



CGI'S TRADE INNOVATION LAB: BRINGING BLOCKCHAIN TO TRADE FINANCE

Blockchain technology's potential to transform trade finance is the focus of a new Trade Innovation Lab launched by IT and business process services leader CGI. Kitt Carswell, CGI's vice president, senior offering manager, talks to Helen Castell about why it's needed, what CGI is already doing in the distributed ledger or shared database space and some of the challenges this new technology looks set to unleash.



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Trade finance has been flagged as an area where blockchain could have multiple and far-reaching applications. The technology – which also underpins bitcoin – allows data to be agreed, stored and updated in near real time on a cryptographically secured distributed ledger and accessed transparently by numerous authorised participants.

For traditional trade finance – which tends to involve long paper trails and a relatively slow verification and settlement process – blockchain could allow for the development of 'smart' or digitised contracts and almost instantaneous payments, as well as helping facilitate the more accurate tracking of goods' movement and condition. The visibility and automation offered by the technology could therefore create huge savings for the industry, both in terms of time and money, and help mitigate risk.

For this reason, CGI's Trade Innovation Lab was born. "When

we look beyond the horizon, we see a lot of promise in blockchain. We think it can bring many benefits both to trade finance and to trade in general. CGI wants to be part of making that a reality," says Carswell.

"We don't want to be three to five years down the road and have this wave of disruption crash on our heads. Instead, we want to get deeply involved now as an active participant helping to shape and channel that wave to the benefit of our clients and partners."

The Trade Innovation Lab provides a place where CGI can collaborate with banks, fintechs and corporates to explore and prove out blockchain or distributed ledger solutions and to provide a pathway to take them from an experimental stage through pilots and then finally full commercial roll-out, he adds.

"Our objective is to accelerate the transition from exploration to commercialised solutions."

The fact that most blockchain

solutions currently being investigated are cloud-based or hosted makes the technology a natural fit for CGI's existing offerings. These include CGI's Trade360 platform, which the company offers as a Software as a Service (SaaS) solution.

Fintechs that are developing blockchain and distributed ledger solutions are going to need to develop truly commercial trade applications, Carswell argues. "CGI brings a wealth of expertise in the development and operation of commercial financial services software, making us an ideal partner to facilitate that transition."

CGI is open to work with "anyone who is interested in collaborating, exploring and commercialising innovative solutions in the trade space," he says.

We would like to see a commercial solution emerging from the Trade Innovation Lab in 12-24 months.

"Almost all of these things involve use cases where you

need to attract enough interest from a combination of tech companies, bank consortiums or individual banks to move forward, and we're open to multiple streams of doing that."

THE STORY SO FAR

CGI's work with blockchain applications for trade finance started in early 2015, although it has been actively exploring the technology in the wider payment space a year before that.

Its first achievement was to design, develop and operate what has been billed as the first ever trade finance blockchain proof of concept, on behalf of a consortium of banks and a government agency in Singapore.

"That use case was to prevent duplicate financing of export invoices by different banks and to allow for third parties like Customs House or shipping companies to validate that an invoice is tied to an actual trade transaction," Carswell says.

In the Trade Innovation Lab, CGI will leverage its Trade360 platform, which encompasses 50 trade finance products including 20 open account products in receivables, payables and collateral management. It will also leverage its Intelligent Gateway financial messaging hub to manage inter-operability between banks' legacy systems and the underlying blockchain network solutions. It is currently supporting the Ripple payment channel for CGI payments platforms and will be expanded to provide inter-operability between legacy trade platforms, new trade applications and the underlying network solutions."

"Trade360, which has virtually every kind of product you might want to experiment with, and the Intelligent Gateway give the lab a unique advantage to either build

new applications, extend or re-use the existing legacy capabilities in Trade360 to interact with the blockchain network solution," Carswell says. "It provides a testing and development environment to build new things. You have all the pieces in one place to enable you to do it in a pretty straightforward way, plus the 250+ person dedicated CGI trade team."

The company has also been active in various industry groups, including sub-committees for blockchain on trade finance for the Bankers Association for Finance and Trade (BAFT) and for the Euro Banking Association (EBA), which published a report in May that found crypto technologies like blockchain could provide big cost savings to banks in trade finance, payments and cash management.

INTERNET OF THINGS

While potential applications for blockchain in trade finance are being identified all the time, readily available ways to overlay the real-time tracking made possible by the Internet of Things onto supply chain finance look to be a big new frontier for the technology.

"When you combine information feeds coming in from the Internet of Things with the financial supply chain, you really have a rich set of data where everybody can see the same status in near real-time," Carswell notes. This could be used to trigger anything from the issue of bills of lading to the transfer of assets or release of goods, lending the technology "a huge amount of power."

For example, if perishable food products are being transported in a refrigerated container and a sensor inside indicates via the Internet of Things that the temperature has risen to a certain point, "you know the refrigerator needs immediate attention if possible or that most likely the food products

are going to be compromised when they arrive," Carswell says. "You can start addressing the issue as soon as you know that."

THE CHALLENGES

Although blockchain offers huge promise for trade finance it is also "at that point in its maturity where there is no shortage of challenges," Carswell acknowledges.

For starters, the industry will have to respond to potentially big and fast-moving regulatory changes that are actually enabled by the transparency provided by blockchain.

A corporate-to-corporate financial supply chain solution on blockchain, for example, would mean that the "the truth of what's happening to that trade is now visible to various authorised parties" – including regulators.

"So now suddenly the regulators and auditors have a real-time window into what's going on. That capability will certainly help them get their creative juices to come up with some regulatory types of compliance that they'll want," Carswell says.

At the same time however, the ability to see everything that is happening should give regulators an extra degree of comfort "because it's exposed and open – everything is so transparent."

Issues around privacy, who is allowed to see what data and who is empowered to determine whether a transaction is valid or not, will present other challenges, while issues of scalability and performance will also need to be addressed.

"It will take some time, effort and of course money to resolve those problems" but Carswell is confident that efforts already underway in this direction will yield results. ■