Embracing a new era in digital trade finance

The age of digitalisation and automation is rapidly making its mark on trade. However, banks still have some way to go before they are positioned to make the most of technological advancements.

CGI believes that being digitally connected to customers is essential, but digitisation must go beyond that to exploit the benefits of intelligent data capture, robotics, artificial intelligence, predictive analytics and a host of other emerging technologies in order to radically redesign banks’ internal processes.

Increasingly, corporate buyers and sellers are using the latest digital platforms and technologies to generate efficiencies; speed up their trade processes; eliminate the need for manual paperwork and enhance collaboration in a digitised environment with their trading counterparties, including their banks.

The big question will be how can corporations and banks take full advantage of the digital data that will be provided by these technologies, especially ones which are sophisticated and facilitated via advancement in intelligent process automation (IPA).

“Trade finance is going digital in two main ways. The first is via corporate-to-corporate collaborative platforms enabling buyers and sellers to trade digitally,” says Kirt Carswell, vice-president, senior offering manager at CGI. Here he identifies Bolero and essDocs as being established examples of corporate-to-corporate platforms, with distributed ledger solutions now representing an emerging alternative corporate-to-corporate collaboration platform. “By plugging into these new digital platforms, banks will take an important step forward by establishing digital input and outputs to their internal processes.”

However, today, even with significant automation, banks’ internal trade finance processes still require much operational effort and deep domain expertise.

“The second way that trade finance is going digital,” Carswell notes, “is that while trade finance banks’ processes are still manually-intensive, human intervention can be significantly reduced or eliminated by employing the right intelligent, digital technologies.”

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Rory Kaplan, CGI

He explains that, for example, intelligent data capture, which is facilitated via the application of natural language processing and machine learning, may convert standard documents into digital data and enable robotics to perform repeatable tasks. In a like manner, artificial intelligence may be leveraged to drive straight-through processing or to assist a ‘smart’ human worker. In fact, automating tasks and making “smart” workers highly productive improves the quality and speed of service as well as dramatically reducing costs for trade finance banks.

“The greatest benefits will be achieved by the combination of digital interoperability between the bank and external parties, plus the ‘intelligent’ automation of its internal processes,” says Carswell.

Intelligent process automation (IPA) is a whole new era of emerging technologies which promise the ability to radically redesign and automate today’s workflows and processes. The expected outcome would be a near elimination of manual efforts to extract data from documents. This will be accomplished via automated feeds for compliance/anti-money laundering (AML), greater straight-through transaction processing and by enabling ‘smart’ workers to become highly productive.

This evolution is not without some significant challenges. Some of these technologies have been successfully applied in other domains, yielding dramatic cost savings. However, trade finance will be more difficult and the technologies may need to mature further to fully support a robust set of requirements. It will take time for mass adoption and to fully realise envisioned outcomes.

“The place to start,” says Carswell, “is developing a broad vision of the end-state that will provide the context for a step-by-step evolution, thereby allowing banks to capture the benefits that are possible to be obtained in the near term. This requires an understanding of the current processes, its pain points, and the capabilities of the new technologies in order to successfully position and launch a strategic initiative.

These new technologies include:

- Intelligent data capture – highly improved document data extraction utilising natural language processing and machine learning;
- Robotic process automation (RPA) – this automates repeatable tasks;
- Artificial intelligence (AI) – deep learning and data analytics to perform or assist in the performance of processing;
- Machine learning – a form of AI, used in various ways to ‘teach’ a machine;
- Predictive analytics – Utilising AI, machine learning and algorithms to propose a solution/recommendation.
Carswell says: “The time to start is now and CGI and its CGI Trade360 client banks are working together to identify process improvement use cases and explore the available technologies to implement them.

“Our intent is to rapidly move the qualified use cases through proof of concept (PoC) and pilot phases within our Trade Innovation Lab and then into production,” adds Rory Kaplan, CGI’s director and offering manager. “The huge potential for faster, better, less risky and less costly processing has generated a huge amount of interest with our client banks, with a desire to move forward quickly.”

Taking digitalisation further

However, the ultimate benefits of digitalisation and IPA for trade finance banks do not stop at automating existing processes and reducing the need for manual intervention. Banks can look to automating the transaction processes, but the real opportunity is to exploit the massive amounts of data that will be captured.

Kaplan explains that improvements to forecasting, which have emanated from AI and machine learning techniques, can put banks in a better position to add value to the services that they offer to their clients. Improved analytics and forecasting can help them identify new cross-selling opportunities and grow their client relationships.

“By deploying machine learning techniques, banks can put themselves in an improved position to better identify different trends within a corporate client’s trade finance business and develop a better perspective on where that client’s trade business is going. The bank can then use this improved information to make recommendations to that client, present other relevant products and services and grow the relationship,” he says.

He goes on to explain that the use of machine learning techniques to add value to the customer’s experience and journey is already widespread and evidenced in the consumer market. In the music world, for example, Spotify observes consumer users’ music streaming habits and then uses this information to put together music playlists for them, based on their preferences. Google and Amazon are already taking advantage of machine learning techniques to get a better idea of ‘customer likes’ so that they can present appropriate products based on those ‘likes’.

“There are many financial services offered by banks where the observation of client behaviour – and the advanced analysis of that behaviour via machine learning – can help banks make better recommendations and present relevant, appropriate, additional products to that client,” says Kaplan.

CGI is looking to position itself at the forefront of emerging technology developments and is currently looking to set up use cases to test advanced analytics related to trade finance.

“You can teach a machine to conduct trade finance tasks, previously handled by human workers, such as the document examination, by allowing it to watch how cases are handled by those workers,” says Kaplan. He adds that this is achieved by the machine observing a human trade finance worker in real time or by consuming historical transaction data.

As a result, the sophisticated machine can assist the worker by anticipating the examination results and guiding the worker through its reasoning. The worker thereby becomes a smart worker, one who is tasked to handle the more complex things that require the highest levels of human decision making – things that the machine may not be capable of handling.

Nonetheless, human and machine work together and, over time, more and more activities can be handled automatically or are automatically assisted by the machine. “By providing human workers with better tools to do their job and improving their understanding of a client’s trade finance business, a machine can improve their decision making, too,” says Kaplan. “And RPA can be especially effective in automating repetitive, manual tasks.”

The next generation of trade finance workers

Carswell believes that in the broader working world there are some suggestions that machine learning techniques could see robots replace human workers. However, he explains that this may only be partially the case for the trade finance industry.

“In the trade finance world, there is a notable shortage of people who can take the place of retiring workers,” he says. “This is because trade finance as a profession is generally not proving to be very attractive to the younger generation because it is so manually intensive and often considered to be ‘old-fashioned’, which is resulting in a scarcity of trade resources.”

“However, with the introduction of automated processes into trade finance and by eliminating the manual, more onerous tasks associated with trade finance, it might be possible to attract talented, recent graduates with finance majors.

“If you can automate what is clerical, along with digitalising and streamlining the end-to-end work process via smart worker roles, you can make trade a much more attractive profession to the younger generation,” he says.