



► G20 TechSprint: Retrospective report

Accelerating the future of finance through
innovative technologies

G20 TechSprint
2020
Saudi Arabia

G20 TechSprint
2021
Italy

G20 TechSprint
2022
Indonesia

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2023
India

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The G20 TechSprint in context

Overview of the G20 TechSprint¹

The G20 TechSprint is a collaborative initiative between the Bank for International Settlements (BIS) Innovation Hub, the G20 Presidency, and its central banks. Since its launch in 2020, it has provided a structured platform to accelerate technological innovation in the financial sector. Spanning six G20 Presidencies—Saudi Arabia, Italy, Indonesia, India, Brazil and South Africa—the TechSprint has shaped key themes and advancements across global financial systems.

The initiative advances the BIS Innovation Hub's three-fold mandate, particularly by identifying and analysing critical technological trends affecting central banking, and by providing a platform to explore emerging solutions and their impact. It also supports the development of public goods in technology and serves as a focal point for collaboration among central banks. Past editions also demonstrate the TechSprint's role in catalysing cross-jurisdictional initiatives—for example, advancing tokenised wholesale money settlement, strengthening anti-money laundering frameworks and deepening the understanding of emerging technologies.

Each edition aligns with the G20 agenda and the remit of the BIS Innovation Hub, translating broad challenges into a global theme and three targeted problem statements to ensure solutions are relevant and impactful. Themes have ranged from regulatory and supervisory technologies (regtech and suptech) to sustainable finance, tokenised wholesale central bank money and digital forms of cash and cross-border payments – reflecting core central banking functions and demonstrating how innovation strengthens them.

To inform this retrospective, a survey was conducted among G20 TechSprint winners to capture their experiences, insights, and observations. Their feedback provides valuable perspectives on how the initiative has evolved, its impact in terms of fostering innovation, and its contribution to central bank collaboration.

G20 TechSprint impact: Participant perspectives

"The G20 TechSprint experience helped expand our collaboration with central banking innovation networks and supranational organisations that support the supervisory community."

"The competition accelerated momentum behind our initiative, leading to boarder acceptance of the methodology, thereby supporting its role in improving reporting accuracy, transparency, and benefits for both market participants and supervisors."

"We received two patents on our technology and also secured a prestigious grant from a national innovation agency to continue development towards production launch. Today we are working with multiple multi-asset businesses, including asset managers, exchanges, payment networks, fintechs, banks, and tokenised fund issuers."

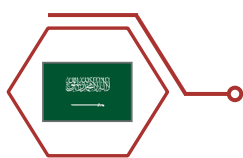
Through its structured experimentation process, the TechSprint enables central banks to assess the feasibility, risks, and implications of new technologies. By combining policy insight with hands-on testing, it bridges the public and private sectors and advances central banks' efforts to promote resilient, inclusive, and innovative financial systems.

¹ This retrospective report and survey were led by Bénédicte Nolens, Head of the BIS Innovation Hub Hong Kong Centre, with support from Jack Lee and Shauna Daswani of the BIS Innovation Hub Hong Kong Centre. We gratefully acknowledge the contributions of Andrew McCormack (Nexus Global Payments), Benjamin Lee (Nexus Global Payments), Ayu Kinanti (Bank Indonesia), Ankur Singh (Reserve Bank of India), and Teresa Lin (Hong Kong Monetary Authority) for their work on previous G20 TechSprints while serving at the BIS Innovation Hub. The preparation of this report was undertaken in collaboration with Farah Izzaty Azman from the Centre for Risk and Uncertainty Research (CRUR) in the United Arab Emirates.

The G20 TechSprint themes

Evolution of the G20 TechSprint focus

Since its launch, the G20 TechSprint has provided a global platform for central banks and innovators to collaboratively explore how technology can strengthen the resilience, efficiency, and sustainability of the financial system. Each annual edition has addressed distinct priority areas – ranging from supervisory innovation and digital transformation to sustainable finance solutions – while remaining aligned with the G20’s broader objectives of inclusion, innovation, and trust in an increasingly interoperable financial system.



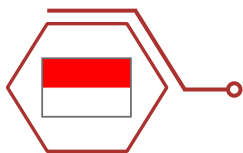
G20 TechSprint 2020:
G20 Saudi Arabia Presidency

Launched amid the Covid-19 crisis, the 2020 edition focused on strengthening supervisory and regulatory capabilities through technology. It produced tools for real-time monitoring, early detection of vulnerabilities, and secure cross-border information sharing – laying the foundations for digital resilience and enabling authorities to better anticipate and manage systemic risks.



G20 TechSprint 2021:
G20 Italy Presidency

Building on this momentum, the 2021 G20 TechSprint concentrated on climate and sustainability. Artificial Intelligence (AI), blockchain and data analytics were applied to enhance environmental, social and governance (ESG) reporting, strengthen transparency and link incentives to environmental and social outcomes. The year marked a shift from compliance towards proactive integration of sustainability within financial systems.



G20 TechSprint 2022:
G20 Indonesia Presidency

In 2022, attention turned to digital financial infrastructure, emphasising interoperability, inclusion, and tokenised wholesale central bank money and digital forms of cash. Privacy-preserving technologies such as zero-knowledge proofs and federated learning were explored to manage cross-border data risks – advancing more secure, transparent, and inclusive digital financial ecosystems.



G20 TechSprint 2023:
G20 India Presidency

Continuing this trajectory, the 2023 G20 TechSprint explored cross-border payments and international financial integration. Participants developed solutions for real-time, multi-currency, and interoperable payment systems, addressing frictions in global transactions and promoting collaboration among jurisdictions to enhance efficiency and inclusion in cross-border financial networks.



G20 TechSprint 2024:
G20 Brazil Presidency

Expanding its scope, the 2024 G20 TechSprint applied digital innovation to sustainable finance. The theme “Technology for the planet” introduced nature-based solutions, open ESG data frameworks for small and medium-sized enterprises (SMEs) and sustainable development goal (SDG) aligned decision tools – demonstrating how technology and finance can jointly support ecosystem restoration and broader sustainable development outcomes.












G20 TechSprint 2025:
G20 South Africa Presidency

The 2025 G20 TechSprint focused on trust and integrity in open finance, addressing verifiable digital identity, consumer-consented credit-data portability and fraud and cyber risk mitigation for fast-payment systems. By promoting interoperable data-sharing and consent-based exchanges, the edition highlighted how open finance can enable inclusive, efficient and secure financial ecosystems across borders.

Intersection of G20 TechSprint with BIS Innovation Hub strategic themes

Each edition of the G20 TechSprint has reflected and contributed to the BIS Innovation Hub's strategic themes, advancing exploration and innovation in areas such as supervisory and regulatory technology (suptech/regtech), financial market infrastructures (FMIs) and central bank money, open finance, green finance and cybersecurity.²

	G20 TechSprint 2020	G20 TechSprint 2021	G20 TechSprint 2022	G20 TechSprint 2023	G20 TechSprint 2024	G20 TechSprint 2025
Suptech and regtech						
FMIs and central bank money						
Open finance						
Green finance						
Cyber security						



"Highlights from G20 TechSprint 2023, hosted under the India G20 Presidency"

² See "[BIS Innovation Hub themes](#)"



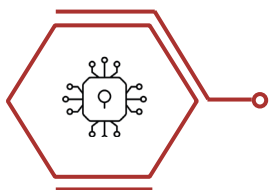
Key findings from the G20 TechSprint survey

Key innovative technologies in the evolving financial landscape

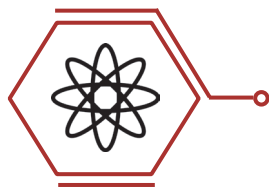
Survey responses reflect a financial sector undergoing rapid technological evolution, driven by the convergence of emerging technologies reshaping how financial services are delivered, managed, and regulated. These innovations are improving efficiency, transparency, and resilience, while also strengthening interactions between financial institutions, regulators, and users. They support more informed decision-making, risk management, and operational effectiveness across markets. The findings further highlighted the following key technologies driving this transformation, underscoring their growing relevance to central banking and financial sector innovation.



AI and machine learning (ML) enable institutions and authorities to process and analyse large, complex datasets in real time. These technologies improve predictive risk assessment, fraud detection, supervisory oversight, and customer service automation. By enabling faster identification of emerging patterns, AI and ML strengthen operational efficiency and contribute to more adaptive, resilient financial systems.



Distributed ledger technologies (DLT), including blockchain, provide secure and transparent frameworks for recording and transferring value. They facilitate innovations such as asset tokenisation, programmable finance, and tokenised money. Institutional applications typically focus on permissioned networks that balance operational efficiency with regulatory oversight and compliance.



Quantum computing may greatly expand computational capacity for financial calculations, cryptography, and large-scale simulations, enabling faster and more complex scenario analysis to support portfolio optimisation, systemic risk evaluation, and encryption resilience. While promising enhanced capabilities, it could also introduce security risks by challenging current cryptographic methods. Practical applications remain limited as the technology is still in an early stage of development.














Digital identity systems support secure authentication and verification, facilitating financial inclusion, compliance, and reliable access to digital services. Combined with Privacy-enhancing technologies (PETs), they enable institutions to use sensitive data while maintaining confidentiality, strengthening trust across digital interactions, and ensuring adherence to regulatory frameworks, particularly in cross-border or multi-jurisdictional financial operations.



Sensor technologies, including the Internet of things (IoT), satellite imagery, and remote sensing, expand the availability of actionable data for finance. They enable monitoring of agricultural production, supply chains, infrastructure and energy use, improving credit assessment and risk evaluation. These technologies also support sustainability-linked financial instruments, allowing financial institutions to integrate environmental, social and operational data into decision-making.

Intersection of G20 TechSprint with key innovative technologies

Across successive editions, the G20 TechSprints have explored and tested applications of key emerging technologies – including AI, distributed ledger technology (DLT), quantum computing, digital identity, and sensor technologies – demonstrating how these innovations can address challenges and opportunities aligned with the BIS Innovation Hub priorities.

	G20 TechSprint 2020	G20 TechSprint 2021	G20 TechSprint 2022	G20 TechSprint 2023	G20 TechSprint 2024	G20 TechSprint 2025
Artificial intelligence						
Distributed ledger technology						
Quantum computing						
Digital identity						
Sensor technology						



"Highlights from G20 TechSprint 2024, hosted under the Brazil G20 Presidency"

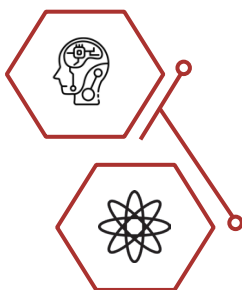
Convergence among key innovative technologies

Reflecting survey responses, emerging technologies are increasingly being deployed in combination, potentially amplifying their collective impact on financial systems. These combinations can improve operational efficiency, strengthen resilience, and enable data-driven decision-making, while supporting secure and trustworthy financial innovation. Survey responses indicate that the pairings below are already being explored or implemented in practice, highlighting potential applications, forward-looking use cases, and considerations for adoption.



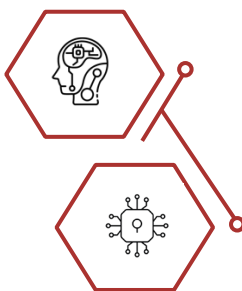
AI and digital identity

Combining AI with Digital identity can enhance the security and reliability of digital financial services. This combination may improve fraud detection and customer verification, while multi-factor authentication could reinforce trust in digital interactions. Looking ahead, AI-enabled digital identity systems could support cross-border onboarding, adaptive fraud monitoring and secure digital wallets, enabling more inclusive and reliable financial access. However, reliance on AI-driven identity verification may introduce risks of automated errors, biased decision-making, or vulnerabilities if identity data are compromised.



AI and quantum computing

Integrating AI with quantum computing can enhance computational capacity, with quantum computing providing the processing power to support more advanced AI applications. This enables faster and more complex data analysis, scenario modelling and simulations, particularly for computationally intensive problems, and could support applications in finance. At the same time, the unprecedented speed and complexity of quantum-enhanced AI computations may outpace current validation methods, creating risks of inaccurate outputs or misinterpreted results.



AI and DLT

AI combined with DLT can enhance transparency, traceability, and operational efficiency in financial transactions. AI may help identify patterns in transaction data, while DLT can strengthen integrity and resilience. Looking forward, this combination could support AI-monitored cross-border settlements, decentralised finance infrastructures, and real-time monitoring of transactions, improving efficiency and trust. Nonetheless, integrating AI with immutable ledgers could propagate errors or misclassifications at scale, and automated DLT operations may require careful oversight to avoid unintended consequences.

Digital identity and PETs



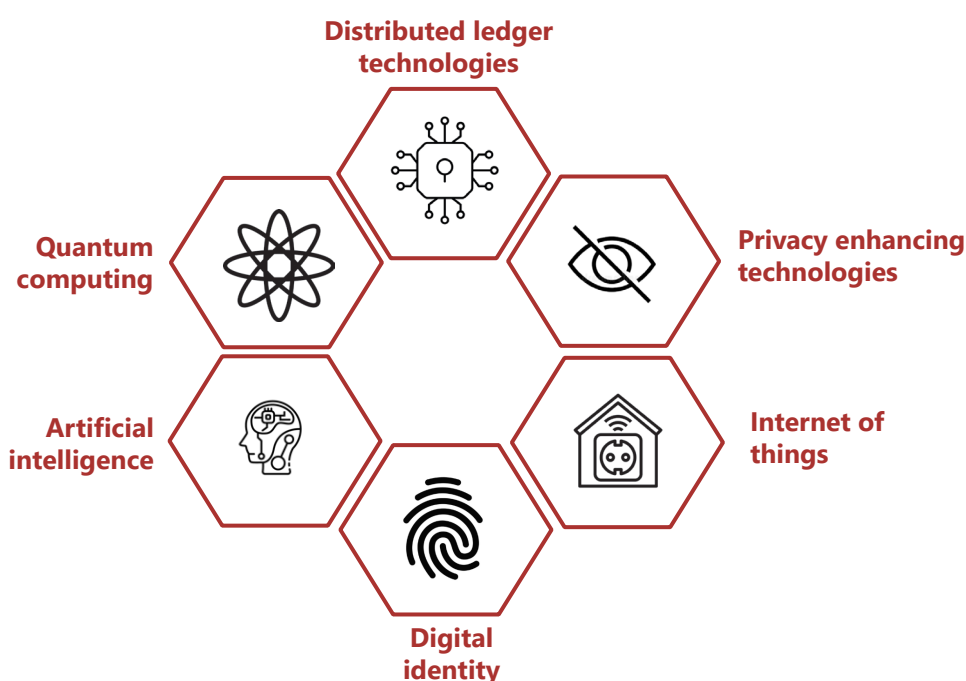
Integrating digital identity with PETs can enable secure identity verification while preserving privacy. This combination may support compliant cross-border data sharing and secure access to services. Future applications may include privacy-preserving credit scoring, secure sharing of customer data across institutions and interoperable digital identity networks supporting global financial interactions. However, combining PETs with digital identity may complicate verification workflows or slow transaction processing if privacy-preserving protocols are not optimally designed.

Internet of Things (IoT) and AI



Integrating IoT with AI can enhance real-time monitoring, predictive capabilities, and automated decision-making. This combination may improve insights across physical and financial systems. Future use cases could include parametric insurance triggered by environmental conditions, predictive supply chain financing, and real-time monitoring of physical assets supporting financial transactions. At the same time, the reliance on sensor-generated data combined with AI analytics may lead to inaccurate predictions or automated responses if IoT inputs are incomplete, delayed, or misinterpreted.

These technology combinations can reshape financial systems by enhancing transparency, efficiency, and resilience. Their integration may support innovation, contribute to stability, and strengthen trust in digital finance. As these technologies converge, attention to governance, cybersecurity, interoperability, and coordination will remain important to ensure that innovation is safe, inclusive, and aligned with the broader public interest.



Advancements following the G20 TechSprint

Across cohorts, participating teams have advanced significantly in maturity, adoption, and impact. Survey findings indicate that many solutions, including those in digital identity, automated compliance and sustainable finance, have moved from functional prototypes or minimum viable products to operational deployments in multiple jurisdictions. Several respondents reported that their solutions have scaled from local pilots to cross-border applications, with platforms now supporting both domestic and international users.

Participants reflected that the G20 TechSprint provided tangible value and opportunities for growth. Responses show that participation helped teams refine technology, gain expert feedback, and enhance visibility, while also accelerating development and fostering new partnerships. Respondents reported outcomes such as international recognition, collaboration with public authorities and multilateral organisations and solution expansion into new markets, underscoring the initiative's direct impact on innovation and adoption.

Participants also reported steady expansion in market reach and operational impact following the TechSprint. Solutions in cross-border payments, sustainable finance, and supervisory technology (suptech) were said to now serve wider institutional clients and central banking networks. Several respondents highlighted formalised partnerships with public authorities, multilateral institutions and private sector consortia, supporting pilots, advisory engagements and operational rollouts. Teams also cited technology upgrades, including integration of advanced AI/ML modules, enhanced data analytics, and improvements to blockchain architectures and privacy-enhancing features, ensuring solutions remain aligned with regulatory expectations and capable of addressing emerging operational challenges.

Survey participants further highlighted measurable regulatory engagement and adoption milestones. Some reported receiving sandbox approvals or operational licences in multiple jurisdictions, while others noted that their solutions had informed policy frameworks, supervisory practices, or played a catalytic role such as in nature-based solutions. Participants with solutions in sustainable finance and environmental monitoring observed growing demand, driven by investor interest in verifiable impact data and regulatory focus on ESG compliance. Collectively, participants' reflections illustrate how early-stage innovations evolved into policy-relevant solutions that generate tangible value for central banks, financial institutions and the wider financial system.



"Highlights from G20 TechSprint 2025, hosted under the South Africa G20 Presidency"

Public sector uptake of TechSprint innovations

Since its inception in 2020, the G20 TechSprint has not only showcased pioneering innovations but also served as a launchpad for public sector collaboration. Follow-up engagements indicate that several winning solutions have progressed from prototype development to active partnerships with public authorities, regulators and development finance institutions. These engagements illustrate TechSprint's catalytic role in turning experimental ideas into solutions that strengthen financial infrastructure, policy execution and sustainable finance.

These solutions have engaged with the public sector through formal partnerships, proof of concept pilots and advisory collaborations. Spanning digital currencies, financial inclusion, ESG data analytics and sustainable finance, they are now being adapted and integrated within policy and operational frameworks.



Financial Network Analytics

G20 TechSprint 2020-Saudi Arabia

Financial Network Analytics (FNA) worked with central banks, regulators, development banks and multilateral institutions to develop supervisory technology tools that combine AI, network analytics and ML for real-time supervisory insight and cross-border monitoring. Its platform supports simulation and monitoring of financial systems using digital twins and AI analytics, allowing assessment of systemic risk, liquidity, and operational dynamics across institutions. Future developments are expected to include shared supervisory utilities, standardised infrastructure, and AI or large language model integration to enable interoperable and modular supotech applications across regional and global levels.



REGnosys-ISDA

G20 TechSprint 2020-Saudi Arabia

REGnosys, in partnership with International Swaps and Derivatives Association (ISDA), engaged central banks, regulators, and multilateral institutions through proof of concept pilots and advisory projects on machine-executable regulatory rules under the ISDA Digital Regulatory Reporting (DRR) programme, improving the reliability and consistency of regulatory reporting. Its Rosetta platform allows regulatory rules to be expressed and executed as code, enabling real-time validation and bridging innovation with practical supervision. Partnerships included integration with the The Depository Trust & Clearing Corporation (DTCC) Global Trade Repository testing environment. Over the short to long term, the company aims to expand adoption across regulatory domains, extend integration into securities financing, ESG and prudential reporting and support the development of globally executable reporting standards.



IDEMIA

G20 TechSprint 2022-Indonesia

IDEMIA collaborated with central banks and multilateral institutions to pilot digital identity and authentication systems for secure financial transactions and digital forms of cash trials. The company provides biometric and digital identity verification solutions that strengthen regulatory compliance and prevent fraud, seamlessly operating within existing public and private infrastructure. Looking ahead, IDEMIA plans to expand into additional markets, integrate AI and blockchain capabilities, and extend its technology to digital government services, ensuring alignment with evolving regulatory standards.



G20 TechSprint 2023-India

KNOVA collaborated with central banks, regulators, ministries of finance and multilateral institutions to pilot privacy-preserving analytics that enhance cross-border monitoring, operational efficiency and policy diagnostics. Its platform aggregates and analyzes financial data without exposing sensitive information, enabling more effective supervisory functions and systemic risk assessment while remaining adaptable to diverse regulatory contexts. Future developments include broader market expansion, integration with AI and DLT and adoption across additional sectors to support standardised data analysis and cross-institutional monitoring.



G20 TechSprint 2024-Brazil

Ekonavi is expanding access to agricultural finance and markets by enabling farmers to be both data producers and consumers. Its platform uses blockchain, AI, and decentralised tools to create efficient economic models for smallholders. Through the Central Bank of Brazil's Lift Lab programme, Ekonavi is working with the central bank to produce government-grade evidence of sustainable farming outcomes, which can be reused across financing programs and ESG reporting. Data are captured once from farmers and converted into auditable digital claims and seasonal impact units. Over the next five to ten years, Ekonavi plans to scale across Brazil, grow adoption of its Auth System and leverage partnerships and regulatory support for wider market integration.



G20 TechSprint 2024-Brazil

Kaleidofin partnered with a public financial institution to enhance credit assessment for micro entrepreneurs and SMEs through alternative data analytics, enabling faster processing and more accurate risk evaluation. Its platform combines digital financial tools with AI-driven credit scoring to assess the creditworthiness of underserved customers, aggregating multiple data sources to support decision-making and reporting for public financial institutions. Looking ahead, Kaleidofin aims to scale into additional markets, integrate with open banking systems and gain broader recognition under regulatory frameworks, expanding its application across diverse financial service contexts.

Beyond these collaborations, G20 TechSprint participants have engaged with the central banking community and the BIS Innovation Hub. For example, Secretarium, a winner of the 2023 G20 TechSprint, contributed to the BIS Innovation Hub's data analytics challenge, demonstrating the practical application of its solution in a central banking context.

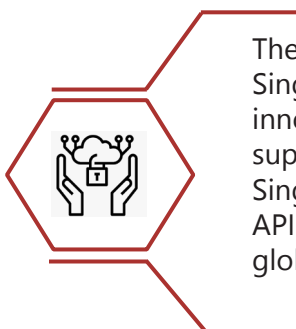


Detailed overview of the G20 TechSprint

G20 TechSprint 2020: Saudi Arabia G20 Presidency



Regulatory compliance (regtech) and supervision (suptech)



The G20 TechSprint 2020, a joint initiative of the BIS Innovation Hub through its Singapore Centre and the Saudi Arabia G20 Presidency, set out to explore how innovative technologies could strengthen regulatory compliance and financial supervision. Implemented with the support of the Monetary Authority of Singapore, the Saudi Arabian Monetary Authority, the Financial Stability Board, API Exchange, and the Regtech for Regulators Accelerator, the competition invited global innovators to address three critical challenges.³

1 Regulatory reporting

Focused on improving the efficiency and consistency of regulatory reporting through digital solutions that enable machine-readable and executable regulations. These codified rules would automate data extraction and reporting, lower compliance costs and enhance cross-border interoperability using identifiers such as Legal Entity Identifier, Unique Transaction Identifier and Unique Product Identifier.

Winning solution: ISDA-REGnosys

Consistent regulatory reporting via the common domain model

→ *Delivered a harmonised, machine-executable data model enhancing automation and consistency.*

2 Monitoring and surveillance

Explored how AI, ML, and data analytics could improve Anti-Money Laundering and Countering the Financing of Terrorism (AML/CFT) monitoring, especially for crypto-asset activities. Solutions aimed at enhancing detection accuracy, timeliness, and oversight at fiat-to-crypto gateways, strengthening institutional resilience against financial crime.

Winning solution: Tookitaki

Crypto-currency AML Typology Repository Management

→ *Created an AI-driven typology repository improving AML/CFT risk detection in crypto transactions.*

3 Dynamic information sharing

Aimed to develop platforms that enable real-time, cross-border information sharing among supervisors during crises like Covid-19. Solutions needed to aggregate structured and unstructured data to support timely coordination and decision-making.

Winning solution: Financial Network Analytics

Platform for Dynamic Information Sharing and Real-Time Analytics

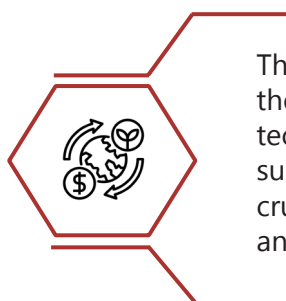
→ *Built an analytics platform for dynamic regulatory data visualisation and exchange.*

³ Details of the G20 TechSprint 2020, are available on the BIS [website](#). Submissions were evaluated by judges with diverse expertise, whose assessments informed the selection of the winning solutions.



G20 TechSprint 2021: Italy G20 Presidency

Green and sustainable finance



The second edition of the G20 TechSprint, hosted by the BIS Innovation Hub and the Bank of Italy under the G20 Italian Presidency, aimed to identify innovative technological solutions that addressed operational challenges in green and sustainable finance. As the green finance sector expanded rapidly, it played a crucial role in channelling capital towards environmentally responsible projects and advancing global sustainable development goals.⁴

1 Data collection, verification and sharing

Focused on improving the availability, comparability, and credibility of environmental and climate data. Participants were asked to design digital tools for collecting and verifying sustainability-related data from multiple sources to support accurate disclosures and green finance decision-making.

Winning solution: Greenomy

Platform for screening and reporting green financing projects

→ *Developed an automated platform that streamlines taxonomy-aligned sustainability reporting and enhances data transparency.*

2 Analysis and assessment of transition and physical climate-related risks

Aimed at leveraging technologies such as AI and big data analytics to evaluate climate-related financial risks. Solutions were expected to model transition and physical risks across sectors and geographies, helping institutions assess exposures and strengthen climate resilience.

Winning solution: CRIF and R.E.D

Climate risk analytics suite

→ *Delivered a comprehensive risk analytics tool to assess the financial impacts of climate-related risks and support strategic decision-making.*

3 Better connecting projects and investors

Sought to bridge the financing gap for sustainable projects by connecting promoters – such as SMEs, start-ups, and local authorities – with investors. Participants were encouraged to develop digital platforms that enable secure, transparent fundraising, performance tracking, and scalability across markets while ensuring data privacy.

Winning solution: Home Infrastructure Technology

Add to my mortgage

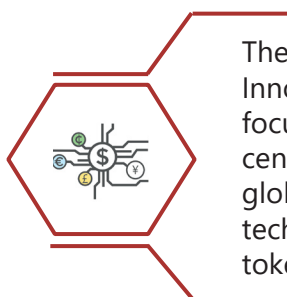
→ *Created a financing solution that allows homeowners to fund green renovations connecting financial institutions with sustainable investment opportunities.*

⁴ Details of the G20 TechSprint 2021, are available on the BIS [website](#). Submissions were evaluated by judges with diverse expertise, whose assessments informed the selection of the winning solutions.

G20 TechSprint 2022: Indonesia G20 Presidency



Central bank digital currencies (CBDCs)



The third edition of the G20 TechSprint, jointly organised by the BIS Innovation Hub and Bank Indonesia under the G20 Indonesia Presidency, focused on advancing the understanding and design of tokenised wholesale central bank money and digital forms of cash. The competition invited global innovators to propose solutions that address key operational and technological challenges related to issuing, distributing, and integrating tokenised reserves and digital cash within existing financial ecosystems.⁵

1 *Effective and robust means to issue, distribute and transfer central bank money*

Explored how technology can support secure, efficient, and scalable digital cash issuance, distribution and transfer mechanisms. Participants were asked to optimise these processes while introducing new functionalities – such as programmability and automation – that could enhance service innovation and user experience.

Winning solution: Dragonfly Fintech

End-to-end CBDC solution

→ *Developed a blockchain-based platform enabling efficient issuance, distribution, and real-time transfer of both wholesale and retail CBDCs with programmable features.*

2 *Enabling financial inclusion*

Focused on how digital forms of cash can promote broader access to financial services for unbanked and underbanked populations. Participants were encouraged to develop inclusive solutions, such as offline transaction capabilities, lightweight wallets, and interoperable designs, to ensure accessibility across devices and connectivity environments.

Winning solution: Bitt-IDEMIA

Secure Offline CBDC Payment Solution

→ *Delivered a secure, offline payment system that enables users without reliable internet access to transact safely using CBDCs, promoting financial inclusion.*

3 *Dynamic information sharing*

Aimed at strengthening domestic and cross-border connectivity between payment systems and financial infrastructures. Solutions were expected to create interoperable frameworks that facilitate seamless interaction among multiple tokenised central bank money systems while maintaining efficiency and security.

Winning solution: Partior

Project naucratis: Enabling connectivity and interoperability for mCBDC

→ *Built an interoperable multi-CBDC platform that enables frictionless cross-border transactions and real-time settlement across jurisdictions.*

⁵ Details of the G20 TechSprint 2022, are available on the BIS [website](#). Submissions were reviewed by judges with diverse expertise, whose evaluations informed the selection of winners.



G20 TechSprint 2023: India G20 Presidency

Transforming cross-border payments



The fourth edition of the G20 TechSprint, jointly organised by the BIS Innovation Hub through its Hong Kong Centre and the Reserve Bank of India under the India G20 Presidency, focused on using technology to enhance the efficiency, transparency, and inclusivity of cross-border payments. Building on prior editions that explored regtech, green finance and tokenised wholesale central bank money and digital forms of cash, the 2023 TechSprint invited global innovators to address three challenges identified by the BIS Innovation Hub and the Reserve Bank of India.⁶

1 Reducing illicit finance risk

Sought technology-driven solutions to strengthen anti-money laundering AML/CFT and sanctions compliance in cross-border payments. Participants were encouraged to enhance transaction transparency, risk detection and data-sharing mechanisms while ensuring privacy and security.

Winning solution: Secretarium Ltd

Privacy-preserving AML/CFT compliance

→ *Developed a secure, confidential computing platform that enables financial institutions to share risk data and detect illicit activities collaboratively without compromising privacy.*

2 Foreign exchange and liquidity management

Focused on improving settlement efficiency and liquidity in cross-border payments, especially for emerging market and developing economy (EMDE) currencies. Participants were tasked with developing innovative mechanisms to reduce settlement risk and enable faster, cost-effective currency transactions.

Winning solution: Millicent Labs

FX and liquidity management solution for EMDE currencies

→ *Created a blockchain-based system for real-time FX settlement and liquidity optimisation across EMDE currencies, reducing operational friction and cost.*

3 Multilateral cross-border tokenised wholesale central bank money

Aimed at developing interoperable multilateral tokenised wholesale central bank money infrastructures to facilitate seamless cross-border transactions among central banks. Participants were encouraged to propose frameworks supporting secure connectivity, governance, and real-time settlement between different tokenised reserve systems.

Winning solution: Knox Networks

Multi-CBDC interoperability platform

→ *Built an interoperable CBDC tokenised reserve platform enabling instant and secure cross-border payments between jurisdictions through shared standards and governance mechanisms.*

⁶ Key outcomes and findings from the G20 TechSprint 2023 are documented in [BIS Innovation Hub, G20 TechSprint 2023: transforming cross-border payments, October 2024](#). Submissions were evaluated by judges with diverse expertise, whose assessments informed the selection of the winning solutions.



G20 TechSprint 2024: Brazil G20 Presidency

Technology for the planet



The fifth edition of the G20 TechSprint, jointly organised by the BIS Innovation Hub through its Hong Kong Centre and the Central Bank of Brazil under the Brazil G20 Presidency, focused on advancing technology solutions that promote sustainable finance and support the achievement of the United Nations' SDGs. The 2024 G20 TechSprint built on the COP28 TechSprint, which was jointly organised by the BIS Innovation Hub and the Central Bank of the United Arab Emirates. Insights from the COP28 TechSprint and roundtable discussions informed this edition, carrying forward the sustainability focus.⁷

1 Stimulating the widespread adoption and scaling of nature-based solutions

Focused on identifying technology-based approaches that incentivise investment in biodiversity conservation and ecological restoration. Participants highlighted systems that enable inclusive, scalable financing for nature-based solutions while ensuring transparency, traceability and impact measurement.

Winning solution: Ekonavi

Tokenised nature-based investment platform

→ *Tokenised verified ecological restoration data into investable assets, aligning with international ESG standards to attract investments in biodiversity preservation.*

2 Enhancing ESG data reporting

Aimed at improving the quality, reliability, and granularity ESG data to support due diligence, disclosure and management of ESG-related risks and opportunities. Solutions enable SMEs to access practical and cost-efficient ESG reporting tools.

Winning solution: Tese

ESG data and reporting dashboard for SMEs

→ *Delivered a secure, offline payment system that enables users without reliable internet access to transact safely using CBDCs, promoting financial inclusion.*

3 Accelerating progress towards the SDGs

Sought open-source technology that supports financial decisions and capital allocation aligned with SDG priorities such as biodiversity, clean energy, financial inclusion and poverty alleviation. Solutions help enhance credit access and sustainability-linked financing through data-driven insights.

Winning solution: Kaleidofin

Data-driven credit health and SDG financing platform

→ *Offered a predictive credit assessment tool that enables affordable financing for small businesses and risk analytics.*

⁷ Key outcomes and findings from the G20 TechSprint 2024 are documented in [BIS Innovation Hub, G20 TechSprint 2024: Technology for the planet, December 2024](#). Further, insights from the roundtable discussions are available in [BIS Innovation Hub, Innovative technologies for sustainable finance, 2024](#). Submissions were evaluated by judges with diverse expertise, whose assessments informed the selection of the winning solutions.

G20 TechSprint 2025: South Africa G20 Presidency



Trust and integrity in scalable and open finance



The sixth edition of the G20 TechSprint, jointly organised by the BIS Innovation Hub through its Hong Kong Centre and the South African Reserve Bank (SARB) under the South Africa G20 Presidency, focuses on advancing technological solutions that enhance trust and integrity in the financial sector. The TechSprint encourages innovative approaches to verifiable digital identity, credit data portability, and fraud and cyber risk mitigation.⁸

1 Digital identity solutions

Aimed at establishing trust among financial institutions through privacy-preserving, verifiable digital identity technologies. Participants are invited to develop solutions that enable secure, trusted identity verification while protecting user privacy and complying with data regulations.

Winning solution: Ownapay SA (Proprietary) Ltd

Flow platform

→ Enables secure, privacy-preserving payments across devices using blockchain identity, zero-knowledge proofs, and voice authentication.

2 Credit data portability

Focused on improving small and medium-sized enterprises' access to finance through secure, consumer-consented credit data exchange. Solutions should facilitate seamless sharing of credit information across borders and institutions while ensuring confidentiality and compliance.

Winning solution: Silence Laboratories

Privacy-preserving SME credit scoring

→ Enables privacy-preserving SME credit scoring using multi-party computation and cryptographic computing, allowing secure, compliant cross-border risk assessment.

3 Solutions to mitigate fraud and cyber risks

Encourages the development of technologies that reduce fraud and cyber risks, supporting the adoption of fast payment systems globally. Solutions should promote financial inclusion, enhance system resilience and foster economic growth through safer and more reliable payment infrastructures.

Winning solution: FNA & Proto

AI-driven fraud detection and response

→ Combat fraud in real time by combining fund tracing and recovery with inclusive, AI-powered scam reporting.

⁸ Key outcomes and findings from the G20 TechSprint 2025 are documented in [BIS Innovation Hub, G20 TechSprint 2025: Trust and integrity in scalable and open finance](#). Submissions were evaluated by judges with diverse expertise, whose assessments informed the selection of the winning solutions.

Judges of the G20 TechSprints (2020–2025)

G20 TechSprint 2020: Regulatory compliance (regtech) and supervision (suptech)

Adrienne A Harris, Professor of the Practice, University of Michigan

Arunma Oteh, Academic Scholar, University of Oxford

Caroline Malcolm, Head of Global Blockchain Policy Centre Organisation for Economic Co-operation and Development (OECD)

Chea Serey, Director General, National Bank of Cambodia

Douglas Arner, Kerry Holdings Professor in Law and Director, Asian Institute of International Financial Law University of Hong Kong

Jo Ann Barefoot, Co-founder and CEO, Alliance for Innovative Regulation

Lesly Goh, Senior Technology Advisor, World Bank

Louis de Koker, Professor, La Trobe Law School, La Trobe University

Michael Gardner, CEO, AqaiX

Sheila M'Mbijewe, Deputy Governor, Central Bank of Kenya

Simone di Castri, DirectorRegTech for Regulators Accelerator

Sopnendu Mohanty, Chief FinTech Officer, Monetary Authority of Singapore

Umar Farooq, Head of Digital Wholesale Payments and Blockchain, JPMorgan

Ziad Alyousef, Deputy Governor for Development and Technology, Saudi Arabian Monetary Authority

G20 TechSprint 2021: Green and sustainable finance

Fabio Natalucci, Deputy Director of the Monetary and Capital Markets Department at IMF

Marianne Haahr, Executive Director at Green Digital Finance Alliance

Massamba Thioye, Manager, Sustainable Development Mechanism Program at the United Nations Framework Convention on Climate Change, Co-Chair at Climate Chain Coalition, and Co-Chair of ISO Working Group 10

Thomas Puschmann, Founder and Director of the Swiss Fintech Innovation Lab and Founder of the Global Center for Sustainable Digital Finance, a joint initiative of Stanford University and the University of Zurich

Richard Teichmeister, Head of Funding – New Products & Structured Transactions –European Investment Bank

Anthony Nyong, Africa Regional Director, Global Centre on Adaption and former Director, Climate Change and Green Growth, African Development Bank

Sharon Donnery, Deputy Governor, Central Bank of Ireland

Vijaya Ramachandran, Director for Energy and Development at The Breakthrough Institute

Paolo Giudici, Professor of Statistics and Financial Data Science, University of Pavia

Elizabeth Aceituno, Sustainable Finance Specialist at World Wildlife Fund

Christine Chow, Executive Director, Global Head of Strategic Governance and ESG Integration at IHS Markit

Vivek Pathak, Director and Global Head for Climate Business at International Finance Corporation

Barbara Buchner, Global Managing Director and Executive Director at Climate Policy Initiative

Sabine Mauderer, Member of the Executive Board of the Deutsche Bundesbank

David Brand, CEO, New Forests

Eric Usher, Head of UN Environment Programme Finance Initiative

Gema Sacristan, Chief Investment Officer at IDB Invest

Ronie Mak, Managing Director, RS Group Asia

Eric Parrado Herrera, Chief Economist and General Manager of the Research Department at Inter-American Development Bank

Gerhard Mulder, CEO and Co-Founder at Climate Risk Services

Simone Borghesi, Director Florence School of Regulation Climate, European University Institute

G20 TechSprint 2022: Central bank digital currencies

Prof. Duan Jin-Chuan, Executive Director, Asian Institute of Digital Finance

Ms. Katie Fortune, Senior Manager, CBDC Unit, Bank of England

Ms. Lyle Horsley, Divisional Head, Fintech Unit, South African Reserve Bank

Ms. Anneke Kosse, Senior Economist, Committee on Payments and Market Infrastructure

Mr. Sopnendu Mohanty, Chief FinTech Officer, Monetary Authority of Singapore

Mr. Mu Changchun, Head of Digital Currency Institute, People's Bank of China

Ms. Iota Nassr, Policy Analyst, Directorate for Financial and Enterprise Affairs, OECD

Mr. Harish Natarajan, Lead Financial Sector Specialist, Finance, Competitiveness & Innovation, World Bank

Ms. Sandra Ro, CEO, Global Blockchain Business Council

Ms. Pia Roman Tayag, Director of the Office of the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development (UNSGSA)

Ms. Katie Ann Wilson, Managing Director, Digital Monetary Institute, OMFIF

G20 TechSprint 2023: Transforming cross-border payments

Dilip Asbe, Managing Director and CEO, National Payments Corporations of India (NPCI)

Bryan Zheng Zhang, Co-founder and Executive Director, Cambridge Centre for Alternative Finance

Yvonne Tsui, Senior Fintech Director, Hong Kong Monetary Authority

Andrew McCormack, Chief Operating Officer, Al Etihad Payments

Andre Reslow, Senior Economist, International Monetary Fund (IMF)

Harish Nataraja, Senior Financial Sector Specialist, World Bank

Violaine Cler, Executive Secretary, Financial Action Task Force

Peerapong Thonnagith, Deputy Director, Bank of Thailand

G20 TechSprint 2024: Technology for the planet

Dr Samuel Tiriongo, Director, Research and Policy, Kenya Bankers Association

Dr Ben Caldecott, Director, Oxford Sustainable Finance Group, and the Lombard Odier Associate Professor, University of Oxford; Member, UK Climate Change Committee

Brad Punu, Deputy Chief Financial Officer, Green Climate Fund

Maria Netto, Chief Executive Officer, Institute for Climate and Society (iCS)

Morgan Doyle, General Manager, Country Department Southern Cone, Inter-American Development Bank

Alvin Li, Head of Supervisory Technology Division, Banking Supervision Department, Hong Kong Monetary Authority (HKMA)

Marianne Haahr, Nature-related Finance Director, Global Canopy; Lead, Support on Specific Guidance, Taskforce on Nature-related Financial Disclosures

Dr Jakob Thomä, Co-Founder and CEO, Theia Finance Labs; Research Director, Inevitable Policy Response

Eva Szalkai Csaky, Chief Executive Officer, Global Inclusive Economy Society

Patrick Slovik, Director, Financial System Surveillance and Policy, Central Bank of the United Arab Emirates

Irene Heemskerk, Head of the Climate Change Centre, European Central Bank

Sue Lloyd, Vice-Chair, International Sustainability Standards Board

Xiaochen Zhang, Chief Responsible AI Officer and Executive Director, AI 2030; CEO, FinTech4Good

Caitlin Nash, National Steering Committee Member, South Africa Startup Act Movement

G20 TechSprint 2025: Trust and integrity in scalable and open finance

Dr Joseph Atick, Executive Chairman, ID4Africa

Mr Raymond Chan, Executive Director (Enforcement and AML), Hong Kong Monetary Authority

Ms Mary Beth Christie, Independent non-Executive Director, Open Banking UK

Ms Violaine Clerc, Executive Secretary, Financial Action Task Force

Mr Jeremy Gray, Technical Director, Cenfri

Ms Gail Hodges, Executive Director, OpenID Foundation

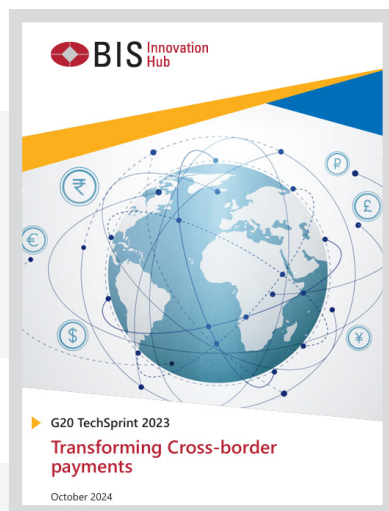
Mr Guilherme Themes Miguel Jose, Head of Division at the Financial System Regulation Department, Central Bank of Brazil

Mr Stephen Linnell, Chief Executive Officer, PayInc

Mr Mark Munne, Head of Technology, Nexus Global Payments

Mr Kwame Oppong, Former Head FinTech and Innovation, Bank of Ghana

Mr P Vasudevan, Executive Director, Reserve Bank of India



G20 TechSprint 2023:
Transforming cross-border payments

G20 TechSprint 2024:
Technology for the planet



G20 TechSprint 2025:
Trust and integrity in scalable and open finance





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