

Critically Evaluating SWIFT's Strategy as a Monopoly in the Fintech Business

Sabyasachi Dasgupta, Priya Grover

Abstract: *The objective of this paper is to understand how SWIFT has become the monopoly in terms of the digital payment transaction industry. The methodology adapted in this paper is qualitative secondary research case study method. The study undertook a literature review analysis where the literature of more than fifty research papers and reports were analyzed and themes were generated. Hence twelve such themes evolved and then thematic content analysis was executed through grounded theory method. The reliability of the data source mentioned were taken from relevant organizations involved in cross border payments and validation of the reports were done by experts in this field of financial ecosystem. SWIFT still enjoys monopoly in the market in terms of its huge network and the number of banks it partners across 200 + countries in the world. But the new block chain technology launched by Ripple and Bitcoin and other small start-ups has posed a challenge to the existing traditional cross border payment system of SWIFT. Block chain has a peer-to-peer communication with no intermediary network required. It involves a simple transaction charge with the flexibility to share documents over network for better transparency. But SWIFT having a legacy incredibility and trust can ensure more reliable services to the businesses in cross border payments.*

Keywords: Digital payment, SWIFT, monopoly, incredibility

I. BACKGROUND OF FINANCIAL MARKETS AND INSTITUTIONS IN INDIA

The financial markets in India pose an interesting mixture of inflow and outflow of money from multiple sources. The flourishing E-commerce and E-banking have phenomenally added value to the financial landscape of a country which attained its globalization in 1991. According to a research by Shilpan Vyas in 2012, E-banking has conveniently made the nature of monetary transactions a borderless entity permitting anytime, anywhere and anyhow banking. E-commerce had gradually led to mobile commerce as the medium of E-commerce transactions were mostly on the cell phone as a medium. According to a paper published by Cook and Soramaki (2012), mobile payments have a strong growth potential. Many banks have developed a mobile payments service or wallet. But many non-banks have also entered the mobile payments market, often with innovative solutions. According to the World Bank Report of April 2018, there had been record growth in terms of the remittances provided to middle and low income countries in 2017. According to the World Bank report (2018) in terms of South Asia:

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“Remittances to **South Asia** grew a moderate 5.8 percent to \$117 billion in 2017. Remittances to many countries appear to be picking up after the slowdown in 2016. Remittances to India picked up sharply by 9.9 percent to \$69 billion in 2017, reversing the previous year's sharp decline. Flows to Pakistan and Bangladesh were both largely flat in 2017, while Sri Lanka saw a small decline (-0.9 percent). In 2018, remittances to the region will likely grow modestly by 2.5 percent to \$120 billion”

Matias, Vihtori & Pauli (2016) in a case study named Bangladesh Bank Heist were of the opinion that whoever or whatever organization was eventually behind the bank heist, the most important thing is to focus on revising and enhancing the cybersecurity of financial messaging networks and the cybersecurity strategies of individual banks.

The objective of this paper is to understand how SWIFT has become the monopoly in terms of the digital payment transaction industry. So, the research question is:

What kind of monopoly has SWIFT made in the cross border payment transaction business?

The methodology adapted in this paper is qualitative secondary research case study method. The study undertook a literature review analysis where the literature of more than fifty research papers and reports were analyzed and themes were generated. Hence twelve such themes evolved and then thematic content analysis was executed through grounded theory method. The reliability of the data source mentioned were taken from relevant organizations involved in cross border payments and validation of the reports were done by experts in this field of financial ecosystem.

II. GENESIS OF SWIFT

Globalization has been a phenomenon which has created numerous transformations in the way traditional societies and economies were created. It mutilated the whole concept of a boundary or a barricade and opened up every possible doors to create a structure of fluidity in the global sphere. The flow of trade started happening and business amalgamation developed between countries of highly developed economies and countries of lowly developed economies. As a result, there was a flow of resources and monetary transactions between different countries leading to hybridization of culture, societies and consumption patterns. When exchanges took place within a specific boundary, there were mechanisms that help the smooth flow of resources and monetary transactions. But, with the opening up of boundaries, the monetary transactions along with resources started travelling in all directions. This process

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resulted in countries and specially banks of different countries to think about ways in which monetary transactions could be facilitated. Thus, it was evident that a revolution in the way in which financial institutions worked would have to be modified to suit the needs of such dynamic transactions. It was also felt that there would be a requirement of a technological infrastructure that would help in the delegation of such financial markets and volatile transactions. The insight that the network banks derived which would help any company to create a financial infrastructure of cross border payments were as follows: cybersecurity, reliability, distinctive standards, confidentiality, integrity, reduction of error rates, authentication of messages, volume of messages, homogeneity of message transfer format, development of network technology, operational risk and transactional efficiency.

This junction of history took a diplomatic turn when Society for Worldwide Interbank Financial Telecommunications (SWIFT) was founded on 3rd May 1973 with a mission to create a system that was unbiased and not linked under the dominance of any government, corporate or geographic location. The location of this organization was in Brussels, Belgium which was far away from the diplomatic battle ground for power from either London or New York. SWIFT was a co-operative society, not for profit organization based out of Belgium with the promise to provide the best possible financial infrastructure in terms of cross country monetary transfers. SWIFT ensured that all of the above twelve parameters required by a secured systems was prevalent and executed by SWIFT. SWIFT had been successful to balance the geo-politics and maintain the business of cross border transaction in an effective way. In the words of Scott & Zachariadis (2010),

“While Geo-politics were the cause of occasional thematic interest, the more enduring source of tension for SWIFT's governance has been managing the boundary between co-operation and competition among stakeholders with different strategic identities. The question of whether the financial community should co-operate or compete with each other has shadowed the development of SWIFT from its inception to present day”.

III. SWOT ANALYSIS OF SWIFT

A. Strengths:

With the dynamic environment of global payments, corporate treasury departments need a real-time balance reporting information and connectivity to their banks. The information should also be safe, self-service and immediate. To meet this objective, several software companies have developed a special software called Treasury Management Systems(TMS).Through this software, companies are able to connect and get access to all of their bank accounts globally and transact directly with them. One such globally used method or interface is SWIFT, the Society for Worldwide Interbank Financial Telecommunication that provides a global, secure and standardized means for corporates to interact and transact with banks globally.

AI. Huge Network: SWIFT got live back in 1977 and currently is used by more than 11,000 financial institutions in more than 200 countries and territories around the world. It definitely is the backbone of global financial communication. (www.swift.com)

AII. Better control: By reducing your bank connectivity options, corporates can exercise better control over transactions.

AIII. Paramount Security: SWIFT is the most secured platform to connect to your banks and it can be enhanced by adding encryption to your target banks. The corporates can thus ensure that the messages are encrypted at source and readable only by their recipients.

AIV. Reliability: SWIFT boasts of 99.999% network reliability so corporates need not to worry about network being down. (www.swift.com) Moreover, SWIFT has never lost a “FIN” message which shows the reliability it boasts of.

AV. Operational Excellence: SWIFT keeps investing in modernizing its technology platforms to increase its operational excellence. In 2017, several multi-year key initiatives were introduced by SWIFT including renewal of Public Key Infrastructure and the Red Hat Linux server platform migration

AVI. Standardized messages: SWIFT creates and maintains global financial messaging and reference data standards thereby maintaining common language for international financial messaging. The service message platform, SWIFT Net through four complementary messaging services: FIN, Inter Act, File Act and Web Access cater for the distinct messaging needs to their different set of users.

AVII. Transparency: SWIFT is into internationally standardized messaging recording every transaction between every financial institution and providing details in a clear transparent manner. Each transaction has a unique reference number, bank operation code and details of charges incurred during the transaction.

AVIII. Traceability: SWIFT provide a clear route of transaction between banks, it provides a recognized proof of payment.

AIX. Consistency: SWIFT messages are structured in a consistent format, so payment information is easy to decipher irrespective of the language if the respective country.

AX. Straight through Processing-STP: By advocating the use of standard global formats for payments (like MT101 and ISO20022 XML PAIN.001) and bank statements (MT940/MT942 formats), it enables the banks and corporates to exchange messages in a consistent manner.

AXI. Cyber security initiatives: Keeping in mind the increase in cyber threats in financial transactions, SWIFT continues to work towards strengthening their capabilities for cyber securities. In May, 2017, SWIFT launched the SWIFT Information Sharing and Analysis Centre (ISAC) portal that facilitates the community to defend itself against possible future attacks. Moreover, The Security Operations Centre (SOC) ensures rapid and real-time effective response to security alerts to both SWIFT production and enterprise environment, with a 24x7 security monitoring capability.

AXII. Growing SWIFT Traffic: SWIFT community has been growing since its inception with 7.1 billion FIN messages generated till now.

(www.swift.com)

AXIII. Continuous Innovations: SWIFT believes in continuous innovations and one of the major initiative that matured in 2017 was SWIFT's global payments innovation (gpi) service that enables end-to-end payments tracking. SWIFT gpi transformed the payment industry radically. With hundreds of financial institutions backing it, including world's 60 biggest banks, it now accounts for more than 55% of SWIFT's cross border payments. (www.swift.com) Over 50% of SWIFT gpi payments are credited within 30 minutes and almost 100% in 24 hours.

B. Weaknesses:

BI. Costly: Sending messages through SWIFT is costly especially for smaller amounts of money. As the SWIFT transaction goes through intermediary banks, each bank levies their own fee called "Routing charge" without the consent of the sender or receiver. So, for certain payment routes, the amount received by receiver is lesser than the amount sent by the sender.

BII. Joining SWIFT involves a lot of resources: It is easier to join SWIFT but takes time and resources to complete the joining procedures. The legal and documentation procedures are not that simple. You need to have a significant amount of time, resources and money to build a secure and automated end to end interface between your ERP systems and banks.

BIII. Connectivity issues: SWIFT boasts of 99.999% connectivity but if your bank SWIFT gateway is down, the payments and whole other processes are on hold. So, all the routes that the files and messages goes through need to make their way to or from the SWIFT network.

BIV. A Strong Bank Partnership required: Corporates need strong mentoring and guidance from the senior most levels in banks to ensure the success if the SIFT project.

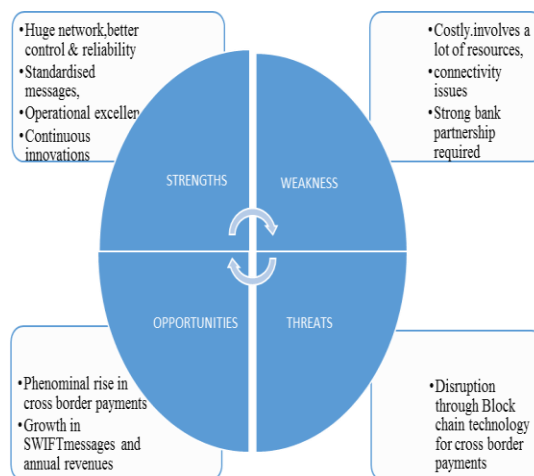
C. Opportunities:

The number of cross-border transactions is expected to rise from 4800 billion this year to 5000 billion by next year and is expected to reach 5800 billion by 2022. So, cross border payments volume is poised for growth. Cross-border flows account for 27% of global transaction revenues and is increasing by 6% annually. (Mc Kinsey and Company, 2018) SWIFT, a huge network recorded 7821 million messages in 2018 with 11.35% growth annually. SWIFT latest innovation, SWIFT gpi in 2018 being used to send hundreds of billions in payments everyday which is more than half of SWIFT's cross border traffic. (www.swift.com) Backed by the support of hundreds of financial institution including world's 60 biggest banks, this innovative product is radically transforming correspondent banking.

D. Threats:

With its distributed ledger technology and the advantage of minimal fee involved in transactions, block chain poses a threat to cross-border funds transfer systems and more specifically to SWIFT, a consortium of banks managing global transactions. Block chain also enables cross-border transfers but in a decentralized way. Banks are connected to each other directly on the same network and transactions are approved directly. It excludes middlemen, central agencies or correspondents from the payment processing. It provides the benefit of reduces costs with minimal charges across the payment chain and reduced turnaround time for settlement.

The details of the transaction are encrypted and hashed, there are no chances of modifying the data. Since sender and receiver are the nodes of the network, there is enhanced payment transfer with distributed ledger technology.



IV. COMPETITIVE INDUSTRY ANALYSIS

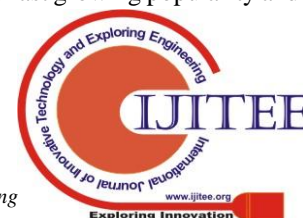
SWIFT with a revenue of \$190M has top 10 competitors: Euroclear, DTCC, Clearstream, Premier Transportation, Ripple, Softgate Systems, Ethereum, Calastone, UBP and VertexSMS. Together they have raised over 845.2 M and pose a strong competition to SWIFT.

Euroclear is SWIFT's no.1 competitor. Founded in Brussels in 1968, it operates in the Diversified Financial Services industry with a revenue of \$157M. DTCC, founded in 1973 is another fierce competitor generating \$60 M less than SWIFT. Clearstream founded in 1970, headquartered in Luxembourg generates \$160M less than revenue than SWIFT. (<https://www.owler.com/company/swift>)

Being in the international payment market for the last 45 years, SWIFT has a competitive edge over its competitors with a strong network of 11,000 banks. SWIFT enjoys monopoly in the market. But one competitor Ripple has gone one step further addressing the failures and loopholes in SWIFT cross border payments through its block chain technology. Speed, reliability and almost zero transaction costs are the backbone of this technology. Ripple has been in the market for less than 10 years and has been able to collaborate with over 100 banking institutions and adding a new affiliate every week. This could affect SWIFT in the upcoming 2 years. (Kazi, 2018)

Ripple is disrupting this monopoly of SWIFT through the use of sub second payments with automated best pricing from its network. Ripple payments are swift removing credit and liquidity risk from the process thereby reducing costs considerably. Ripple uses industry standard ISO and MT messaging and there is no loss of corporate data. Known fees and complete messages make for much higher auto reconciliation rates.

Ripple's crypto currency named xCurrent is liked and been adopted by 120 global financial institutions over the past year. (Brownie, 2018) Looking into the fast growing popularity and visibility of Ripple in the cross border payments market, SWIFT launched their Global



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Payments Innovation Initiative (GPII). It is a set of rules to commit banks to behave more reasonably in cross-border payments backed by payment tracking and data monitoring to ensure adherence to these rules.

Comparison between Ripple and GPII

	Ripple	GPII
Speed	Seconds	Hours or days
Fees	Lowest possible	Disclosed
FX	Best possible	Determined by bank board rate
Data	Full delivery	(Planned for version 2)
Tracking	Not needed	Yes
Technology	Ripple & ILP	SWIFT+ new messages
Number of banks	45	80
Difficulty	Roughly equal	Roughly equal

Source: (Blair, 2017)

Comparing both Ripple and GPII on various parameters, it is expected that Ripple would grow faster than GPII. But, being driven by SWIFT and based on existing correspondent banking arrangements, GPII seems more likely to be adopted by banks.

A. Porter five forces model:

According to Porter five forces model, (Annexure 1) there are five forces that shape competition in an industry. They are Industry rivalry, threat of entry, threat of substitutes, bargaining power of suppliers and bargaining power of buyers. The five forces affecting the competition in the cross border payment industry are as follows:

AI. Industry rivalry: SWIFT has competitors namely Euroclear, DTCC, Clearstream, Premier Transportation, Ripple, Softgate Systems, Ethereum, Calastone, UBP and VertexSMS. Though

AII. Threat of entry: Cross border payments especially B2B is on the rise. These payments are expected to rise by 7% by 2019. (Mc Kinsey and Company, 2018) The market offers immense opportunities to many FinTechs and start-ups based who are either planning to enter the market. But there are a lot of barriers to cross-border payments which companies need to understand before entering the market.

AIII. Threat of substitutes: The entry of block chain technology as a substitute to the traditional cross border payment system poses disruption of the cross-border payments. The company SWIFT needs to innovate products based on block chain in order to fight competition from start-ups like Ripple which are gaining fast momentum and visibility due to this technology.

AIV. Bargaining power of suppliers: The suppliers here are the payment networks ensuring cross border payments. With the advent of a number of payment networks due to rise in e-commerce industry, the bargaining power of suppliers has reduced.

AV. Bargaining power of buyers: The buyers are the banks or the merchants. In A B2B transaction which accounts for most of the cross border payments, the end user is the receiver of the payment that is usually a corporate or any other merchant.

B. BCG Matrix

BCG Matrix or Growth-share Matrix, (Annexure 2) a framework created by Boston Consulting Group evaluates the strategic position of the business and its potential classifying business portfolio on the basis of growth rate of the industry (industry attractiveness) and relative market share (competitive position).

In 2017, global payments revenues rose to \$1.9 trillion. It's forecasted that by 2020 payments would rise to \$2 trillion and cross \$ 3trillion within 5 years. (Bansal, Bruno, Denecker, & Nierderkorn, 2018) The industry's phenomenal annual growth rate of 11% with maximum revenues coming from Asia –Pacific corridor makes the industry attractive for companies planning to enter with new disruptive technologies. The growth rate is the highest in the last 5 years. The Asia-Pacific region accounts for nearly half of global payments revenue with more than \$900 billion. (Bansal, Bruno, Denecker, & Nierderkorn, 2018) The phenomenal rise in global revenues in 2017 clearly indicates an improved global economic scenario

With 11000 institutions connected across 200 countries and territories, SWIFT has a strong network and boasts of 99.999% net availability and FIN availability. (www.swift.com) In 2017, the total FIN messages generated was 7.1 billion with an average daily number of messages being more than 28.1 million. +8.45 of FIN growth was recorded in 2017. On Nov 30, 2017, SWIFT recorded new peak day with 32,839,705 messages sent over the FIN network, being 5.9% more than the previous peak day recorded at the end of October. (www.swift.com)

C. FIN share by market:

2017 volume (millions)	
Payments (including FIN copy systems)	3485
Securities	3232
Treasury	305
Trade	36
System	18

Source: (SWIFT, 2017)

D. Reporting Messages:

Reporting messages drove close to 60% of the SWIFT total volume particularly in the Securities area. Reporting messages with a growth of 10.5% outperformed the non-reporting messages that grew at 6.6% in 2017. (SWIFT, 2017)

E. Payment messages:

The strong historical increase of 11% in payments volume reflect positive economic conditions and outlook. (SWIFT, 2017)

F. Securities messages:

The securities traffic grew by 7.1%, lower than expected while some other large players showed double-digit growth. (SWIFT, 2017)

All the data reveals the strong position of SWIFT in terms of market share in the cross border payments industry.

The company is a star in the BCG matrix enjoying high market share in an industry having attractive high growth rate. In order to sustain its position, it needs to continuously innovate



and adopt latest technologies in cross border payments.

V. SWIFT ADOPTION CHALLENGES

A. Optional service: SWIFT remains an optional service for corporates despite its robust connectivity. SWIFT members are expected to be well versed with the day-to-day operations.

B. Cost: SWIFT charges connectivity and traffic to earn income. This is an additional cost as compared to direct banking channel where traffic is offered for free.

C. Not viable for small enterprises: Looking into the fact that it takes time and cost to realize and reap the benefits of SWIFT, the platform is not viable for small enterprises or the ones who deal domestically with one or two banking partners.

D. Competition: A competing protocol, EBICS, Electronic Banking Internet Communication Standard is well known in Germany and France and expanding in Europe. Then there is competition from FinTech and start-ups like Ripple challenging the old cross border payment structure of SWIFT through the latest Digital Ledger technology through block chain. Moreover, many banks prefer their proprietary electronic Web Based connections that are faster and easier to implement than SWIFT.

VI. CONCLUSION

SWIFT still enjoys monopoly in the market in terms of its huge network and the number of banks it partners across 200 + countries in the world. But the new block chain technology launched by Ripple and Bitcoin and other small start-ups has posed a challenge to the existing traditional cross border payment system of SWIFT. Block chain has a peer-to-peer communication with no intermediary network required. It involves a simple transaction charge with the flexibility to share documents over network for better transparency. But SWIFT having a legacy incredibility and trust can ensure more reliable services to the businesses in cross border payments. SWIFT launched SWIFT gpi to combat competition by Ripple through block chain technology. In just a year and half of its operations, more than \$100 billion a day payments are being done using gpi. In the US, it accounts for more than 40 % of the traffic. (Koning, 2018) SWIFT should initiate incorporating block chain technology and adopt itself to the dynamically changing cross border payment industry looking into the monopolistic position it enjoys in the market in order to be the leader and earn a greater share of the market. In order to survive in this market, just by having an infrastructural capability does not help. It requires the diplomacy of working with different banks and getting all of them in the same network. SWIFT has been successful to enhance the model of co-operation that will enable SWIFT to get a wider reach and sync majority of the brands globally in one network. SWIFT has the capability to provide excellence both in the technical field as well as managing the network of banks and countries. In this way SWIFT will sustain its monopoly not only because of its brand name and its technological capabilities but also because of its larger reach due to diplomatic balancing of various banks and countries universally.

REFERENCES

1. G. O. Young, "Synthetic structure of industrial plastics (Book style with paper title and editor)," in *Plastics*, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.
2. W.-K. Chen, *Linear Networks and Systems* (Book style). Belmont, CA: Wadsworth, 1993, pp. 123–135.
3. H. Poor, *An Introduction to Signal Detection and Estimation*. New York: Springer-Verlag, 1985, Ch. 4.
4. B. Smith, "An approach to graphs of linear forms (Unpublished work style)," unpublished.
5. E. H. Miller, "A note on reflector arrays (Periodical style—Accepted for publication)," *IEEE Trans. Antennas Propagat.*, to be published.
6. J. Wang, "Fundamentals of erbium-doped fiber amplifiers arrays (Periodical style—Submitted for publication)," *IEEE J. Quantum Electron.*, submitted for publication.
7. C. J. Kaufman, Rocky Mountain Research Lab., Boulder, CO, private communication, May 1995.
8. Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interfaces (Translation Journals style)," *IEEE Transl. J. Magn.Jpn.*, vol. 2, Aug. 1987, pp. 740–741 [Dig. 9th Annu. Conf. Magnetics Japan, 1982, p. 301].
9. M. Young, *The Technical Writers Handbook*. Mill Valley, CA: University Science, 1989.
10. (Basic Book/Monograph Online Sources) J. K. Author. (Year, month, day). Title (edition) [Type of medium]. Volume (issue). Available: [http://www.\(URL\)](http://www.(URL))
11. J. Jones. (1991, May 10). Networks (2nd Ed.) [Online]. Available: <http://www.atm.com>
12. (Journal Online Sources style) K. Author. (Year, month). Title. *Journal* [Type of medium]. Volume (issue), paging if given. Available: [http://www.\(URL\)](http://www.(URL))

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Management. She has done her PhD from Hemwati Nandan Bahuguna Garhwal University, Srinagar (A central university). She has worked as Associate Professor, Symbiosis Institute of Media & Communication, Symbiosis International (Deemed University), Pune, India. She was the Head of the Department for Brand Communication. With an enriched experience of 15 years, she has written papers that have been published in journals of international repute some of which are Scopus indexed. Dr. Grover has successfully cleared a certificate course in Digital Branding & Engagement from Curtin University, Australia, Google ad word certified professional certified by Google and Digital Marketing certified professional by Manipal University. She is an avid reader, a passionate researcher and case writer. Her cases have been published in reputed international journals for case writing. She has presented her case on a start-up in 2018 in the reputed North American Case Research Association Conference, Orlando, Florida, USA. She has also written a book on "Optimizing millennial consumer engagement with mood analysis" published by IGI Global. Her latest book is an edited Emerald publication under the name "Start-Up Marketing Strategies in India". She has also conducted multiple workshop on case study writing.