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# Financial Supply Chain & its Implementation in the Banking Sectors of Bangladesh

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#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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#### **ABSTRACT**

A drastic changing scenario is observed to manage Financial Supply Chain all over the "World" except Bangladesh. A few Banks or financial institutions in Bangladesh are implementing the concepts of Financial Supply Chain Management to provide benefits to the buyers (Anchors) and suppliers (Vendors). We explored the benefits and challenges of FSC from the management perspective of Bangladesh. The researchers made an effort to support our findings through a case study involving three parties: Bank Asia, Banga Millers limited (a sister concern of PRAN Company), and marginal suppliers. The researchers establish that trios can benefit if a strong Financial Supply Chain system can be established with the help of the latest computer software like VEEFIN. Researchers are aware of the fact that technology makes data transparent and does transaction settlement more successfully. The main objective of this paper is to discover the loopholes and challenges to popularizing the concept of Financial Supply Chain Management in Bangladesh's perspective, to search for benefits for the stakeholders on account of implementing a Financial Supply Chain, and also to find out the potentiality of FSC in Bangladesh perspective in the coming years. The Researchers also made a forecast to identify the amount of disbursement

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through the Banks or financial institutions five years later to explore the scenario of FSC flow and found that the disbursement amount will be equivalent to twenty core takas by using the least square method. The findings of this research can help financial institutions and banks in favor to introduce the Financial Supply Chain in their organization to provide better services and enhance customer satisfaction.

Keywords: Financial supply chain; anchor; VEEFIN software; optimum working capital; procurement process.

#### 1. INTRODUCTION

In the present economic world, the period "monetary supply Chain" is the maximum essential idea. It's also a total ability marketplace for monetary establishments and Banks globally. However, it's far one that is probably surprising mainly in the context of Bangladesh. Groups ought to emphasize the substances of economic deliver-chain control, including operating capital or change management, and so forth. By means concerning average ideas which include monetary supply, chain controls haven't begun to be explored in our use even though a number of banks and financial establishments are imposing the idea in Bangladesh.

Within the present generation of hyperaggressive enterprises globally, the burning issue to run the enterprise organization smoothly is supply Chain control (SCM) which is mainly concerned with efficient control of suppliers, factories, warehouses, shops, etc. The high objectives of delivery Chain management are to look at and divulge procurement, manufacturing, distribution, and cargo of products and services. SCM is now broadly used due to its competitive benefit to decrease the cost of products and increase customer support. In line with Kenneth Lysons and brain Farrington, supply Chain control is the integration of all business procedures throughout the delivery chain. Besides, supply chain management changed into defined that it'd be an integrative philosophy to manipulate the full go-with flow of the distribution channel from the provider to the remaining user.

Moreover, the "financial machine" is also included in the modern "Supply Chain" that's known as financial Supply Chain management. The journey of financial supply Chain control became started at the hand of Flat Italian Automaker which brought a brand-new placement with its suppliers within the early Seventies. It changed into perhaps approving providers' invoices a good deal earlier than the standard time margin. So, suppliers used that brief formal approval due to get cheaper finance

and Fiat could negotiate better margins with them even though this concept became the early form of reverse factoring. Besides, SCF took up in Spain twenty years later, where it was known as "confirming". Then, Banco Santander supplied the opposite thing solution in 1991. But the period of Supply Chain Finance became first applied in an academic article by Stemmler and Securing. Optimistically large price economic financial savings might be performed if Supply Chain and monetary cash drift have been optimally designed. McAdam & McCormack, [1] stated that financial Supply Chain control becomes promoted lessening due to inefficiencies of financial waft within the supply chain usage of economic engineering and management processes.

In Bangladesh, practices of FSCM within the banking sectors aren't widely practiced. Bank Asia began FSCM in 2020. We specifically centered on the implementation of FSC within the banking sectors in our country as for competing with the prevailing business efficiently. Our research finds that if FSC principles are carried out in Bangladesh, it can play a vital role for the banks as well as financial institutions from a profitability perspective.

#### 2. LITERATURE REVIEW

In brief, supply chain activities cover product development, sourcing, production, logistics, and the records systems which can be needed to coordinate these activities. Besides, the primary detail to grow and develop a commercial enterprise considered the ability establishments to supply financial sources and provide appropriate economic plans. It is going without saying that if such ability is formed within framework communications the of interactions amongst numerous organizations at the side of one chain, solid competitive privileges may be provided.

As of Pfohl & Gomm [2], the economic supply chain continues to financially and physically glide for commercial enterprise businesses. Hofmann

[3], claims that the monetary supply chain presumes clean usage of running capital within the commercial enterprise. Similarly, financing activities in supply chain control increase the extent of commitments and economic rewards for all of the events which might be associated with every other Ali et. al. [4].

Templar et al. [5] considered delivering chain finance as part of the broader idea of supply chain control. It recognizes 3 faculties (from extensively to narrowly defined): SCF as financial supply chain management, SCF as delivering chain financing, and SCF as consumer-pushed payables solutions.

SCF has long been known as an enormous intersection of change finance and SCM fields. Enabled through technological advancements which include digitalization in current years, there can be a pass toward changing the integrative obligations of materials and information flows into deliverable blessings in terms of better monetary flows for related players along the Supply chain Hofmann and Belin [6]. Moreover, SCF has been discovered to reduce operational expenses and earnings for upstream/downstream players inside the supply chain (e.g., Dye and Yang [7]; Gong et al. [8], enhance corporations' financial overall performance (e.g., Caniato, et al. [9], and promote supply chain sustainability.

For downstream clients, opposite factoring is an opportunity factoring mechanism that lets banks provide loans to upstream suppliers. The mechanism of reverse factoring is just like that of factoring. In the evaluation of clients' advanced fee approach, reverse factoring can better sell chain sustainability shipping and overall performance. The better the manufacturing value, the higher the importance of opposite factoring influences supply chain sustainability (Zhan et al. [10]. Van der Vliet et al. [11] discover the fees and blessings of opposite factoring at the same time as clients offer opposite factoring to upstream suppliers in going lower back for price period extension.

FSCM brings many benefits to the supply chain: the decreased fee of the capital among exclusive players within the delivery chain (Lamoureux & Evans [12]; adequate get right of entry to the operating capital [1]; lessened inventories, and advanced inventory accuracy Dong et al. [13]; Sari, [14]; lessen within the cash-to-cash cycle for deliver chain companions (Grosse-Ruyken et al. [15]; higher allocation of chance a number of

the deliver chain contributors Wuttke et al. [16]: stepped forward deliver chain visibility (Caridi et al. [17]; the decreasing cost of information as of Pfohl & Gomm [2]; accuracy of the data on customers and higher danger assessment Hofmann [3],; the decreased risk of bankruptcy as well as lower credit score danger Klapper, [18]; better collaboration, Hofmann & Kotzab, [19]; a stepped forward collection of receivables, Tanriserver et al. [20], and so on. Especially, the identity of past research a couple of operational and monetary benefits may be realized via FSCM. However, the methods to recognize these benefits and the influences on consumer-supplier dating have not been analyzed efficiently. Samuel PD Anantadjaya et al. [21] make a substantial relationship between Supply Chain Management, Inventory Management, Financial Performance. Jean-Noel et al. [22] in their paper made an effort to identified the dynamic capabilities approach and aims to empirically investigate the impact of supply chain finance (SCF) on firm performance. However, a whole lot of disturbing situations and issues are also associated with the monetary issue of the supply chain, and huge attention is wanted for its answer (Melo et al, [23]. A matrix of challenges in FSCM is included in the Fig. 1.

Banks generally tend to define FSCM offerings in terms of five interrelated companies: 1. Payments and cash control; 2. Running capital control (WCM) and delivering chain finance; 3. Danger mitigation; four. Technique development; 5. Shared services (BPO); 6. Visibility management (See Fig. 2):

Supply Chain Finance Process works among anchors, suppliers, and banks. In the first level Anchor or client locations a work order with the supplier [24,25]. After then, the provider accepts the acquisition order and offers a bill in opposition to the order to the client as well as delivers items to the consumer. After ten, an invoice is submitted via the provider for their payments to the customer. Inside the intervening time, the client approves the bill and applies it to the bank for bills to the dealer. Then, the financial institution accepts consumers' requests and does some banking processes. After the entirety of the banking technique, the financial institution has the same opinion to pay the overall dues to the supplier against the client. Subsequently, after maturity, the buyer repays all the dues to the financial institution. In this device, economic supply Chain control takes place respectively.

Sources	Low Process Speed	Unpredictable & Untrustable Financial Flow	Unoptimized Credit Decisions	Huge Time Needed	Higher Expenditure	Paper- based method	No Regulatory policy	Low Knowledge	Little knowledge of Technology	Collaboration of all parties	Lack of Proper HRM
Mehdi et.al [24]	1	1	1	1	1	х	x	х	х	×	х
Nowshad Ayub Md. et al [25]	1	1	1	1	1	1	×	×	1	×	х
Abidur Rahman Md. [26]	x	х	1	×	×	х	1	×	×	х	×
Dr. Mohamed Baymout [27]	x	×	×	×	1	1	×	×	×	×	х
Le Thi Minh Hang et al [28]	×	×	×	×	×	×	×	•	4	×	х
Georgios L. Vousinas et al [29]	1	1	4	×	4	х	×	1	1	1	x
Vousinas, Georgios [30]	1	×	1	×	×	х	×	1	1	1	x
Islam ME [Addressed in the present article]	1	1	×	1	1	1	1	1	1	1	1

Fig. 1. Challenges matrix

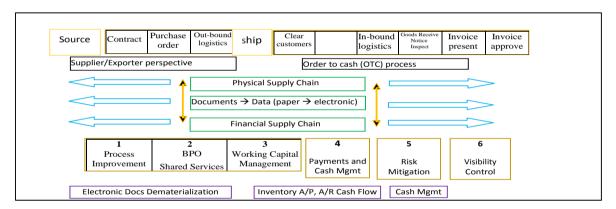


Fig. 2. Key elements of FSCM

Source: The 2007 guide to Financial Supply Chain Management, HSBC



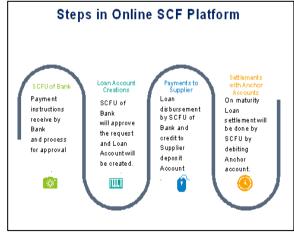


Fig. 3. Steps in online SCF platform

Research finding of Nowshad et al. [26] for getting the pictures of FSC from Bangladesh's perspective and assumed that the findings are reliable. The summary of the paper is mentioned below:

Table 1. Summary of the paper

S.N.	Questions	Findings
1.	How familiar are you with the supply chain on a scale of 1-10?	On a scale of 100, most of the people we found staying in the 0%-80% range which means mass awareness is still a prerequisite.
2.	Is the Bangladeshi Supply Chain transparent?	At least 65% of surveyed people think that the major hindrance to Supply Chain in Bangladesh is crystal clear which means a lack of transparency. So, it needs a lot of learning to unlearn, re-learn, and stereotypes to break.
3.	What do you think of SCF?	Most of the respondents think that SCF is the process of buyers accepting third-party financing for the payment to the supplier which is somewhat like "fintech" which is an effective way of reducing the financial cost. On the other hand, some respondents are not so familiar with this term.
4.	How much are you willing to bear for SC as a percentage of the total cost?	No other part of our survey was as important as this part. Here, 31.6% of respondents gave preference for each category to bear the cost which is between 2-3% and 3-5% range. Besides, most people are reluctant to go for more than 55 costs. So, it is a benchmark.
5.	What is the upper limit of the amount you transact?	Now, most people are willing to undergo less than a 5% fee for what quantity of the transaction. Right here, 20% of respondents said that they transact around BDT "10.000" and it no longer gives up at BDT 10,000. Except, humans transact as excessive as 10, 00,000 ranging from "50,000, 80,000" and so forth. Additionally, as little as BDT 500, a hundred, and lower.
6.	Is digital payment reliable?	Here, at least all of the respondents think that this digital payment system is trustable which tells so much about Supply Chan finance's scope and future.
7.	Does Supply Chain Finance reduce risk?	Of all the respondents, 90% of them voted that supply Chain Finance reduces the overall financial, security, management, and related risks.
8.	Does it lower the overall cost?	All of the respondents think and agree that SCF reduces the overall cost of transactions and it is well self-explanatory to some extent.
9.	Are you willing to put collateral for safety?	There we found different opinions because 42% of the respondents are willing to put collateral whereas 32% of respondents think otherwise. The most interesting part is that 26% of respondents are contemplating whether to put collateral.
10.	Does BD have the resources to materialize the SCF?	Most of the people of the respondents think Bangladesh has sufficient assets. At the same time as 21% do now not confirm this belief 32% are puzzled or now not so sure approximately Bangladesh could be the right venue to discover.
11.	Which should be our main customer segment?	More than half of respondents (53% approximately) suggest targeting SMEs. It is understandable because Bangladesh's economy is built on SMEs. They contribute a significant portion of our economy. And rightly so, 21% suggest catering to these corporate while the other 26% recommend catering to mass

S.N.	Questions	Findings
		people.
12.	Isn't it complicated for mass people to grasp the SCF?	The answer is positive because 68% of respondents find it perplexing and cumbersome to digest whereas 11% are familiar with it. Here, financial literacy among people, perfect marketing, and mass awareness is required.
13.	Factoring (debtor financing) or Reserve Factoring (Supply Chain Financing)	As it is a complex thing, most of the respondents are yet to choose reverse factoring. Only 21% chose reverse factoring.
14.	Is there a lack of policy & support from corporate entities to materialize SCF in BD?	Like everything in Bangladesh, there is a plethora of lacking in policy and support from responsible "organizations" which is a major obstacle to winning and thriving. Almost 67% of respondents think so.
15.	Since the finance & banking sector is in distress, will SCF be the silver lining/damsel in distress?	Rightly so, proliferating supply chain finance extensively could be a silver lining. Approximately, 58% of the respondents termed it as a damsel in distress.
16.	How much cost & time SCF can save compared to traditional methods?	Now, while the time financial savings and fee discount conveniences are in comparison, 58% of respondents termed the supply chain finances benefits as common. And another 32% termed it the sole winner and these numbers talk volumes and encourage the potentialities of such initiatives.
17.	Should we focus more on short-term financing or long-term financing?	Here, 73.7% of the respondents think that short-term financing is more comfortable and convenient as it is helpful for working capital management and another 26.3% of the respondents think that long-term financing is not enough good. As supply chain finance is focused mainly on short-term financing, it is better if sticks to short-term financing.
18.	Few cents on how to make things lucrative/interesting?	Providing better terms and reducing findings that may attract SMEs, customizing options for different businesses, increasing the efficiency of technology, and simpler financing terms can make it more lucrative and make the process easier.

Source: Nowshad (2020)

Basically previous works on FSC is made on to introduce the concepts in industries and their benefits, the familiarity of the concept in Bangladesh perspective. In this paper we explore the benefits of FSC practices by the financial institutions and Banks in Bangladesh perspectives.

#### 3. OBJECTIVE

In a developing country like Bangladesh, FSC can be considered a big thing that can bring in massive changes and also create a mammoth amount of opportunity for Buyers, Financial Institutions, and Suppliers. Here, researchers gave more attention to pointing out the implementation of FSC by a real "case study" and realized that if we can introduce this system to our country, business transactions will be smoother and more sustainable as the process will reduce the use of papers. The use of the **VEEFIN** software program system blockchain generation inside the supply chain management enables the records to flow to internal events and external parties easily and develops the integrity and first-rate of economic records being transmitted. Moreover, this brings two advantages to each buyer and provider first it achieves the transparency of the records and additionally will increase the change of the electrical file between partners, which brings more acceptance as true for each party. In this file, a case has a look at the usage of the VEEFIN software system in managing the financial delivery chain has been discussed in element. The main objective of this paper is to discover the loopholes and challenges to popularizing the concept of Financial Supply Chain Management in Bangladesh's perspective, to search for benefits for the stakeholders on account of implementing a Financial Supply Chain, and also to find out the potentiality of FSC in Bangladesh perspective in the coming years.

#### 4. RESEARCH METHODOLOGY

It sets out two phases of information collection to know the experience of FSC that were followed in completing the study. The first phase is the Primary source and the second phase is the Secondary source. The number one statistic has been accumulated from exclusive providers, consumers, and employees of "Bank Asia" whereas secondary data has been amassed from different sources such as journals, books, and websites as references in our research articles. Here, we also used the least square

method for predicting the potential disbursement of financial flow through Bank Asia. We used the function:

$$Y=a+bX$$
 (1)

And two normal equations:

$$\sum_{i=1}^{n} = na + b \sum_{i=1}^{n} X_{i}$$
 (2)

$$\sum_{i=1}^{n} X_{i}Y_{i} = a \sum_{i=1}^{n} X_{i} + b \sum_{i=1}^{n} X_{i}^{2}$$
 (3)

Where a and b are constants.

Besides the data collection, we chose the case study technique as it is a strong tradition of using case study research for studying the operations performance and management devices of corporations which is an effective methodology for evaluating the loopholes, challenges & impact of a process transparently. In this paper, we also used the techniques of data and information presented in textual, tabular, and graphical forms respectively.

# 5. CASE STUDY ANALYSIS AND FINDINGS

We discussed a case study regarding Financial Supply Chain Management. In this case study, three stakeholders are involved which are Bank Asia Limited, Banga Millers Limited, and Marginal Suppliers. Among these stakeholders, Banga Millers Limited is the sister concern of PRAN Company.

At present, there are 61 scheduled banks in Bangladesh of which 49 are private and 9 are public banks and 3 are specialized banks operating their activities. Among them, 17 are second-generation banks. From then, Bank Asia is a second-generation bank that started its commercial banking operation on November 27, 1999. Since then, it is banking with outstanding performance and effectiveness. It has now emerged as one of the most prominent banks in Bangladesh. In a nutshell, bank Asia is a tale of success and eagerness for an endless journey towards a new horizon. Its story is about the financials and the impact it desires to create. Furthermore, it has a vast and strong network infrastructure. nourishina governance, robust compliance, and a customercentric lifestyle. It remains busy proving quality services. The highest priority is given on customer satisfaction. Moreover, it is attaining

The NPAT of Bank Asia is at a growing degree

every corner of Bangladesh by adopting generation-driven banking offerings which do now not require the physical existence of a branch i.e., Agent Banking. Using supplying generation-based financial services to marginalized humans with strong digital insurance and infrastructure centers, bank Asia has to turn out to be a function model of economic inclusion within our country's banking industry. Considering its inception, Bank Asia has dedicated itself to meeting the financial needs of humans through innovative customer support and assorted monetary services, which in turn contributes to making sure a sustainable economic system and increase of its customers.

In 2020, the total assets of Bank Asia are valued at Tk.408,717 crores where the average growth rate is 15.52% in the last two consecutive years. In 2020, the total assets of Bank Asia are valued at Tk.408.717 where the average growth rate is 15.52% in the last two consecutive years.

Having some fluctuation, the present growth rate is very satisfactory and shows a positive growth rate (see Fig. 4).

which means internet earnings have a whole lot of coins to put money into its future, pay dividends, and buy lower back inventory. The increased charge of NPAT was better in 2017 while in 2018 it has substantially fallen because of the motive of the outbreak of the COVID-19 pandemic disaster. Again, in 2020 it has come to the upward movement that's 3.82%. In Bank Asia, the deposit growth rate is the highest in Besides, the Loan and Advance section of Bank Asia is very important because the success of this department helps to increase its business. Here, we can see that the upward motion of loans and Advances of Bank Asia is the maximum vital asset and the primary supply of profits which facilitates the improvement of the economic health of this financial institution.

Return on assets is a metric that shows financial institution Asia's profitability concerning its total property. Right here, we can note that the higher ROA of Bank Asia is greater productive at coping efficient and their balance sheet to generate profits (see Table 2).

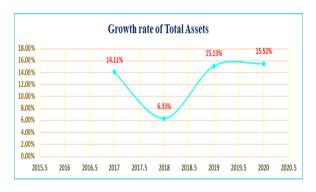




Fig. 4. The growth rate of total assets and NPAT

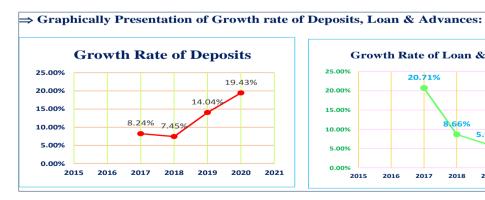




Fig. 5. The growth rate of deposits, loan & advances

Table 2. Return on assets (ROA)

Return on Assets (ROA):						
Year	2020	2019	2018	2017	2016	
Return on Assets (ROA)	0.53%	0.59%	0.76%	0.76%0	0.65%	

Supply Chain Finance of Bank Asia is one of the maximum appealing methods for agencies to better control their working capital with the aid of facilitating their suppliers' and sellers' access to positive financing centers. Supply Chain Finance (SCF) is short-term working Capital finance with a blend of term Loans, demand Loans & Overdraft products to dealers/suppliers having business relationships with large corporates ("Anchor"). Moreover, all transactions are connected to invoice among the Anchor & dealers/suppliers. Here, Supply Chain Finance is designed to optimize finance & flexibility for the client.

The program is aimed at corporate clients, firstly for whom trade financing, "balance sheet" and risk control are key drivers, or in any other case have a big network of the value chain for potential Supplier finance packages. Secondly: "Corporates" for whom liquidity and working capital, risk and balance sheet control are key profitability drivers. Thirdly: organizations where CFOs have a strict working capital goal to grow Days Payable notable (DPO). Fourthly, rapid growing organizations that need alternative working capital sources for suppliers with a higher cost of funding than themselves, and lastly, corporates with a remarkable provider base and procurement go with the flow and offer support to suppliers. Bank Asia began its adventure of FSC in 2020 and the actual loan quantity distributed quarterly is proven in the following table (see Table 3):

Table 3. Disbursement amount through FSC of Bank Asia

Х	Υ
1	466,199,20
2	120,197,194
3	203,449,67
4	304,440,43

Now, by using the least square approach, we can identify the twentieth-quartile loan disbursement amount.

Using the equations (1) to (3), we can get the values of constants a=91,496,527.25 and b=-14,837, 985.8 respectively. Finally, the total investment will be Y=205,263,188.75 which is quite impressive.

Banga Millers Limited is a rice mill organization. It produces goods by preserving international standards and the best level of high quality at every stage of its manufacturing manner. It's miles compliant with HACCP (chance analysis essential control point) and certified with ISO 9001, halal, the FDA, BSTI, and BARC which guarantees the best satisfactory products. Every 12 months it wishes a large amount of rice for producing quality baked items (desserts, puff pastry, and so forth.), halal products, non-public labels, biscuits, fats & oils, cereals, grains, pasta, pulses, rice, bread & bakery, and so forth. Yet, a problem happened between supplier and buyer in increasing financial efficiency such as improving cash flow, optimizing working capital, lessening cost, and so on [27-30]. Besides, some political unrest and economic recession there create a problem for suppliers for getting accounts receivable timely and for a buyer to disburse the accounts payable at the same time. So, the Banga Millers have come to a decision that they deal with their transactions through the banking system which is called the financial supply chain system. For solving this problem, Bank Asia has created a platform for Financial Supply Chain Management (FSCM). The present case is comprised of Bank Asia, Banga Millers Limited, and Rinku Rimon Auto Rice Mill. Here Banga Millers Limited is the buyer, Rinku Rimon Auto Rice Mill (marginal supplier) and Bank Asia is the financial institution. The financial supply chain is represented in the Fig. 6.

The steps for implementing the Financial Supply Chain processes and loan opening and disbursement flowchart are given in Appendix-I.

Table 4. Statistical table for least square method

Χ	Υ	X <sup>2</sup>	XY
1	466,199,20	1	466,199,20
2	120,197,194	4	240,394,388
3	203,449,67	9	610,349,01
4	304,440,43	16	121,776,172
$\sum x = 10$	$\sum y = 217,606,124$	$\sum x^2 = 30$	$\sum xy = 469,825,381$

#### 6. BENEFITS OF THE STUDY

From the case study, we can point out some benefits where most of them are matched both the Banks, Anchors, and Suppliers. Here, some additional benefits also arose from the aforementioned cases which are compared with the existing literature and mentioned in the last row of the table. These are also pointed out in our paper. In the beginning, we pointed out the benefits of the Bank, anchor, and Suppliers by the facility matrix table. After studying both of the cases, we found some benefits for all parties and also soughed out some additional benefits of FSCM (see Tables 5 and 6):

From the analysis of the case, we can factor out a primary distinction in why stakeholders need to deliver more precedence to taking the FSCM device. The distinction is, the method initiated by the buyer, in its most effective shape "SCF" wherein a dealer sells its invoices to a lender at a reduction and requires the approval of the client. The lender makes use of the creditworthiness of the purchaser, the bigger entity which means that the provider can get the right of entry to finance at a decreased price than if it has been to acquire the finance in its own right. Therefore, the dealer will acquire its cash "earlier" and as a result, increase "working capital".

We also explore the potentiality in this sector in the coming days (the twentieth quartiles later that is after five years) by using the data of Bank Asia given in Table 4 using the statistical tools mentioned in the research methodology section. Then, it is shown that the forecasted amount is equivalent to taking "205,263,188.75". The forecasted value suggests that shortly FSC activities are going to be popular.

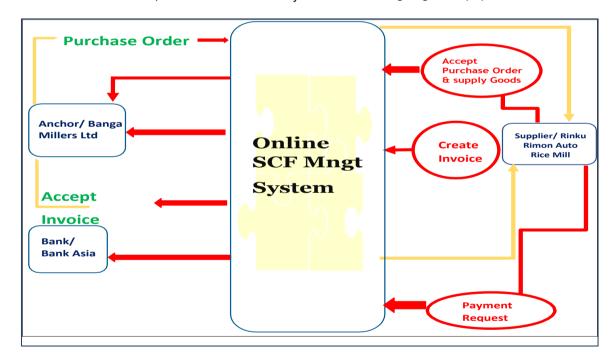


Fig. 6. Implementation of FSCM Source: Prepared by the authors

Table 5. Facility matrix of FSC

Facility matrix of FSC:							
Benefits	ICF	owc	MT	RC	LIR	AP	
Anchor	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Bank	×	V	V	V	×	×	
Supplier	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	

Here, ICF= Improved Cash Flow, OWC= Optimized Working Capital, MT= Mitigated Risk, RC= Reduced Cost, LIR= Low Interest Risk and AP= Automated Payment

## Secondly, additional benefits are given below in a table:

Table 6. Additional benefits of using FSC

S. N.	Anchor Perspective	Supplier Perspective	Bank perspective
1.	Freed up credit score lines.	Stable fee policy.	Extended business quantity.
2.	Extended Days Sales Outstanding.	Reduced Days Sales Outstanding.	The New venture prospects.
3.	Discounted price from suppliers.	Fast access to receive cash.	The New customer opportunities.
4.	Developed the system of delivery.	Enhanced the distribution network.	Extra profits from financing.
5.	Little danger in supplier innovation	Debt-free balance sheet.	Cross-selling Opportunities.
6.	Experience an extra solid supply base.	Gain gets the right of entry to low-fee finance fees.	Decorate the bottom line by assisting clients' "complete deliver chain from stop-to-quit"
7.	Develop relationships with sellers.	Obtain a more secure source of working capital.	Enhance the reach of the Trade Finance organization.
8.	Develop visibility across the financial supply chain.	Acquire visibility into the payment process.	Enhance the profile of the Trade Finance organization.

#### 7. CONCLUSION

Supply Chain Finance establishes an excellent link between a buyer, a dealer, and a monetary institution. Now not the most effective dealer however also customer is constantly seeking out economic advantages for purchasing from authorizing working capital. Within the supply chain, both events have extraordinary thoughts about extraordinary hobbies regarding monetary transaction timing. Consumers like to pay "as overdue as viable" while providers continually need to get paid within a bit of time. SCF follows the price because its moves via the delivery chain community. Both client and supplier are helped via SCF to free up their running capital and preserve a better stage of liquidity with the aid of introducing an intermediary financial group. Except, it permits the consumer to preserve the charge a bit longer while the supplier was given paid early. Primarily based on the credit rating, the charge of price and duration are given between consumer and provider.

The present case study indicates how FSCM is working in Bangladesh. Traditionally, the operations of FSCM are paper-based and managed by using multi-functional departments. Presently, due to the development of networking and technology like VEEFIN and Blockchain. The paper also shows if FSCM is continuing its practices in our country effectively and efficiently based on the present study.

#### 8. RECOMMENDATIONS

- Most of the suppliers of our country are very reluctant to use SCF as they have little knowledge about the uses of this system. We recommend that financial institutes can arrange some awareness programs.
- Besides, they feel comfortable doing their monetary transactions traditionally. They also do not accustom to using newer technology like VEEFIN software. This is regarded as "the technology barrier" which is the most impactful barrier for which the suppliers of our country are not thriving and becoming failing to maintain and sustain. So, we have to give more emphasis to engage suppliers technologically enabled.
- Bank Asia can invite huge corporate and commercial clients so that it will join the VEEFIN deliver Chain Finance platform and link their providers and vendors. Then, the suppliers and distributors who are selected will be able to raise financing requests from

- their computer or mobile telephone packages while not having to go to the financial institution's branches. Truly, they want to forward their supply and purchase requests to Bank Asia and could acquire the cash in their money owed.
- Besides VEEFIN technology, the next generation of Supply chain financing is Blockchain powered digital platform. That should be implemented as early as possible.
- 5. In Bangladesh, the practice of SCF is in a downward movement as most of the suppliers of our country are not known for using the SCF process. So, it is a dire need for an arrangement of training for making suppliers experts in this concept. Besides, every month, there should be arranged a seminar or meeting with suppliers for getter benefits by using the practice of SCF.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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#### **APPENDIX-I**

- **Step 01:** First of all, Banga Millers Limited and Rinku Rimon Auto Rice Mill agreed to Bank Asia and they will log in to the online SCF system with a user ID Password.
- **Step 02:** Secondly, Banga Millers Limited (Buyer) creates work orders through the SCF system for Rinku Rimon Auto Rice Mill (Supplier).
- **Step 03:** Thirdly, Rinku Rimon Auto Rice Mill accepts the work order through the SCF system and delivers goods to Banga Millers Limited.
- **Step 04:** Fourthly, after then, Rinku Rimon Auto Rice Mill prepares an invoice for Banga Millers Limited and submits it to them by the SCF system for their payments.
- **Step 05:** After getting the invoice, Banga Millers Limited applies to Bank Asia by the SCF system for payments to Rinku Rimon Auto Rice Mill.
- Step 06: Then, Bank Asia approves the invoice and does the processes for loan disbursement.
- **Step 07:** The specific loan processing system by Bank Asia is as follows:

The branch, being the number one contact with debtors, continues thorough know-how of the borrower's commercial enterprise and industry via the connection of everyday touch, factory/warehouse inspections, and so forth. The department also video display units the monetary performance and account conduct of borrowers. The evaluation of a credit score applicant's credit status is primarily based on numerous "records" resources and record types following the nature of the borrower. Anyways, the preliminary evaluation is built upon having complete and cutting-edge records of the monetary and personal situation of the borrower.

The credit evaluation incorporates both qualitative information and quantitative statistics regarding the borrower. The department, then, prepares a complete and vital picture of the borrower. For making sure that all the records accrued with the aid of the relationship supervisor, are exceeded directly to the person in charge of the credit evaluation, the department prepares a standardized and based credit score memorandum. This procedure confirms that data is collected in its entirety and efficiently. The layout of the memo is exact and covered within the internal hints. For ensuring that the statistics accrued are whole, obligatory lists displaying what information is required are used. Those lists then are adapted to the requirements of the credit evaluation process for conforming to the form of the borrower in each case. Additionally, for taking character borrower records, many cases require popular facts at the monetary scenario of the vicinity or an enterprise for allowing a comprehensive evaluation of credit utilization. The branch is accountable for the well-timed and correct submission of credit Memorandums for brand new proposals and annual evaluations, taking into account the credit assessment necessities outlined.

Now, for loan sanctioning, some post-approval activities have to be done by "Bank Asia" such as completion of documentation, and loan account opening procedure and after then the loan disbursement process will be completed by some steps. This full process is discussed on the next page respectively:

Whilst the branch receives the sanction letter issued by way of the CRM of the company office, it starts evolved documentation formalities. Then the documentation begins from the issuance of the "sanction letter" to being typical by the consumer. At the equal time, the department completes documentation which is extensively categorized into i. Security documents (price documents, project, insurance "policy, and so on.) ii. Identify documents (identify deeds, Bia deeds, Khatians, Mutation & DCR, hire price receipt, Registration of vehicle, and so forth.).

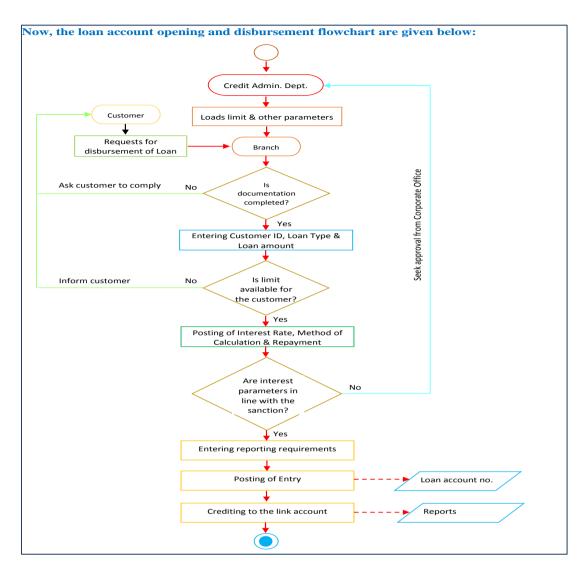


Fig. 7. Loan account opening and disbursement flowchart

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