and industry sectors

Use the Hub to:

- Keep up to date with the latest legal and regulatory developments
- See where blockchain is shaking up industries
- View the legal positions and restrictions for cryptocurrency and the FATF travel rule in various countries
- Compare regulatory developments across the world and see how regulatory approaches are evolving over time
- Create bespoke reports with developments across multiple countries
- Access useful blockchain resources, including reports, in-depth articles, and more

Explore the Hogan Lovells Blockchain Hub here

John Salmon
Partner & Global Head of Blockchain
Hogan Lovells

China and Digital Currency Electronic Payments

COVID-19 has recalibrated every aspect of our daily life. With the conversion from offline to online, never have digital payments seemed more important. As studies around the world suggested that COVID-19 could survive on banknotes for up to four weeks, we saw the acceleration of the schedule of launching Digital Currency Electronic Payment (DCEP) from governments around the world.

China's DCEP has already launched pilot tests in selected areas. The government recently distributed 20 million yuan (around 3 million USD) worth of digital currency to 100,000 people in Suzhou via lottery, allowing it to be spent on JD.com's shopping platform. Before that, 10 million digital yuan was distributed to 50,000 people in Shenzhen via lottery, to be spent at over 3,000 merchants in local supermarket and pharmacies. With the successful soft launch of China's DCEP, China is one step closer to the cashless society.

The pandemic has triggered another significant question for finance: the use of digital assets as a safe haven for currency manipulation and depreciation. March 2020 saw the Fed announce an unlimited QE plan to support the markets by buying back the Treasury bonds and mortgage-backed securities. Ever since, USD has depreciated substantially. Bitcoin was handed the opportunity to showcase its benefits over central bank-controlled money. With its tokenomics scripted in the source code, its transparency, and anti-inflation properties, interest in the asset increased and this year saw Bitcoin break the $20,000 USD barrier in December.

The trend of digitalization is irreversible, and is having an impact across financial systems. From a retail perspective, digital assets as a payment tool provides a natural foundation for our new digital world. From an institutional point of view, we expect the looming economic shifts of 2021 to further test the financial benefits of cryptocurrencies.

Watch Elaine Sun, Huobi, speaking on CBDCs at or Global Digital Currencies Conference.

Elaine Sun
Head of Compliance
Huobi

Beyond Skepticism and Towards Solutions

The COVID pandemic brought important pause and perspective across the board, and while governments, businesses, and citizens looked for any solution to the litany of issues faced, technology and innovation came bubbling to the surface with solutions. Outside the context of the pandemic, 2020 was already set to be a big year for blockchain's real world use cases, developed in an ambiguous regulatory environment and matured in a more regulated world. With the emergence of Libra (now Diem), the rapid maturity towards real CBDCs, growing regulated products on cryptocurrency, the increasing regulatory clarity had poised 2020 for scalable progress.

2020 has been a decisive turning point for blockchain and crypto assets, especially, one of the most significant being the European Commission's proposal for a digital asset equivalent of MiFID – MiCA. We are seeing the shift in attention and seriousness by national governments and their respective competent authorities.

The debate between traditional and DeFi continued to develop. However, the fundamental questions still remain the same: What legal rights does this asset confer upon the holder? How are investors able to accurately understand their risks in holding these assets? How do we ensure fair and equal dissemination of information to investors to understand their risks? Can this actually scale without introducing new risks?

The biggest concerns or perceived risks of yesteryear have been reframed in the context of the pandemic. Technology is not viewed with skepticism, but rather as the solution to real problems. We are finally at the tipping point, where we can clearly see through the technological fog created out of initial blockchain hype. We also understand where blockchain provides novel solutions and where it does not.

If 2020 has left us with anything, it is that digital assets are here in that we can see a model of where and how incumbents and new entrants are best poised to create a new future—a future that benefits not only from of the open access that the technology brings, but also from incumbent experience in the creation of fair, orderly, and scalable markets, and from the new entrant push to innovate and offer services to customers through the expansion of the platform business model.

Michael Coletta
Head of Blockchain & Emerging Tech Innovation and Strategy
LSEG

The Roaring Twenties, Digital Assets, & Escaping the Dominant Logic of the 20th Century

I remember saying at the end of 2019 that I was excited that we were now entering into the roaring twenties and that I could see a world of promise and significant advances that have the opportunity to change the way we do things for decades to come.

Well, COVID kind of took the edge off that one. But coming into 2021, I hold form on my assertion from one year ago.

Our motto at SIX Digital Exchange is **"Grand Ambition. Big Impact. Small Steps."** The Grand Ambition and strategic intent is to build a global liquidity network for institutional digital assets. The Big Impact that we can generate if we get this right has the potential to make a difference to how corporations, governments and individuals engage with institutional capital markets, to democratize access to new products and services, and to redefine how capital and liquidity are formed. We also know that in order to achieve this, we need to deliver value to the industry in Small Steps rather than try to boil the ocean.

So far, so good. After 2020 I am delighted to confirm that we are well on track. Having been in the institutional blockchain/DLT and digital asset space now for over 5 years, I would rate the industry as a whole reasonably highly for driving towards change. Technology maturity, regulation, investment, commitment, commercial models, standards, and stated strategic intent have all progressed to the point where the pieces of the puzzle are coming together, which bodes well for a decade that really should be roaring.

There is one key ingredient that, in my opinion, needs to be addressed in order for us to progress further. And that ingredient is mindset. In crude terms, we need to "getting out of our own way." The major impediment to progress is being in the right frame of mind as an industry to allow progress to happen. The dominant logic that came from the latter part of the 20th century was driven by the social, political, economic, regulatory and, crucially, technology choices that we collectively made and that were available at the time. As we approach the second quarter of the 21st century, many of these 20th century dominant views are no longer relevant and often simply fly in the face of progress.

Every one of us has to understand what it means to move into a 21st century mindset and leave our 20th century mental models where they belong as relics of the past. This is our greatest challenge and if we can conquer it then it will lead to truly roaring twenties and the achievement of our Grand Ambitions.

Tim Grant
CEO
SIX Digital Exchange

The R3 CDBC Forum

2020 was the year that digital payments on ledger moved into the global mainstream. We have long recognized the potential of enterprise blockchain to be used in highly regulated sectors and built Corda with that specific purpose in mind. Italy's Spunta Banca DLT project, which went live this year, is a great example of where blockchain is providing value, with 100 banks now using the service to manage all domestic interbank payments. Seeing the speed and scope of developments in Central Bank Digital Currency (CBDC) projects points to even greater potential.

R3's Corda platform has been used in CBDC projects for some time – starting with Project Jasper in Canada in 2016 and expanding to multiple projects with central banks in the APAC region, including Singapore, Thailand, and Hong Kong. 2020 has seen us engage with the Swiss National Bank and the Swiss Digital Exchange in their wholesale project, and Riksbank gave us our first opportunity to work on a retail CBDC – the e-krona. We are also currently kicking-off work with the Banque de France and anticipate many more projects in the coming year.

With these projects in mind, this summer we brought together the public and private sector to launch a CBDC working group that provides a forum to share learnings on CBDCs and its deployment. This work will continue throughout 2021, and has engaged over 100 entities, including 30+ central banks and a strong mixture of private and public sector organizations. It has been fantastic to work alongside GDF, as well as the likes of BIS, World Bank, IMF, US Federal Reserve Board, People's Bank of China, Bank of England and many others.

2021 will undoubtedly be a year of significant progress for CBDCs, and we look forward to continuing to play a critical role in bringing this technology one step closer to widespread adoption.

Todd McDonald
Co-Founder & CPO
R3

REGULATION & POLICY

The Regulatory Landscape

Towards Regulatory Certainty

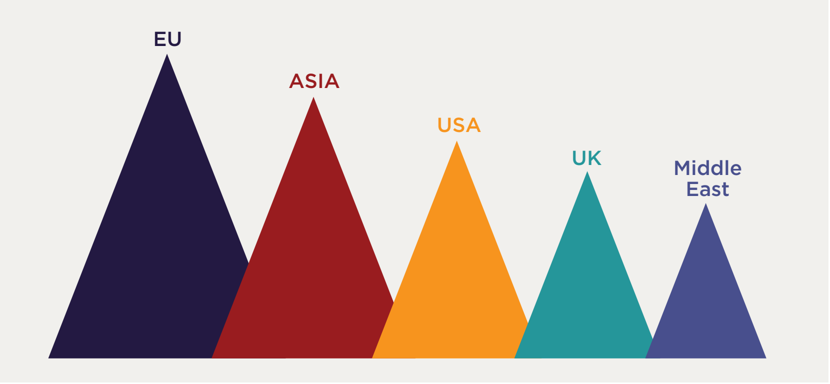
Jeff Bandman
Board Member
GDF

In last year's annual report, I mused that 2020 might finally be the year that saw institutional investors move into the cryptoasset space, asking 'what would have to happen to promote confidence and adoption?'

Could it be that a global pandemic was the answer?

Troubling though that may seem, the impact of global lockdowns on individuals, businesses and fiscal policy have forced us to reckon with shortcomings of present technology and various aspects of finance, from welfare systems to business support loan programs. This has accelerated digital finance programs, including the interest in Central Bank Digital Currencies and stablecoins.

Alongside DeFi's explosion and Bitcoin's rise in value, institutional interest and activity has flourished, and regulatory attention has followed. In the U.S., the OCC gave clarity over the ability of federally chartered national banks to provide digital asset custody and hold deposits that underpin stablecoins, then doubled down with a legal interpretation supporting payments using stablecoins or blockchain network nodes. The SEC established a long awaited safe harbor for broker dealer custody of digital assets, while in the same week launching enforcement action accusing Ripple for years of offering XRP as an unregistered security. Meanwhile, the European Commission released its framework for Markets in Crypto Assets (MiCA). In Asia the BIS launched two Innovation Hubs in Hong Kong and Singapore, while China continued to develop and publicly tests its digital Yuan, and Japan continued to enhance its digital asset investor protection safeguards alongside broad operation of a state-authorised self-regulatory organization.



Top Jurisdictional Priorities of the GDF Community
GDF Member Survey 2020

2020 has seen a continuation of the trend towards regulatory certainty. Though not always in the direction industry participants may hope for, the clarity that these announcements provide brings a legitimization, promoting forward looking certainty and broader adoption.

Top 5 Regulatory Challenges
GDF Member Survey 2020

#1 Inconsistent or unaligned cross-border regulatory guidance

#2 Lack of clarity on regulatory perimeter

#3 Not all market actors are regulated, creating commercial challenges to partner/collaborate

#4 Ability to meet regulators requirements

#5 Limited engagement by regulators with industry

Regulatory Harmony

The pandemic has also highlighted the extent to which activities throughout all industries are cross-jurisdictional, and that regulatory harmony is key.

GDF has always focused on enabling a global approach to digital assets. Our quarterly Regulator Forums bring together a core of 25-30 regulators from around the world to exchange updates on their current focus.

In late 2019, the narrative seemed to be that international consensus on Anti-Money Laundering regulation for cryptoassets had been reached, and the focus appeared to turn to implementation of the consensus measures. However, the outgoing US administration this December proposed to lower the travel rule threshold to US$250, and to extend certain obligations to self-hosted wallets. What remains to be seen is whether this will lead to a new consensus or alternatively to an extended period of divergence.

While we have seen progress from multi-jurisdictional authorities such as FATF and the European Commission, 2021 awaits major political transitions—whether Brexit or the new US administration—which may also have an impact on regulatory harmony.

Notwithstanding these shifts in global political structures, and the economic impact of the pandemic, we enter 2021 with far more regulatory clarity, institutional certainty, and broader adoption than ever before. Whether we saw this progress because of the global pandemic or in spite of it, we may feel positive about the current regulatory landscape, and indeed GDF's role in supporting the collaboration between industry and policy makers.

Moving Towards Comprehensive Approaches for Cryptoassets

Lavan Thasarathakumar
Head of Regulatory Affairs-EMEA
GDF

2020 will be remembered for a number of things, but from a crypto-regulatory perspective it will be remembered as the year that things got real in Europe.

As the shockwaves of Libra (now Diem)'s announcement continued to reverberate across the continent, European Finance Ministers came together to denounce those wishing to issue private currency, stating that currency issuance is the sole purview of the European Central Bank. At the same time, Central Banks supercharged their efforts for Central Bank Digital Currencies (CBDCs).

However, the most significant moment was the announcement of the Markets in Crypto Asset Regulation (MiCA).

Described as a seminal moment for the cryptoasset industry, MiCA attempts to bring certainty to an industry bereft of clarity. MiCA looks to cover all cryptoassets that does not already fall within the remit of financial legislation, establishing obligations for issuers and services providers, delineating different regimes for asset references tokens, e-money tokens and an 'other' category.

While this is certainly welcome, there are a few issues that have been identified. The approach taken by the Commission seems to shoehorn existing cryptoassets into a similar framework used for traditional financial services. The doctrine of 'same activity, same risk, same rules has been applied, and it feels as though there has not been sufficient thought put into whether what is being conducted is actually the same activity or the same risk. As a result, we have a piece of legislation that does not quite fit the innovation of the asset it is looking to regulate.

The significance of MiCA is clear:, no other jurisdiction has taken such a comprehensive approach on how to regulate crypto. The Commission has first stab at a blank canvas. There is therefore is a strong possibility that whatever comes out of this influences how the rest of the world will regulate cryptoassets. We await to see which jurisdictions will follow suit, and which will diverge.

To scrutinize the proposal and understand the impact this legislation will have on industry, GDF put together a closed-loop working group comprised of Advisory Council and Patron members. We will continue to engage with the European Institutions over the course of the legislative period to ensure the community's interests are represented.

> GDF is a great source of industry commentary, advocacy, and thought leadership. Working Groups setting out industry theme responses stimulates discussion, driving direction and resolution.

GDF Member Survey 2020

Public-Private Partnerships and Global Standards for Virtual Assets

The Financial Action Task Force (FATF) leads global action by governments on money laundering, the financing of terrorism, and the proliferation of weapons of mass destruction. Its global standards apply to the activities that generate these risks, and the same rules apply to the same activities.

In 2019, these risks resulted in new global standards for virtual assets. The risks are real, as highlighted by the 2020 FATF red flags report, and continue to evolve, with virtual assets used to hide the proceeds of criminal exploitation of the response to the COVID-19 pandemic.

FATF's 12-month review report in June 2020 showed that many governments had already implemented the new global standards, while in the private sector, 2020 saw the development of technology and protocols for compliance with the 'travel rule'. At the same time, the virtual asset sector has continued its rapid pace of change and innovation, keeping the attention of global policy makers, including accelerating the interest of G20 Finance Ministers and Central Bank Governors in so-called stablecoins.

However, it remains early days. To ensure regulatory alignment, all countries must implement the FATF Standards as a priority. The FATF is monitoring progress, assessing implementation by governments and publishing the results. In 2021, industry needs to use the innovative solutions being developed to implement the travel rule fully and effectively. In June, the FATF will report again on progress, through a second 12-month review, and with a focus on key issues such as peer-to-peer transactions and decentralized finance.

The FATF Standards are technology neutral, but the FATF is not technology silent. There are opportunities as well as risks in new technologies. It is important to target harden businesses against these risks in order to help realized the opportunities that technology can bring, from virtual assets to digital identity. Continued public-private partnership is critical and GDF has successfully helped capture and communicate the voice of the sector.

These are exciting times. The FATF is clearly committed to public-private partnership and making sure its standards are fit for purpose, fit for the future, and can be implemented on the ground so that technology can be the game-changer it needs to be.

Watch the GDF Travel Rule Summit

David Lewis
Executive Secretary
FATF

The V20 Summit

The Road to Meaningful Regulation

A Unified Voice

In advance of November's G20 Riyadh Summit, the V20 Summit convened crypto industry leaders, the Financial Action Task Force (FATF), and industry regulators in a three-day virtual conference to share views on the progress of the implementation of the Travel Rule, and other challenges that the industry is facing.

A common criticism from regulators is that the virtual asset industry is a disparate group of factions. For a sector that now serves a global client base across many asset classes, this is a slightly glib assessment given the diverse and competitive nature of digital finance.

However, the industry heard this criticism and responded. Following the inaugural V20 Summit in Osaka last year, the industry worked to deliver the IMVS101 data payload standard, demonstrating that they can come together with a unified voice when they need to. This year's V20 Summit showed the same commitment.

That said, a few challenges remain. Amongst other points of discussion, the rapid growth of DeFi this year has brought the market under the gaze of authorities. Considering the success of industry engagement on the Travel Rule, G20 ministers would be advised to seek to engage a wide selection of DeFi specialists as early as possible, ensuring that conclusions are drawn from fact-driven evidence.

The DeFi sector will also have to step up the maturity of its engagement with policy makers and regulators. Rolling out the same platitudes as the early days of the blockchain is unlikely to influence policy.

Above all, the V20 is a great example of industry-regulator collaboration, and the agile execution of policy in the virtual asset sector.

Meaningful Compliance

The principal focus on the development of policies, perimeters, and regulations is often overly consumed with a shift of responsibilities – to be able to hold a single entity or entities to account for culpable wrongdoing, liability, and punishment.

Every now and then, the development of new (and innovative) policies, perimeters, and regulations result in a meaningful form of compliance that is focused on risk transparency for financial services products that work for everyone.

By enabling open dialogue and encouraging mutual respect, the V20 is on the road to creating meaningful compliance. There is still a long way to go, but what an outstanding start in just over a year.

G20 ministers might wish to take note. Regulators should increase their industry engagement and make room in their digital sandboxes to scale up the virtual assets sector—a sector that offers great promise for financial services in the 21st century.

It was a pleasure to co-host the V20 Summit with IDAXA this year, and we look forward to further industry-wide collaboration in the future.

Read more on the success of V20 here

Anson Zeall
Chair
IDAXA & Convener of the V20 Summit

Lawrence Wintermeyer
Executive Co-Chair
GDF

The FSB Landscape for Crypto and Digital Assets

Technological innovation in the financial sector offers the potential for significant benefits, but also brings about new challenges. The Financial Stability Board (FSB) has been committed to developing a deep and early understanding of how innovation is transforming financial institutions and markets. Crypto assets have been a key part of this work.

Since 2018, the FSB has been monitoring the financial stability implications of crypto-asset markets. This monitoring considers for instance risks arising if crypto-assets became widely used in payments and settlement; risks from market capitalization and wealth effects; risks arising from exposures of financial institutions; and reputational risks to financial institutions and their regulators. To this day, the FSB believes that crypto-assets have not posed a material risk to global financial stability. However, the speed of market developments underlines the need for continuous vigilant monitoring.

One area of particular focus of the FSB work has been so-called “stablecoins” instruments that have the potential to reach global scale. While such instruments could enhance the efficiency of the provision of financial services, they could – if widely adopted -- become systemically important in one or many jurisdictions, including as a means of making payments. As “stablecoins” continue to evolve, comprehensive and effective oversight of such instruments at the national and international level will be of the utmost importance.

The FSB has issued high-level recommendations for regulatory, supervisory, and oversight responses to address the financial stability risks that global “stablecoins” may pose. The recommendations call for regulation, supervision and oversight that is proportionate to the risks and require market stakeholders to adhere to applicable regulatory standards before commencing operations. Further, they promote the implementation of: comprehensive governance and effective risk management; robust systems for handling data; appropriate recovery and resolution plans; appropriate disclosure of information to users and relevant stakeholders; and legal clarity on redemption rights.

Dietrich Domanski
Secretary General
FSB

Through this work, the FSB aims to address the risks of global "stablecoins" while preserving the potential benefits. By applying the lens of "same activity – same risk – same rules" independent of the underlying technology, the recommendations support innovation. They also provide flexibility for jurisdictions to implement domestic approaches, while stressing the value of cooperation and coordination among authorities across sectors and borders. During 2021, standard setting bodies will consider whether and how to update international standards in light of the FSB recommendations to ensure that risks are adequately mitigated.

The work on "stablecoins" has been incorporated into the comprehensive FSB roadmap to enhance cross-border payments that G20 Leaders endorsed in November 2020. The goal is to make cross-border payments faster, cheaper, more transparent and more inclusive, including remittances, while maintaining their safety and security. Achieving this goal would have widespread benefits for citizens and economies worldwide, supporting economic growth, international trade, global development and financial inclusion. The roadmap, organized along 19 Building Blocks, provides a high-level plan, which sets ambitious but achievable targets and milestones, to enhance cross-border payments in both the retail and wholesale space.

The involvement of the private sector, sharing their insights and practical expertise, as well as delivering change, will be key to support the practical implementation of the roadmap. The work under each building block will consider how to most effectively involve the private sector. With its comprehensive set of concrete actions, the roadmap has the ability to offer better, state-of-the-art payment services to use on a global scale.

The Digital Asset Tipping Point

Malcolm Gladwell said, “A tipping point is that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire.”

We are at a tipping point with digital assets.

Digital assets and their underlying technology are pushing conventional boundaries. And the innovation in this area continues apace. Digital asset markets continue to grow, despite the pandemic. At the same time, stablecoins and Central Bank Digital Currencies markets continue to grow because of the pandemic.

During my tenure at the CFTC, I’ve seen firsthand the extraordinary growth of the digital asset markets and the challenges these markets encounter due to regulatory uncertainty.

Despite the small size of digital assets derivative markets relative to the other asset classes we regulate, our regulatory structure needs to be agile and responsive to address this rapid innovation.

First and foremost, classification of digital assets must be addressed. Given digital assets’ unique characteristics and continuous evolution, this is not an easy task. I believe the next Congress should work to provide greater clarity on classification, which will in turn clarify the applicable regulatory authority for this market.

But legislation takes time.

This “tipping point” has shown us that we must act now to address the growing marketplaces of crypto. And each regulator must not act in a vacuum, focused inward on its own jurisdiction. International coordination is essential.

Developing a principles-based approach to digital assets that can be applied globally is imperative. A principles-based approach will provide a flexible and effective framework for innovation to thrive, while also reinforcing market integrity and consumer/investor protection.

Here in the United States, it is critical that federal and state regulators work together to create a digital assets regulatory framework. This will provide more certainty for the marketplace while also mitigating any risk or regulatory concerns for more traditional financial markets.

Regardless of where we sit around the globe, we must acknowledge this evolving market and act. We must anticipate the future. Recognizing this moment in time—this “tipping point”—is the first step.

Heath Tarbert
Chairman and Chief Executive
CFTC

Creating a Global Hub for Digital Assets

Abu Dhabi Global Market

The Abu Dhabi Global Market (ADGM) has set new global standards when it comes to fostering a holistic ecosystem that encourages innovation in the financial industry. One of ADGM's landmark achievements in this area is its regulatory regime for virtual assets.

Virtual assets have been at the forefront of regulatory agendas around the world in recent years. With global investors keen to diversify into new asset classes that comply with robust regimes and uphold high standards, regulators have had to adapt at pace to ensure adequate yet forward-looking provisions, and ADGM has taken a leading stance with its digital assets framework.

Having introduced one of the most comprehensive, transparent, and robust virtual assets regulatory frameworks in the world in 2018 that enables firms to operate as fully licensed multilateral trading facilities, custodians or intermediaries, ADGM is widely considered a destination of choice for virtual asset firms and digital securities activities.

ADGM's evolution into a leading global hub for digital assets is closely aligned with the UAE government's commitment to introducing innovative technologies across the country, and lays a strong foundation for broader economic benefits arising from the progressive regulation of digital assets.

ADGM's regulatory regime for virtual assets addresses a number of key risk areas with particular emphasis on the risks relating to AML/CTF, consumer protection, technology governance, exchange operations and the safeguarding of investor assets, which is comparable to the regulation of conventional counterparties.

The successful introduction of tailored, innovative regulation for new asset classes, coupled with the establishment of a strong FinTech regulatory regime, makes ADGM a natural home for operators of virtual assets businesses looking to tap into the market opportunities worldwide within the bounds of a globally renowned regulatory environment.

Watch the Global Leaders Townhall with Richard Teng, CEO of ADGM

Richard Teng
CEO
ADGM Financial Services Regulatory Authority

When it Comes to Sustainable Finance, Market Governance is now Data Governance

The pandemic has provided a unique moment for reflection. Governments around the world have articulated a vision to "build back better" and pursue a "green recovery", while investors increasingly recognise that non-financial sustainability issues, notably environmental, social and governance factors, can and do impact long-term value propositions. These tail risks; low probability, high impact events like pandemics, popular social movements, or the more severe, less predictable weather events we can expect as the physical effects of climate change manifest in the years to come.

As such, practices and products to better incorporate material ESG considerations into financial decision-making have grown steadily. Today numerous providers offer ESG ratings for companies, designed to assess material sustainability performance and risks, while metrics, disclosure frameworks, investment approaches and ESG-based financial products have similarly proliferated. ESG assessment has become a significant feature of global capital markets, with ESG-rated companies now making up 78% of total global market capitalisation.

However, new analysis in the OECD's 2020 Business and Finance Outlook has shown that in practice market participants often lack the tools they need, such as consistent data, comparable metrics, and transparent methodologies, to properly inform decision-making through a sustainability risk lens. In this context, current ESG practices may not support well-functioning markets, and may actually distort markets if such information is used to incorrectly price risks, allocate capital inefficiently, or misrepresent sustainable financial products to financial consumers.

Though there are several gaps to be filled, information asymmetries are at the core of this market failure, and data must be at the foundation of addressing it. Individual investors and financial markets need ESG data that appropriately reflects material risks, is consistent, verifiable, and allows for accurate

Greg Medcraft
Director – Financial and Enterprise Affairs
OECD

comparison between assets – and this is not something the private sector will deliver on its own. For policymakers and regulators, *market governance* increasingly means focussing on *data governance*.

To truly harvest the potential benefits of ESG practices, regulators and international standard setting bodies will need to work together towards a globally mandated data reporting framework – and the more grounded in digital practices, the better we can leverage current and emerging technologies to meet the needs of investors today and tomorrow.

This means formulating a common data taxonomy as a foundation for data collection and reporting. It means considering issues of interoperability between the systems that collect ESG data and those that analyze and disclose it. It means building transparency and accessibility into those systems, for example by incorporating application programming interfaces at the network level, and establishing an independent data repository to ensure the integrity and availability of data at the global level.

Looking further into the future, as ESG reporting grows in importance companies will need to consider how best to collect, analyze and report a host of non-traditional, non-financial data in the service of financial decision-making. Here, emerging technologies hold great promise.

Smart sensors already measure common ESG metrics, like carbon dioxide emissions in power generation or industrial water usage, and the application of internet-enabled devices will likely expand to automate the collection and reporting of a much wider range of performance data. Artificial intelligence will be critical in interpreting this wealth of data, in particular using pattern matching and predictive algorithms to help determine which ESG risks are financially material in which industries and companies – but careful attention is needed to ensure algorithms are fit-for-purpose and data is of sufficient quality. Blockchain technology is ideally suited to secure and authenticate such data, ensuring quality and veracity, through decentralized consensus mechanisms – and is already in use to assure employment conditions and pay in risky industries like cobalt mining.

This journey has already started. International standard setters, from the OECD to IOSCO and the Financial Stability Board, already have a solid foundation of existing policy tools and guidance on which to build a common data framework. The International Financial Reporting Standards Foundation's proposal to establish a Sustainability Standards Board presents a platform to convene and coordinate these efforts and drive them forward at the global level.

Of course, none of this will be successful without close engagement and collaboration with business every step of the way – and clearly the global blockchain, crypto, and digital assets sector has a role to play here which should not be underestimated. As we advance, we look forward to working with all players in the financial sector to ensure the market has the sustainability data it needs, and to support the innovation required to get there.

VOICE OF THE COMMUNITY

Money 2.0

Towards A New Institutional Paradigm

The growing popularity of digital assets is raising questions about the nature of money and the structure of the underlying monetary system. New entrants and new instruments are challenging long-established institutional arrangements and testing the boundaries of existing legal and regulatory frameworks. Will we witness a monumental reconfiguration of our monetary system, and how will regulators and policymakers respond to these developments?

New Payment Instruments

Bitcoin started out as a peer-to-peer electronic cash system and, for some years, was considered a promising niche product for cheap and fast online payments. Its current use may have evolved, but Bitcoin – and other early cryptoassets – have proven that the growing demand for (near) real-time digital payments at negligible costs could be addressed outside traditional payment rails.

It took a few more years before stablecoins took the scene, becoming an efficient cross-border tool for moving value between offshore exchanges and other cryptoasset service providers.

Stablecoins have experienced considerable growth over the last two years: total on-chain volumes alone (excluding bank coins) have exceeded the $1 trillion mark in 2020, facilitated by an aggregate $34 billion outstanding supply as of mid-January 2021 (up roughly 10x since early 2019). Today, stablecoins are a driving force behind much of the innovation that is occurring on all layers of the blockchain ecosystem.

Stablecoins and the Monetary System

Whether in Eurodollar deposits or repo transactions, the emergence of "shadow money" in the second half of the 20th century grew to such a scale that it nearly took down the entire financial system in 2008. Unlike bank deposits, there are no formal institutional safeguards or backstops in place to support these private liabilities.

Many see stablecoins as the latest manifestation of privately-issued liabilities that have gained traction as money-like instruments. They are also seen as a direct response the demand for money that is digitally native, globally accessible, and cost efficient to move.
Unlike 'conventional' types of shadow money, stablecoins are not limited to wholesale money markets. Most are directly available and marketed to consumers and businesses.

The Regulatory Challenge

This universal availability – across borders, organisations, and groups – presents significant challenges to regulators. With the announcement of Facebook's Libra (now Diem), the 'business' of money was brought into the spotlight.

Keith Bear
Associate Partner
Elixirr Consulting Limited

Michel Rauchs
Managing Director
Paradigma

Tania Ziegler
FinTech Benchmarking Specialist

The concerns range from money laundering to capital evasion. In particular, concerns about the potential impact of stablecoins on financial stability have been growing in lockstep with rising volumes.

Stablecoin issuers rely on commercial banks not only for processing deposits and withdrawals, but also for custody of most of the collateral that back the assets. Given the scale of potential issuers such as Diem, stablecoin reserves may act as gigantic collateral sinks that could further exacerbate the global collateral shortage, thereby creating a new source of systemic risk in an already tense macro environment.

Some argue that any deposit-taking entity, including stablecoin issuers, should operate under a banking license. With a growing number of traditional banks contemplating the launch of their own stablecoins, opponents of the requirement of a banking charter argue that it presents too much of a burden for most market participants, and would provide an unfair advantage to incumbents and well-funded competitors. Meanwhile, the rise of central bank digital currencies (CBDC) may provide an alternative opportunity.

Enter CBDC

Research by the Bank for International Settlements (BIS) has revealed that some 80% of the world's central banks are now researching, experimenting or piloting CBDC. The evidence points to most central banks using CBDC as an additional lever to manage financial and monetary stability, leaving the distribution and management primarily to the private sector. How CBDC is designed and implemented will vary from one country to another, but it will have wide-ranging implications on both private forms of money and their respective issuers.

Will CBDC reinforce the role played by the commercial banking system, perhaps at the expense of FinTechs and TechFins alike? Or will they lay the groundwork for increased competition by allowing more private enterprises to access the privilege of money creation in new ways? BigTech, FinTechs and TechFins may take a much more active role in the management and operation of the monetary systems than ever before.

How these initiatives will play out remains an open question, but China's e-CNY pilot can offer some insights into one potential course of action. Today, Alipay and WeChat Pay account for over 80% of mobile payments, and their savings, loans and wealth business have been taking market share from the traditional commercial banks over recent years. In the current e-CNY pilot, however, it is so far the commercial banks – not the FinTechs – that are distributing the CBDC and managing the corresponding digital wallets, re-establishing their role in the market.

The CBDC debate provides an opportunity for the reconfiguration of the monetary system that makes it fit for purpose for a 21st century digital economy. Private sector innovation in money and payments has always been an essential driver of the development of monetary systems. A new institutional arrangement may provide a formal role for new actors – such as FinTechs and BigTech – in the operation and management of the monetary system.

Read the full article here

Establishing Best Practices:

Integrating the GDF Code of Conduct into Training Programs

Since 1955, the ACI Financial Markets Association (ACI FMA) has been focused on enhancing good market practices and supporting market participants to adhere to principles of ethical conduct.

As digital finance has flourished in the past few years, so too have the new requirements for codes of conduct: with assets ever more digitized, ever borderless, the principles that guide good practices must also look to preserve the innovation that the new asset classes offer.

As a major industry backer and supporter of the FX Global Code, we have been collaborating with GDF for over a year discussing codes of conduct for the crypto and digital asset space.

The ACI FMA is now reviewing the GDF Code of Conduct to potentially include it in our E-Learning, Attestation, and Certification (ELAC) platform. The GDF Code already stands as a set of principles to uphold and self-certify against, but it can also become a tool for training, enabling staff in financial institutions to accumulate CPD hours based on its codes and demonstrate their understanding of the unique requirements of this sector.

To this end, we are in the early stages of forming a joint working group to establish how best to integrate the codes into the ELAC program. This requires the leaders of the various parts of the GDF codes to use their expertise to envision the scenarios in which each principle would be applied.

It is a good exercise in determining the harmonies between the new crypto world and established financial practices, and we look forward to delivering the training program in the year to come.

Kim Winding Larsen
President
ACI Financial Markets Association

> GDF is a highly professional outfit that strikes precisely the right balance among the objectives of gathering key stakeholders into common fora, engaging with regulators and policy-makers on behalf of the industry, and identifying and executing against specific actions to deliver effective collaboration with governments and industry-driven outcomes.

GDF Member Survey 2020

Advancing Engagement with Industry at Domestic and International Levels

The OECD's Global Blockchain Policy Centre

When we created the OECD's Global Blockchain Policy Centre in 2018, I hoped to build a reference point for policymakers from across the world as they began to explore the policy implications of distributed ledger technologies (DLT), as well as how it may be used as a tool to achieve policy objectives. The demand for this level of policy discussion was made clear when in mid-2019, the Facebook-led global stablecoin initiative Libra, now Diem, exploded interest in the technology in the mainstream finance world. The risks it posed to traditional financial and monetary systems was underlined by French Finance Minister Bruno Le Maire when he announced at our annual Global Blockchain Policy Forum that Libra in its current form was not welcome in Europe, recognising that "the monetary sovereignty of States is at stake".

There has been a lot of water under the bridge since then. In the past twelve months we have seen the Diem Association revamp its proposal in key regards, and watched the rapid growth of DeFi projects, which aim to bring the initial promise of Bitcoin and a dis-intermediated financial system closer to reality. At the same time, many traditional financial institutions are drawing on the technology to offer more efficient inter-bank settlement systems, or to create new services, such as JP Morgan's interbank information network, Liink.

Long-term however, adoption of these new applications in the finance sector requires a sound policy framework to provide the certainty and confidence necessary for mass adoption. This includes an understanding of the fundamentally different structure of DLT-based applications, which can hamper an easy fit within existing regulations when in their most decentralized form. Already we have seen some countries develop guidance, or offer a regulatory sandbox for DLT-based fintech, most recently the European Commission's proposal for a "Markets in Crypto Assets" regulatory framework.

The pace of technological development suggests that these policy efforts must accelerate and ongoing industry engagement in that process is critical to such efforts being fruitful. This is one of the reasons we set up the OECD's Blockchain Expert Policy Advisory Board, including Lawrence Wintermeyer from GDF, to bring together the public and private sectors as well as academia and civil society to pursue viable innovation and adoption of DLT. As we head into 2021, we can expect to see DLT-applications in the finance sector grow, from tokenize assets to central bank digital currencies. As a result, the important work of policy makers at the domestic and international level, in responding to and anticipating such developments, must continue to advance.

Caroline Malcolm
Head of Global Blockchain
Policy Centre
OECD

Why Self-Hosted Wallets Are Critical to the Future of the Crypto Economy

Self-hosted wallets allow individuals to engage in transactions over the internet on a peer-to-peer basis, meaning that no other individuals or entities are parties to the transaction. The ability to "cut out the middleman" in digital transactions creates a new paradigm for individuals, policymakers, and law enforcement alike.

Some domestic and international regulators are concerned that cutting out intermediaries creates unacceptable money laundering and terrorist financing risks. Their concerns are understandable: illicit actors are likely to exploit the financial system at their disposal.

Allowing individuals to transact on a peer-to-peer basis over the internet, however, is a net positive for society and therefore good policy. Here's why:

The best available evidence suggests that the percentage of illicit activity (as well as absolute dollar amount) in the traditional financial system is higher than the percentage of illicit activity in the digital asset ecosystem. Moreover, as evidenced by a string of recent forfeitures, law enforcement has become adept at identifying and seizing ill-gotten digital assets. Additional restrictions on self-hosted wallets would not only represent a disproportionate response to the risks, but it would also undermine law enforcement's ability to establish attribution in cases involving digital assets.

Secondly, these restrictions would lay the foundation for total surveillance of citizens' financial lives by eliminating a digital cash-like payment option. The decline of cash transactions has driven the majority of transactions online involving exploitable intermediaries, meaning that they are not private.

Thirdly, restrictions on self-hosted wallets would eliminate the unique features of digital assets that make them a catalyst of expanding financial inclusivity. Because anyone with an internet connection can create and use self-hosted wallets to transact with others, they are the critical feature of digital assets that could make basic financial services available to the billions of people currently without access to these services.

Finally, these restrictions would indiscriminately apply payments regulation to a diverse and developing ecosystem with applications that extend far beyond the transmission of money. Similar to a home safe, self-hosted wallets could be used to store other digital assets, including important documents and even immutable digital art. Pre-emptively applying payments regulation to self-hosted wallets would inappropriately "pigeonhole" an innovative ecosystem that could bring revolutionary products and services to the market.

The restrictions that we place on this technology will have broad and long-lasting consequences for our society. It is a policy decision that tests our commitment to a right to privacy and ownership, and should therefore be adjudicated by our elected representatives.

Kristen Smith
Executive Director
Blockchain Association

COMMUNITY

Digital Identities:

The Cost of Waiting

There has been a really big change in the environment around digital identity over the past year. The coronavirus catastrophe has required many individuals, companies and organizations who never had to do business online before to shift to the new normal in double-quick time. This in turn has highlighted the need for stronger online identification. We have seen a shift in the perception of digital identity from being a "nice to have" to a fundamental.

I have sat through countless meetings trying to work out business models around digital identity in my time. I have often been met with the kind of natural resistance that you expect in the corporate world. So, when someone from the Department of Whatever asks me to project the value of new revenue streams and the associated costs of delivering digital identities for the year 2033, for example, I am stuck. I can say that there will be winners and losers in the digital identity game, but being an honest sort of person I have had to admit that the magnitude of gains and losses contains guesswork.

While we may be no nearer to calculating the costs of having a digital identity infrastructure, we now have some very accurate figures for the costs of not having that infrastructure. In the UK, recent estimates from the Treasury and others indicate that losses to fraud in the disbursement of government COVID support and aid to both individuals and businesses could be in the region of £50 billion and upwards. In this country, we could have had a fully developed, privacy-enhancing, innovation-enabling digital identity platform for a fraction of that cost.

Perhaps now is the time to bang a few heads together (starting with the banking industry) and start work on the digital identity framework that the Future of Finance review noted as crucial in a post-pandemic, post-Brexit and post-password world – not just for finance, but across the whole economy.

David Birch
Author and advisor on
digital financial services

The DeFi Wave

Major trends in the digital assets industry have come in waves over the past few years – the DAO, ICO boom, Bitcoin's bubble, enterprise blockchain, or tokenization of everything. In 2020, the DeFi wave, or decentralized finance, came crashing ashore.

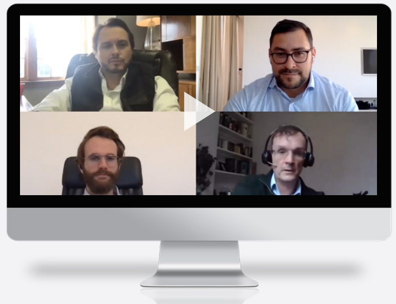
DeFi can be viewed, in part, as an off-shoot of the financial services movement collectively known as open banking. Open banking is focused on transforming stodgy legacy banking systems, all the while increasing financial access and inclusion. DeFi, which sits on the far edge of the open banking horizon, is a mixture of products and services built on open, public blockchain networks and accessible through various on-ramps and decentralized products. DeFi exploded in 2020. Projects that had been under the surface for years, such as bZx, Uniswap, or 0x, found a captive audience and broad interest in their products. Anonymous founders and community-driven projects were deployed at a rapid pace during the DeFi summer and subsequent liquidity wars. The lego blocks of DeFi began taking shape as innovation pressed beyond R&D and into production, tested in real-time by an active (and at times ferocious) community of traders, developers, and retail consumers. In the span of a few months, DeFi grew beyond just yield farming and lending into a full-stack of financial services products.

On the Horizon, Regulators Toil

The automation of financial activities across these new, open systems have reduced the need for counterparties, issuers, and centralised entities. But these innovations and efficiencies come with great risks. And, while these systems are new, many of the activities they execute are not. DeFi, as a collective, must think carefully about how it grows, mitigates risk, and complies with regulations.

It is clear that a primary goal in 2021 will be to shore up monetary sovereignty through new regulations on stablecoins and unhosted wallets. Projects, backed by venture checks, will build regulated on-ramps and integrations, enabling institutional players to dip their toes.

At the same time, the DeFi community of 'degens' will continue building and testing and experimenting at the bleeding edge of finance, whether or not the regulators like it. This will lead to a bifurcation of DeFi in 2021, as a mirror universe built for the institutions begins to appear and a struggle for the future of the movement starts to take shape.



Watch panellists discuss the transition from CeFi to DeFi at our Hogan Lovells DeFi conference

Jake Stott
dGen

The Year Digital Assets Became Essential

The New Normal and the Case for Stablecoins

2020 was a seminal year for the world and for how essential technology is in keeping the gears of the global economy turning. In every aspect of our lives during an unprecedented global crisis, the role of technology for household, business, and governmental continuity has been essential. This is true in perhaps every aspect of our lives, with the one potential exception being the way we transfer value.

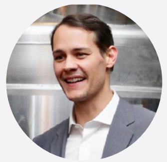
The case for the efficiency, reduced friction and user empowerment that is the promise of fintech was laid bare through the course of a tumultuous year—one in which governments grappled with how to get direct relief to their neediest citizens, while targeting economy-wide interventions to protect and preserve the engines of commerce amid a global lockdown.

In this environment, contactless payments, reduced costs and efficiency in the movement of value, without sacrificing trust and compliance, have proven essential. As COVID-19 continues to wreak havoc globally, the cautious optimism of vaccine mobilization should see a return to a "new normal." There are, however, some items worth keeping as we reflect on a year of fintech innovation. The use of blockchain as a core building blocks of user-directed payment systems should be here to stay.

A key pillar of broadening the base of participation in these efforts is the growing wave of regulatory clarity for the treatment of these assets, and promoting responsible and principled innovation. Chief among these are efforts on both sides of the Atlantic and around the world to address the legal classification of digital assets, while at the same time delineating minimum expectations when it comes to combating illicit activities in the space.

Encouraging market developments suggests the era of cryptocurrencies is beginning to bridge the gap into the real economy. 2020 was the year this change became lasting. 2021 and beyond will mark the period these developments gain much needed regulatory clarity following a 'same risk, same rules' technology-neutral approach to oversight.

Watch the Global Leader's Townhall with Dante Disparte, Executive Vice President at Diem Association.



Julien le Goc
Director of Policy
Diem Association

The Global Standards Mapping Initiative

Sandra Ro
CEO
Global Blockchain Business Council

Board Member
GDF

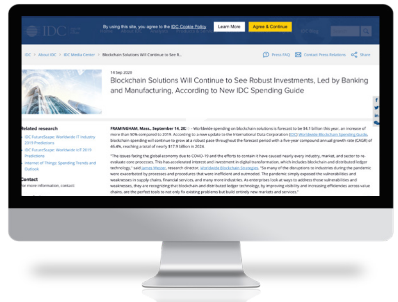
2020 was a big year for the blockchain and digital asset industry – global blockchain spending is forecasted to reach $4.1 billion by year end, major institutions entered the picture, and after years of heads down building, many projects moved into production.

While the blockchain technology and digital assets industry has grown tremendously, a lack of harmonization in technical standards and regulation threatens broad-based adoption and progress. In light of this, the Global Blockchain Business Council (GBBC) and World Economic Forum (WEF) in partnership with blockchain and digital asset leaders, including Global Digital Finance (GDF), came together to release the Global Standards Mapping Initiative (GSMI).

The GSMI 2020, version 1.0 is an unprecedented effort to map and analyze data from over 185 jurisdictions, nearly 400 industry consortia, and over 30 technical standards-setting entities to assess the current landscape and evaluate where there may be gaps, overlaps, inconsistencies, and conflicts. The GSMI includes two reports (Legal & Regulatory and Technical) and an Interactive Map of blockchain and digital asset regulation and guidance.

The GSMI is intended to serve as a resource for the blockchain and digital asset community and will continue to evolve beyond this initial release. As we look towards 2021, outlining a path towards universally accepted standards will become increasingly important. Key areas of focus moving forward will include: a deeper dive into taxonomy, an important first step in achieving greater harmonization; developing regulatory reporting and derivatives frameworks; and continuing to update and expand jurisdictional coverage.

As the GBBC and its 2021 partners work towards developing the roadmap and working groups for GSMI version 2.0, we encourage interested parties to get in touch.
gsmi2021@gbbcouncil.org



[Explore more of the Global Standards Mapping Initiative]

The Alchemy of Talent and Techonology

Leveraging technology to create human-centred economies

Covid is an indiscriminate infector yet discriminating deliverer of death. My heart goes out to all those affected by the virus and to all those souls taken before their time. The crisis has also exposed much which is sub-optimal in our social and economic fabric. Covid, like so much of what currently faces us, is more than a matter for the nation state. Be it the pandemic or climate, problems are international, and the solutions must be collaboratively global. The tools at our disposal for these problems will be the alchemy of talent and technology.

By digitizing finance, we have the potential to transform global trading relationships. And the choice is clear: it's international trade, cooperation and interconnectivity, or get left behind.

I was fortunate to lead on an international proof of concept, Reducing Friction in International Trade (RFIT), deploying Distributed Ledger Technology (DLT) and Internet of Things (IoT) to digitize paper processes of the Australia-United Kingdom wine trade. It was a truly collaborative, pro bono effort, demonstrating the possibility of doing things differently and delivering on the promise set out in my 2017 report. It is more than possible for every nation to deliver digitally enabled borders if we choose and if we don't choose, we all, to varying extents, lose.

Finance doesn't need to be the dough that divides. Finance can be an enabler, a grower, a public-private good. It must include and through that inclusion empower every citizen. Financial exclusion blights economies, scars societies and locks down individual potential. Financially include and an economy grows, financially include and everyone benefits. And it is possible: all we must do is look a little differently at the issues in broader context.

Fintech has come up with so many solutions to financial exclusion. Covid saw many perfected, pro bono, over a weekend around the globe: people focused on getting the finance to individuals traceably, speedily, and efficiently.

One such solution based on DLT has enabled those in refugee camps in Syria to gain some financial independence and digital identity. What an example of talent and technology at its humane best. If it can be done here, there seems no excuse and rather, some shame, that we in the West still have so many shut out through the failings of traditional financial services.

Technology is not a silver bullet, but seeing that we have such phenomenal tools in our well washed hands, it is on us to determine how we deploy them. The goal must be to enable the citizens to look at a new social contract. We can align the individual interest with the societal, and the lot, with the planetary. We can reimagine innovative, human-centred, interconnected "future states".

We have the opportunity to secure DLT and all elements of 4IR as a benefit for public good. We can create public-private partnerships worthy of that title. We can own, really own, our identity, our data, and be digital citizens. We can use the technology to empower and include, both financially and digitally. Technology is neither servant nor master. Technology is the partner.

Christopher Holmes
Lord Holmes of Richmond
MBE

GDF EXECUTIVE REPORT

GDF 2020 in Review

Emma Joyce
Head of Community & Membership
GDF

2020 was a year we will never forget. The world came to a halt, schools and offices shut down, and worldwide lockdowns sent shockwaves through most economies. Throughout 2020 and the pandemic, Global Digital Finance, like many in our community, has proved resilient and agile. Today, we have over 100 GDF Code Members and 300 community members – and we continue to grow.

We have welcomed the London Stock Exchange Group, EY, SDX and 100x onto our Patron Board, and XReg Consulting and ING joined our Advisory Council. Securrency, dGen, Bancambios Financial Technologies, Rain, Xkey, Lacero, Fasset, Notabene, 9th Gear Technologies, Kaiko, Bloc & Partners, Market Across, Farha Legal, Rowet Group, Shyft Network, Okcoin, Crypto.com, Bitfinex, Lykke Corp, CRYFIN, TrustMe and Aereve all joined as Working Members.

GDF member-led working groups have been prolific in their development of standards, codes and working papers in 2020. New codes launched for AML / CTF, Custody, and Market Integrity. In May, the Joint Working Group (JWG) ratified IVMS101, the InterVASP messaging standard that has been adopted by the industry. The JWG is co-chaired by GDF, The Chamber of Digital Commerce, IDAXA, and XReg Consulting and is comprised of over 130 professionals who, in response to the FATF R16 requirement for VASPs, dedicated themselves to delivering this standard in a record time of 17 weeks.

New Directions

2020 was also the year that GDF went beyond codes. Our **Enterprise Blockchain Report**, created by Keith Bear & Michel Rauchs, covers the emergence of the "Big 3" enterprise blockchain platforms: Corda, Ethereum, and Hyperledger. **The Public Digital Currencies** working group released a comprehensive account for policy makers focused on issuing public digital currencies. The Tax working group published their **paper on global tax issues** in July, which has been recognized for its material substance by the OECD. The new **Private Markets Digitization Steering Group** delivered a reference architecture and a POC in the space of a few months, and their pilot program will go live early 2021. Alongside these projects, the support for the R3 CBDC working group and the collaboration on research with the GBBC and WEF on the Global Standards Mapping Initiative (GSMI) has really demonstrated how agile GDF has been in growing beyond conduct standards.

Read the Enterprise Blockchain Report

Events

At the end of 2019 we surveyed our community in order to plan our 2020 program. The feedback that we received was that many also look to GDF for thought leadership, and we were asked to curate more events. 2020 was not the year for traditional conferences, but this was quickly turned into an opportunity: no longer constrained by geographical location, members globally were able to participate in and attend our virtual conferences, webinars, and summits.

In fitting with our association's global nature, these events always had an international, cross-jurisdictional focus. We started in March with our **Covid-19 Hubs Summit**, where speakers situated across 6 continents reported on the local responses to the first wave of global lockdowns. In July, we produced our **Digital Currencies and Global Stablecoins Conference** with DLA Piper which had over 500 delegates engaged. The summer also saw the FATF open our **Travel Rule Conference**, and in September we held our **Sustainable Finance Conference** with an incredible line up of experts in this area. In October we held our **DeFi Conference** and in the same week produced **V20 –** the industry-FAFT collaboration platform – in partnership with the associations IDAXA and ACCESS.

Our conferences and summits were watched live by over 2000 audience members, with even more viewing the recordings. The positive feedback from our events consistently focused on the depth and relevance of the rich discussions. For this, we have our panellists and speakers to thank.

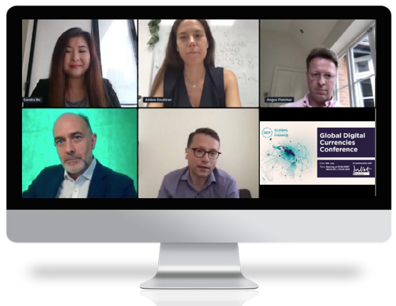
Webinars & Roundtables

The knowledgeable and committed people who make up both the GDF membership and greater community also enabled us to deliver our popular **Global Leaders Webinar**. We launched this series in March in partnership with The Global Blockchain Business Council, and over the course of 29 weeks we have listened to policy makers, authors, regulators and business leaders discussing trending topics including CBDCs, DeFi, and the effect of the pandemic on the wider economy and indeed our social wellbeing.

We continued our **General Knowledge Sharing Webinar Series** that began in 2019, and over the year members have presented on Prime Brokerage in Digital Assets, Institutional Custody, Digital Identity, The Travel Rule Sharing Alliance as well as panel discussions on the current regulatory landscape, and a review of 2020.

Just before many countries entered a lockdown

Heath Tarbert on the Global Leaders Townhall Series



Digital Currencies and Global Stablecoins Conference

Best Ways for GDF to Support Firms in 2021

GDF Member Survey 2020

Digital Asset Report

"GDF is a leader in this space. The team is as professional as they come and GDF makes a real impact in the industry."

GDF Member Survey 2020

in March, we launched the Digital Asset Report recorded from the London Stock Exchange Group studios with our partner Fintech.TV. We pivoted to virtual recordings for the interviews and have now delivered 27 member interviews this year on the channel.

Before GDF became a members' association, our journey began in 2018 producing code of conducts and holding small roundtables to investigate and explore subjects in detail. While we have grown and progressed during 2020, we have also returned to our roots, and this year we held roundtables on Consumer Wallets, DeFi and the UK Fintech Review. These small assemblies enable participants to discuss topics in detail and drive the focus of our working groups. In the new year we will continue to explore themes and subjects in this way by expanding our roundtable program. Everything we have achieved this year is thanks to the support and hard work of our members and community contributors, all of whom are committed to the development of conduct standards in the global crypto and digital assets sector. We would like to thank every single one of our Code and community members for their support, dedication, and contribution in this unprecedented year where we also pause to share our thoughts with those who have been affected by COVID-19.

I'd also like to thank the GDF Board whose help and guidance are invaluable, our wonderful executive team which came together in 2020, our Patron Board who set the strategic direction for GDF and the Advisory Board that oversees the development of the codes of conduct, regulatory consultations, and policy recommendations. GDF is truly a member-led association.

2020 in Numbers

13 Working Groups active in 2020

3 Approved Codes & Standards

7 Regulator Responses

64 Webinars & Digital Asset Reports

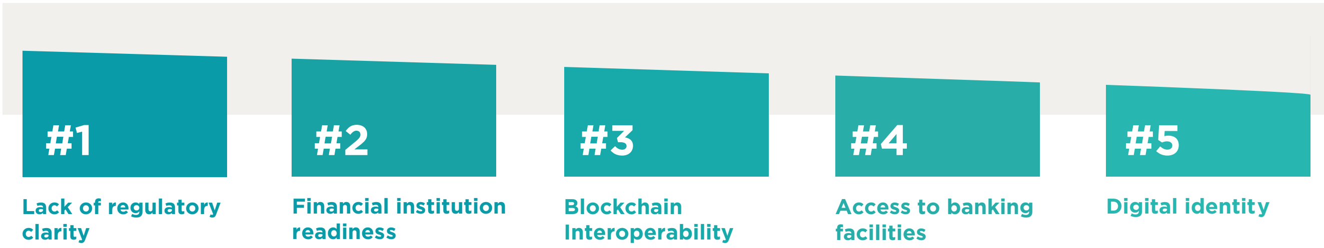
9 Conferences & Summits

4 Roundtables

2000+ Delegates

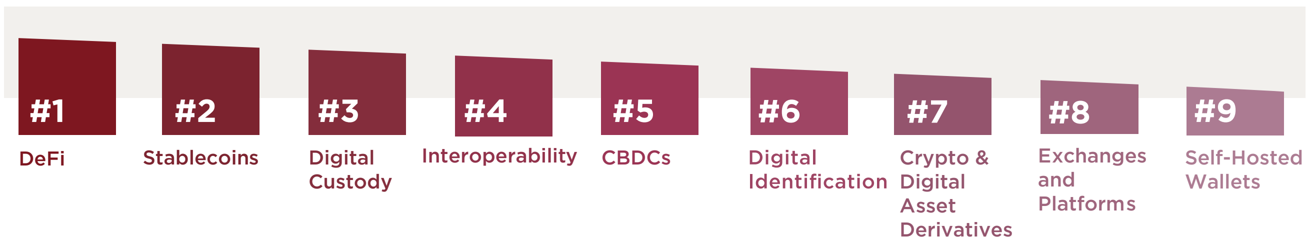
Top Challenges to the Crypto and Digital Asset Sector for 2021

GDF Member Survey 2020



Top Priorities Areas for Further Code Development

GDF Member Survey 2020



In partnership with

Global Leaders Townhall of Fame 2020


Martin Bartlam
DLA Piper


Rod Beckstrom
ICANN


Richard Byworth
Diginex


Michael Coletta
London Stock Exchange Group


Dante Disparte
Diem Association


Tarek El Diwany
Kreatoc Zest


Tonya Evans
Penn State Dickenson Law


Tim Grant
SIX Digital Exchang


Toomas Hendrik Ilves
Former President of Estonia


Rodney Hood
NCUA


Jason Hsu
Former Legislator-At-Large, Taiwan


Eva Kaili
European Parliament, Greece


Kairat Kelimbetov
Astana International Financial Centre (AIFC)


Steve Kokinos
Algorand


Linda Lacewell
NY State Department of Financial Services


Chris Lee
Huobi


Dr. Jemilah Mahmood
Government of Malaysia


Michael Mainelli
Chair of Z/Yen Group


Santosh Misra
Tamil Nadu e-Governance Agency


Yuval Rooz
Digital Asset


John Salmon
Hogan Lovells


Heath Tarbert
CFTC


Richard Teng
Abu Dhabi Global Markets


David Treat
Accenture

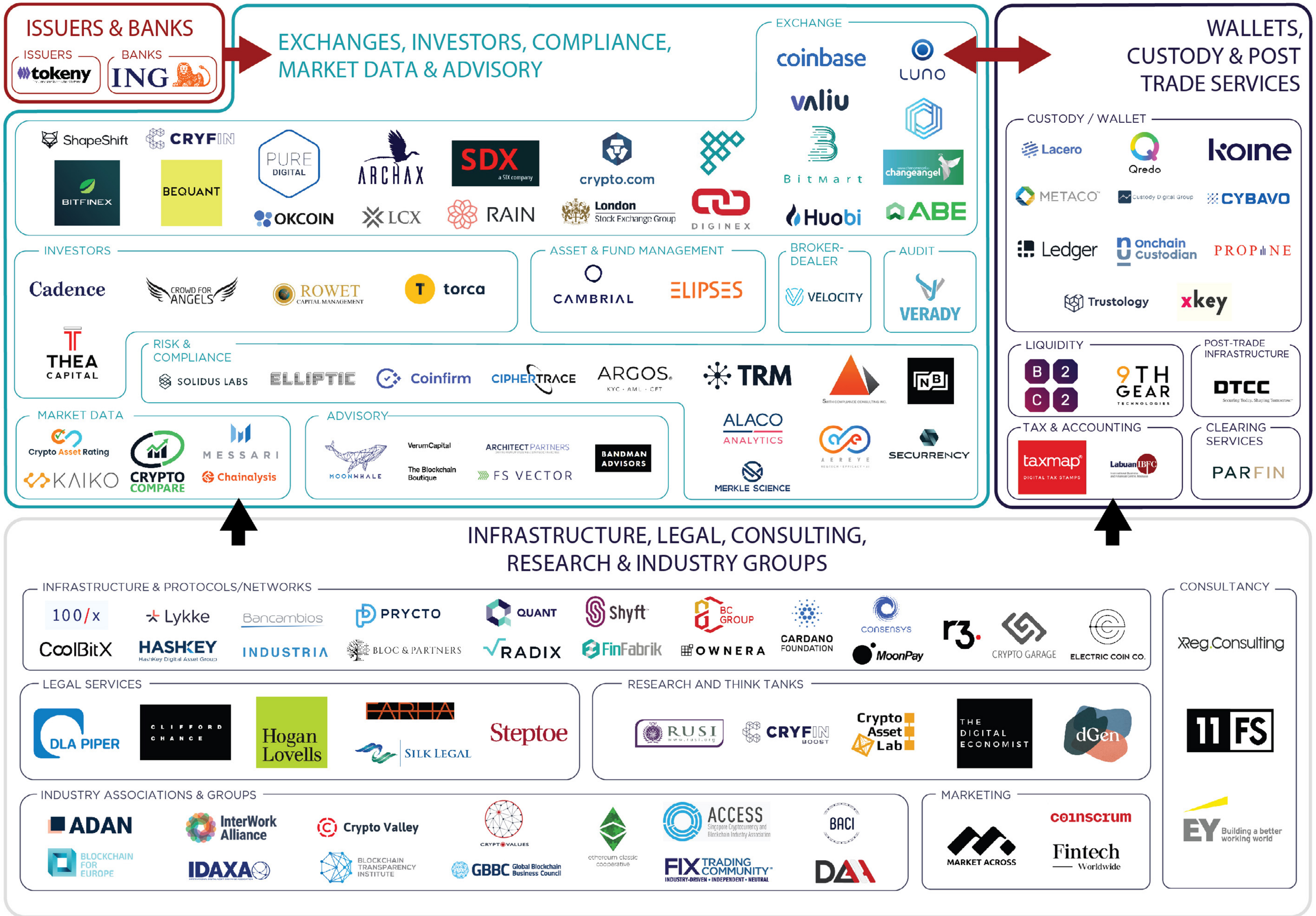

Clyde Vanel
NY State Assembly


Lord Vaizey of Didcot
House of Lords


Staci Warden
Milken Institute


Sheila Warren
The World Economic Forum

GDF Code Members & Partners Ecosystem



GDF Code Members & Partners

GDF Code Members

GDF Partners

GDF Central Hubs

ADVISORY COUNCIL & WORKING GROUPS

Beyond the Codes:
A Letter from the Advisory Council Chair and Secretariat

In its first year, GDF brought together a community to develop codes and standards for the digital asset sector. In an extraordinarily busy 12 months, the Advisory Council oversaw the approval of nine of these codes, and the creation of the working groups that led them.

If we were under the impression that COVID-19 might slow us down in GDF's second year, we were happily mistaken. That said, these activities have taken new forms.

Between the EU's proposed framework for cryptoassets and the FATF's requirements, this year has seen rapid developments from regulators as they grappled with the complexities of this new asset class, whose emergence showed no slowdown in 2020.

As our industry has evolved, so too have its requirements, and GDF has proven that it has the agility to respond accordingly: the Private Markets Digitization Steering (PMDS) group and Public Digital Currencies group were set up in response to the impact of the pandemic, and an Advisory Council members' group was created to provide an in-depth response to the EU's Markets in Crypto-Assets proposal.

Led by the discussions held in our monthly Advisory Council meetings, we have continually found the new tasks for the industry to undertake. Other working groups have continued to work on codes, and between the reports, pilot programs, consultation responses and roundtables, the output from GDF has continued to thrive.

This year has made two things clear: firstly, it has shown the extent to which these achievements rely on the engaged industry leaders who make up a community such as ours. We would not have made such progress in this sector were it not for the members' input, the richness of the discussions that they lead, and their will to collaborate with each other—despite the sector's nascent state.

Secondly, the Advisory Council continues to be crucial to the strength of GDF, helping it anticipate the industry's needs and mobilize the community to respond. Through this, GDF's achievements have evolved well beyond Codes of Conduct, and into new ways of engaging with policy makers.

It has been our pleasure to lead the Advisory Council meetings throughout the year, and we look forward to all that is to come for GDF and our community in 2021.

Malcolm Wright
Chair
Advisory Council

Bryony Widdup
Secretariat
Advisory Council

Custody
Working Group

CUSTODY


GDF Code of Conduct
Part IX(i) - Principles for Custody
"Custodial Wallets"

[See the Code of Conduct Part VIII - Principles for Custody]

In 2020, the GDF Custody working group finalised the GDF Code of Conduct Part VIII – Principles for Custodial Wallet. The code was approved by the Advisory Council in Q1, and is now available for members to attest to.

Throughout the rest of the year, the group continued to respond to various consultation papers impacting digital asset custodians. The group built travel rule protocols and solutions inventory and, with the support of ING and Clifford Chance, a custody regulatory landscape.

In 2021, the group will continue to monitor travel rule implementation and regulatory changes. We will work on extending the working group to new and traditional custodians as well as extend self-certification to our code of conduct.

Finally, the co-chairs will be working to develop training scenarios based on the GDF Custody Code of Conduct that will mirror the ACI ELAC platform, allowing organizations to extend their team's knowledge base.

Alexander Kech
CEO
Onchain Custodian

Hervé François
Blockchain/Digital Assets
Initiative Lead
ING

KYC / AML
Working Group

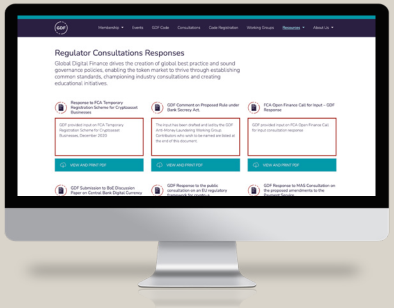
2020 was the year of execution, building on the foundations laid out by the FATF in its updated Recommendations in 2019. Countries legislated and firms took note of their obligations.
We saw more firms move towards compliance with the FATF Recommendations, even if their own jurisdictions did not require it yet. This happened for two reasons: to be ready for legislation, and to be ready to comply with counterparty VASP's travel rule obligations. Firms saw immediate benefits, particularly from institutional investors feeling more comfortable with a maturing industry.

The AML working group then focussed on supporting these efforts. We released TRIXO (a VASP to VASP onboarding questionnaire for travel rule purposes) late in the summer, responded to numerous consultations from the FCA, FinCEN, and Hong Kong among others, and are currently developing a more detailed best practice guide based on the AML Code of Conduct. This year also saw us split into two subgroups (EU/Asia and EU/US), allowing us to cover more ground more efficiently.
Expect more in 2021 as we do not see any let-up coming to the work that needs to be completed and we are constantly encouraging more GDF members to join us with the foundational and important efforts.

Malcolm Wright
Chief Compliance Officer
100x

Jack Gavigan
Product and Regulatory Affairs
Electric Coin Co.

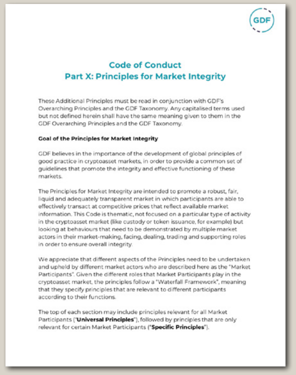
Dominic Gee
Advisor and Consultant



[Explore the Consultation Responses here]

Market Integrity
Working Group

MARKET INTEGRITY


GDF

Code of Conduct
Part X: Principles for Market Integrity

These Additional Principles must be read in conjunction with GDF's Overarching Principles and the GDF Taxonomy. Any capitalised terms used but not defined herein shall have the same meaning given to them in the GDF Overarching Principles and the GDF Taxonomy.

Goal of the Principles for Market Integrity

GDF believes in the importance of the development of global principles of good practice in cryptoasset markets, in order to provide a common set of guidelines that promote the integrity and effective functioning of these markets.

The Principles for Market Integrity are intended to promote a robust, fair, liquid and adequately transparent market in which participants are able to effectively transact at competitive prices that reflect available market information. This Code is thematic, not focused on a particular type of activity in the cryptoasset market (like custody or token issuance, for example) but looking at behaviours that need to be demonstrated by multiple market actors in their market-making, facing, dealing, trading and supporting roles in order to ensure overall integrity.

We appreciate that different aspects of the Principles need to be undertaken and upheld by different market actors who are described here as the "Market Participants". Given the different roles that Market Participants play in the cryptoasset market, the principles follow a "Waterfall Framework", meaning that they specify principles that are relevant to different participants according to their functions.

The top of each section may include principles relevant for all Market Participants ("**Universal Principles**"), followed by principles that are only relevant for certain Market Participants ("**Specific Principles**").

[See the Code of Conduct Part IX - Principles for Market Integrity]

After a year of work involving close to 40 organizations, the Market Integrity Code of Conduct was presented to and ratified by the GDF Advisory Council. In addition to looking at the role of trading platforms in improving market integrity, the code examines an extensive list of market participants, from individual traders to data companies and even journalists. The result is a comprehensive guideline for any market participant to relate to and act upon, making market integrity a true industry effort.

2020 has without a question been a year of strengthening market integrity. Since the end of 2019, major economies globally have presented advanced crypto regulatory and licensing frameworks at an accelerated pace and it seems the industry is finally getting the regulatory clarity it has been asking for. The sector has the opportunity to demonstrate in return that it is s committed to integrity and compliance, something which the GDF community can be proud of leading.

Moving forward in 2021, the working group plans to extend its work to more specific challenges to market integrity, focusing first on the need for shared-surveillance to address cross-market manipulation and enable crypto-ETFs.

> It has been a pleasure to be involved in working groups in 2020, and we look forward to continued involvement, and attending events.

GDF Member Survey 2020

Chen Arad
Chief Operating Officer
Solidus Labs

Public Digital Currencies
Working Group

When Covid ground economies to a halt, most welfare mechanisms were not built to withstand such an effect and Governments sought to distribute additional financial stimuli to assist. The complexity of existing financial mechanisms made getting much needed central bank money to businesses and individuals very slow, with each day rendering the utility of this policy approach less effective.

This sparked a discussion on the function of Public Digital Currencies and Wallet Infrastructure as a means for disseminating central bank money directly to those that need it without delay. Perhaps the most significant discussions took place in call for a Digital Dollar in both The US House of Representatives through the CARES Act and the US Senate through the Banking for All Act.

As such, GDF pulled together a working group to produce a report that would act as a primer for Governments, Central Banks and policy makers who are looking to explore public digital currency. We provide a framework and recommendations for the global policymaking community on the public policy choices, practical realities, and challenges of deploying a public digital currency and wallet infrastructure.

Lavan Thasarathakumar
Head of Regulatory Affairs – EMEA
GDF

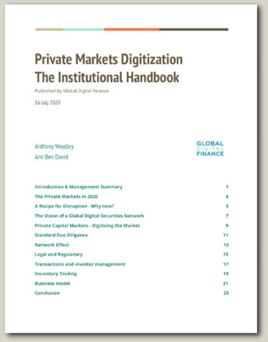
John Collins
Partner
FS Vector

Read more: The Age of Public Digital Currencies: A Guide to Issuance

Private Markets Digitization

Steering Group (PMDS)

PRIVATE MARKETS DIGITISATION STEERING GROUP


Private Markets Digitization
The Institutional Handbook
Published by Global Digital Finance
16 July 2020

Anthony Woolley
Ami Ben David

GLOBAL DIGITAL FINANCE

Read the Private Markets Digitisation Institutional Handbook

The GDF Private Markets Digitization Steering Group was formed in the spring as an industry response to the Global Pandemic. Private markets raise twice as much capital annually as public ones, but are 330 times less liquid, operating almost entirely offline and not ready for our new "online reality". The group of 70 financial institutions, exchanges, law firms and technology companies sought to create an online shared institutional network in which any asset can be distributed to any suitable investor globally, irrespective of location and regulatory jurisdiction.

Above all, the group focused on solving interoperability challenges between financial institutions. We did so by delivering one overlay network called FinP2P, connecting all institutions, across all sub-markets and DLT technologies, into one global digital securities distribution and liquidity network.

Working at unprecedented speed, we published the API specifications for FinP2P in August, and a pilot program was launched in September. The full pilot will be delivered early in 2021 and we expect a production network to be up and running before the end of the year. Where GDF Working Groups have previously focused on developing Codes of Conduct, this group represents a new direction for the GDF community and stands as a stellar example of what is to be achieved from the industry coming together to collaborate.

Anthony Woolley
Head of Business Development
Ownera

Lavan Thasarathakumar
Head of Regulatory Affairs – EMEA
GDF

Tax
Working Group

In July 2020, the Tax Working Group published a working paper on the Tax Treatment of Cryptoassets, the industry's first comprehensive review of the tax issues facing digital assets Rather than engaging in a country-by-country analysis of tax laws, the paper looked novel issues specific to the industry from the classifications of types of cryptoassets for tax purposes, to the appropriate taxing jurisdictions for cross-border transactions, and the challenges in calculating tax liability.

Since the working paper's publication, it has been shared and discussed with various tax regulators as well as with the OECD. In addition, the Tax Working Group authored a summary and analysis of the OECD's overview of tax treatments of virtual currencies. In November, Lisa Zarlenga, co-chair of the group, presented on a panel at the OECD Global Blockchain Policy Forum entitled Crypto-Tax: Ensure a Robust and Transparent Tax Policy Framework.

Group has been considering what tax issues are of interest to the wider GDF community, so as to best focus its efforts moving forward. The group plans to further utilize its current engagement with tax regulators, intergovernmental organizations, and industry participants to engage in a dialog regarding key tax issues.

Lisa Zarlenga
Partner & Co-Chair of Tax Group
Steptoe & Johnson, LLP

Krystle Gan
Seconded Counsel
Wells Fargo

GLOBAL DIGITAL FINANCE
Tax Treatment of Cryptoassets

TABLE OF CONTENTS

Read Tax Treatments of Crypto-assets

TALENT & GOVERNANCE

Abdul Haseeb Basit
Treasurer & Board Member
GDF

Human and Financial Capital

GDF's success is down to the strength of our team and our exceptional member community. In what has been one of the most extraordinary years for many of us, we at GDF have been focused on the wellbeing of our team and community as a priority.

In Q1 we took an early decision before many of us moved into lockdown in our respective locations to halt physical events and move to virtual events. A large part of our community interaction, namely working groups, have been virtual from the outset and were able to continue uninterrupted. Our team and community has rallied to deliver more content than in any prior year through our suite of digital activities launched in 2020.

Our guidance to our community remains that we expect to host digital only events going into 2021, as we wait for the pandemic to subside and will review this decision on a quarterly basis in the coming year.

Board and Executive Team

In 2020 our Board and Executive was ably led by Lawrence Wintermeyer as Executive Co-Chair and Abdul Haseeb Basit, as Treasurer and Board Member. Simon Taylor continued in the capacity of Non-Executive Co-Chair alongside Non-Executive Directors Jeff Bandman and Sandra Ro. Colin Murdoch, COO at Google Deepmind joined the board as an independent observer during 2020.

Our senior Executive team was led by Emma Joyce, Head of Community. 2020 saw some new additions to the team notably Anastasia Kinsky, who joined GDF as Programme Manager having previously led content for Blockchain Live. In the second half of the year, we welcomed Melissa Corthorn as Events Manager and Thomas Peers as Community & Programmes Analyst as we said farewell to Natalie Hall, Head of Growth and Communications, who left to pursue other opportunities. We would like to thank Natalie for her dedication in an extraordinary year and wish her the best for her future career.

Our regulatory affairs team consisted of Lavan Thasarathakumar as Head of Regulatory Affairs - EMEA, and John Beccia, Head of Regulatory Affairs – US, a part-time role via our partnership with advisory firm FS Vector. We have welcomed Phil Anderson and Taylor Marriott from Perception A, who will lead our PR and Media.

Governance

In 2020 we welcomed new Patron members 100x, Coinbase, EY, The London Stock Exchange Group and SDX to our Patron board.

Alongside these new Patrons, we also welcomed new members, ING and xReg Consulting to our Advisory Council. Malcolm Wright, from founding Patron Member firm Diginex, who moved to 100x in October chaired the Advisory Council in 2020 alongside Bryony Widdup from DLA Piper as AC Secretariat, supported by her DLA Piper colleague Malithi Fernando.

We would like to thank all those who have contributed to GDF in 2020, who have allowed us to serve our community during a challenging year and set us up for continued growth in 2021.

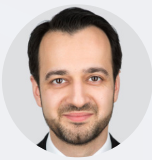
Meet the Team

Lawrence Wintermeyer
Executive Co-Chair & Guarantor

Simon Taylor
Co-Chair & Guarantor

Sandra Ro
Board Member

Jeff Bandman
Board Member



Abdul Haseeb Basit
Treasurer & Board Member

Emma Joyce
Head of Community & Membership

Melissa Corthorn
Events Manager

Anastasia Kinsky
Programme Manager

Thomas Peers
Community & Programme Analyst

Lavan Thasarathakumar
Head of Regulatory Affairs – EMEA

John Beccia
Head of Regulatory Affairs - US

John Collins
Regulatory Affairs - US

Phil Anderson
Media & PR

Taylor Marriott
Media & PR

Our Code Members

Our Patron Members

- 100/x
- coinbase
- DIGINEX
- London Stock Exchange Group
- Hogan Lovells
- DLA PIPER
- EY Building a better working world
- SDX a SIX company
- r3.
- Huobi

Our Advisory Council Members

- 11FS
- ARCHAX
- BANDMAN ADVISORS
- BEQUANT
- XReg Consulting
- CONSENSYS
- CRYPTO COMPARE
- ELIPSES
- ING
- Steptoe
- MESSARI
- METACO
- RADIX
- ShapeShift
- SOLIDUS LABS
- OWNERA

Our Partners

- ACCESS Singapore Cryptocurrency and Blockchain Industry Association
- ADAN
- IDAXA
- BLOCKCHAIN FOR EUROPE
- BLOCKCHAIN TRANSPARENCY INSTITUTE
- CRYPTO VALUES
- Crypto Asset Lab
- Crypto Valley
- FINTECH TV EXPONENTIAL VOICES
- DAA
- ethereum classic cooperative
- coinscrum
- FIX TRADING COMMUNITY INDUSTRY-DRIVEN • INDEPENDENT • NEUTRAL
- GBBC Global Blockchain Business Council
- THE DIGITAL ECONOMIST
- InterWork Alliance
- RUSI www.rusi.org
- FS VECTOR

Our Working Members

GLOBAL DIGITAL FINANCE

HEADQUARTERED AT:

Kemp House
160 City Road
London
EC1V 2NX
United Kingdom

CONTACT US:

e: hello@gdf.io
w: www.gdf.io

FOLLOW US:

@GlobalDigitalFi
Global Digital Finance
@GlobalDigitalFinance