

CGI: Leading the Blockchain Revolution

Blockchain stands out as an innovation driver whose time is now, especially as the federal government looks to drive economic growth through emerging technologies. CGI understands the power of blockchain in reimagining the way government delivers critical services, prevents waste, fraud and abuse, fosters collaboration and spurs economic development.

A cryptographically secure distributed ledger technology, blockchain enables a new age of data storage and sharing. Blockchain enables data to be transparently accessed by many participants, storing that data in an immutable, irrefutable way. Applied widely within the financial services sector today, blockchain offers significant potential for innovation across a broad spectrum of government use cases.



At CGI, we take a practical, mission-driven, technology-neutral approach to blockchain. We recognize that introducing new concepts such as blockchain signifies not just a technology evolution but also a redesign of traditional business models to better enable trusted data sharing.

CGI has successfully blended our domain expertise and blockchain knowledge for proofs of concepts (POC) for a variety of public and private sector clients.



CGI BLOCKCHAIN THOUGHT LEADERSHIP

CGI experts frequently speak on blockchain at industry conferences such as:

- Bankers Association for Finance and Trade (BAFT) Annual North American Conference
- TXF Americas Conference
- BAFT Canada Trade Finance Workshop
- BAFT Annual International Trade Conference
- Swift International Banking Operations Seminar (SIBOS)
- TXF Trade, Fintech and Treasurer's Conference

CGI also participates in industry blockchain working groups:

- ACT-IAC Blockchain Work Group
- Association of Government Accountants Blockchain Working Group
- BAFT Innovations Committee - Blockchain in Trade
- Euro Banking Association sub-committee for Blockchain in Trade
- Government Blockchain

CGI'S BLOCKCHAIN SOLUTIONS IN ACTION

Supporting streamlined processes for digital trading

Trade finance—whether conducted on a domestic or international basis—can be a paper-intensive, costly and risk-laden position involving not only importers and exporters but also their banks, insurers and regulators. Together, CGI, the Bank of Montreal, Royal Bank of Canada, and Mitsubishi UFJ Financial Group completed a POC enabling seamless interoperability between CGI's Trade360® bank trade finance platform and Skuchain Brackets®, a distributed ledger platform for smart contracts. For the first time, a trade finance platform and a blockchain-based platform were integrated to demonstrate how banks will be able to provide trade finance services digitally to their customers conducting business on blockchain B2B platforms.

Enabling a government/bank consortium to address fraud

Banks across Singapore were challenged by a proliferation of fraudulent invoices and duplicate financing. Working with the Singapore government and a consortium of banks, CGI used Ripple to address invoice fraud associated with companies claiming to engage in the shipping business. Under a smart contract blockchain-enabled process, invoices were shared on a permissioned blockchain—agreed upon, stored and shared in near real-time for transparency to the blockchain participants. The solution enabled the government to automatically validate the authenticity of invoices by checking their records for receipt of goods, freeing the source bank from taking on the risk of fraud. The end payment becomes a “block” in the blockchain, connecting the government, shipping company and banks through a distributed single source of truth.

Increasing confidence in document immutability

CGI has partnered with industry and government to conduct POCs to increase confidence that a document has not been fraudulently altered. We worked with life science industry clients to uncover ways to use blockchain to track changes to clinical trial results. Given the size of clinical trial documents, we used hash to capture document metadata within the blockchain: a cryptographic representation of each document wherein changes were tracked, including when data changed, who changed it and what changes were made. A similar initiative with a state Department of Motor Vehicles used MultiChain to store title data, enabling a future state where vehicle title information can be shared among states to aid in identifying fraud.

Facilitating faster, more secure person-to-person money transfers

Person-to-person financial transactions can serve as a rapid, inexpensive means to transfer money. A leading financial services provider looked to CGI to increase security around such transactions between payer and payee banks via blockchain, working with existing bank infrastructure. We applied a hybrid model wherein some data is open and public (such as time of transaction) while other data is closed and available only to financial institutions (such as who sent and who received the funds). The blockchain-enabled process allows real-time payments of any value, across currencies, to anyone, at any time, from anywhere in the world, with real-time insight into liquidity positions.

ABOUT CGI

Founded in 1976, CGI is one of the world's largest IT and business consulting services providers. We help clients achieve their goals, including becoming customer-centric digital organizations, through high-end IT and business consulting, systems integration and outsourcing services combined with a unique client proximity model and global center of excellence network.

For more information about CGI, visit www.cgi.com

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