RTP114

SWIFT vs. Ripple: The Present and Future of Global Banking

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Remitting money from the bank is now a piece of cake. Thanks to technology, today we can swiftly move funds across countries and continents. To be more precise, the adoption of SWIFT in the banking industry has markedly accelerated secure global transactions.

"SWIFT", the abbreviation of the Society for Worldwide Interbank Financial Telecommunication, is a global network for financial institutions around the world to send and receive secured transaction messages. To better understand its impact, consider that in 2021 alone, 11 thousand institutions used SWIFT to send an average of 42 million messages per day (Swift FIN Traffic & Figures | Swift, n.d.).
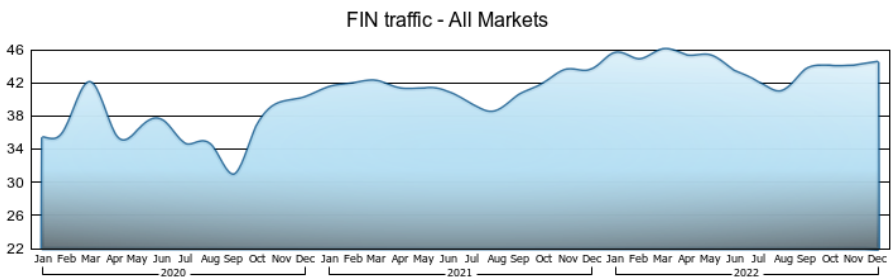

Figure 1: SWIFT's increasing traffic 2020-2022 (Swift FIN Traffic & Figures | Swift, n.d.)

What is SWIFT?

SWIFT is the communication network between banks and other intermediary institutions involved in a financial transaction process. Each financial institution is assigned a SWIFT code of 8 to 11 characters.

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The first 4 characters are the institute code, the next 2 are the country code, the next 2 are the location or city code, and the last 3 are the branch code, which is optional (Business Identifier Code (BIC) | Swift, n.d.).

An amazing specialty of SWIFT is that even if the sender and the receiver are different bank account holders, SWIFT still works. There are six levels of intermediaries in this process: sender, sender's bank, sender bank's correspondent, receiver bank's correspondent, receiver's bank, and receiver (Ripple vs SWIFT: payment (r)evolution, n.d.). A sender can just go to his local bank with the receiver's bank account number and the bank-specific SWIFT code. The sender's bank will then send a transfer message to the receiver's bank via SWIFT. Upon receiving the transfer-incoming message, the receiver's bank will clear out the payment for the receiver.

In the context of Bangladesh, the banks use SWIFT network for remittance transactions, travel, minor-value payments, online payment gateway services, mobile wallets to repatriate service income from ITES or remote services, freelance earnings, etc. The local banks are wary of using messaging services other than SWIFT, including Fedwire, Ripple, and CHIPS (the Clearing House Interbank Payments System) (Hossain, 2022). (Seth, 2022).

Nevertheless, SWIFT has some significant drawbacks. The primary issue is that the typical transfer process moves so slowly that clearing several financial checkpoints might take hours or even days. Furthermore, international payments are expensive and difficult. (Shome, 2019).

Ripple to the rescue!

Chris Larsen and Jed McCaleb co-founded Ripple, which made its debut in 2012. RippleNet is a digital payment network protocol built on the blockchain that has its own coin, called XRP. It makes it possible to transfer money easily in any currency, including digital and fiat currencies like bitcoin and litecoin as well as fiat currencies like dollars, yen, and euros. It even allows sending money in fiat currency and receiving it in bitcoin. The digital currency XRP serves as a medium of exchange and speeds up currency conversion (Shome, 2019). The California-based startup is entering the banking sector with three solutions: xRapid, xCurrent, and xVia.

- xCurrent: allows banks to settle international payments instantly with end-to-end tracking
- xRapid: focuses on sending international remittances
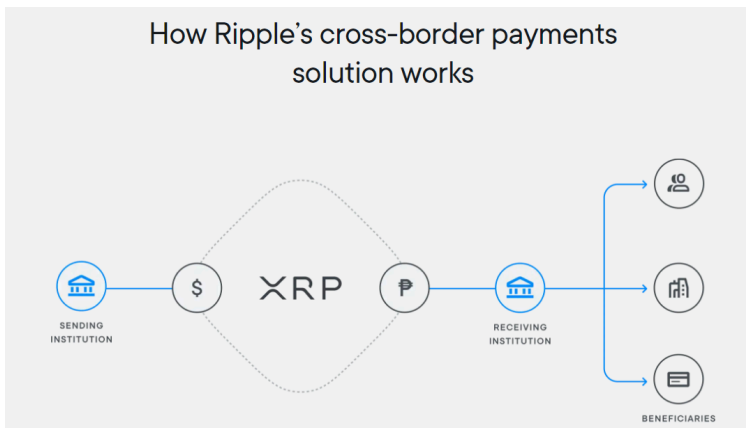- xVia: the default payment interface (Frankenfield, 2022)

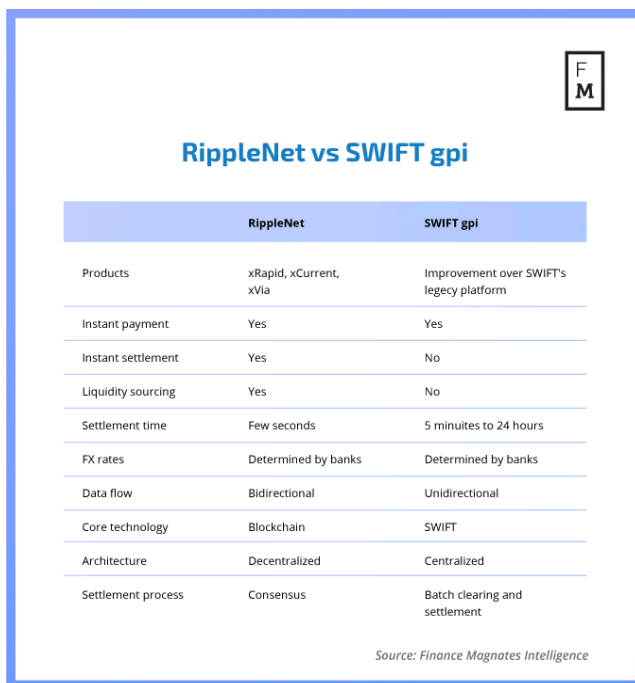Figure 2: How Ripple works (Solutions – Cross-Border Payments, n.d.)

How is Ripple a reflection of blockchain in banking?

Ripple runs on an open-source, distributed ledger technology (DLT) based peer-to-peer platform. The transactions rely on a shared agreement process, similar to blockchain.

Another intriguing feature is Ripple's ability to prevent double-spending in order to ensure system integrity. For instance, if a Ripple user opens a transaction with numerous gateways to send the same $100, only one payment transaction will be completed, and the others will eventually be erased. As a blockchain-based platform, all transactions made in the Ripple wallet are tracked on the Ripple consensus ledger (Frankenfield, 2022).

Simply put, Ripple's main goal is to save time and money by providing client institutions with access to a decentralized secured ledger record system while preventing double spending and other issues associated with traditional banking transfer methods. Despite its digital currency-based services in more than 50 countries, it is still not widely used in most developing countries, including Bangladesh, due to advanced technology requirements.

Let us take a quick look at the differences in settlement times and technologies between Ripple and SWIFT.

Figure 3: Comparison between Ripple & Swift (Shome, 2019)

SWIFT's Response?

In response to emerging blockchain technology, SWIFT has introduced Global Payment Innovations (GPI). The enhanced service was designed with increased efficiency, traceability, and transparency in order to streamline transactions. It also improves predictability and forecasting for the Treasury. Given that over 3,500 banks have already shown interest in implementing GPI, the initiative was a resounding success for the organization. There are currently about 55 payment market infrastructures that exchange GPI, according to SWIFT. However, SWIFT acknowledged that the recently established GPI link still needs to be sufficiently developed for cross-border payments (Shome, 2019).

All things considered, the current situation implies that SWIFT has entered the fray with a new weapon, assessing the potential threat posed by Ripple's DLT technology taking over the banking industry. The good news is that the two revolutionary innovations will incredibly, if not unimaginably, benefit the future of international banking transactions for us.

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Mahin Tasnim has completed her studies with specializations in Computer Information Management and Finance. She is passionate about learning and sharing how FinTech and data analytics are changing the dynamics of today's world. Apart from academics, She enjoys exploring new travel destinations and sharing her insights through content writing.