

Alternative Credit Scoring: Collateralising Data for MSE Financing



Business Finance for the Poor in Bangladesh (BFP-B) in association with The Daily Star organised a roundtable titled "Alternative Credit Scoring: Collateralising Data for MSE Financing" on September 26, 2019. Here we publish a summary of the discussion.

Feisal Hussain, Team Leader, BFP-B
The Business Finance for the Poor in Bangladesh (BFP-B) is a 25 million-pound programme to increase access to finance for micro and small enterprises. BFP-B has assisted financial sector regulators to

develop regulation and common industry infrastructure that make it easier for financial institutions to scale their business to the micro-small enterprises sector, as well as invested in financial institutions and technology companies to test and roll-out viable business models that offer new financial solutions to micro and small businesses. In this, we sought to find new solutions to persistent problems that financial institutions and micro and small businesses have been facing over the last 2-3 decades. We discovered that one of these persistent problems is the costs associated with risk underwriting of loans to micro and small business, particularly in the context of pervasive informality among these businesses. The risk underwriting process and the risk premium together added about six percent, give or take two percent either way, to the overall pricing of loan products to micro and small businesses. So we asked, if we can reduce this cost, could we then dramatically increase the attractiveness of the micro and small business sector for banks? Our search for an answer to this question is at the heart of our support to ShopUp and CRAB. While there are differences in the business models across these organisations, two common features are the use of alternative data to assess risk more accurately than using traditional data, as well as greater automation of the assessment processes to reduce operational costs of assessment. Early signs are very promising because we are seeing that these business models are able to reduce risk underwriting costs by as much as half of traditional risk-underwriting. This should make the micro and small business market segment more attractive to banks in search of new markets, while lower underwriting costs should feed into lower priced loans for micro and small businesses, encouraging their growth and contribution to the local economy.

Afeef Zaman, Co-Founder and CEO, ShopUp
We started ShopUp with a goal to remove barriers for micro and small businesses using technology. Last year we started a project with BFP-B. We were a family of 10,000 MSMEs and now we are a family of 200,000.

We have both merchants on the demand side and the supply side. On the supply side, the MSMEs are primarily small manufacturers and wholesalers, and on the demand side, we have online sellers mainly based on Facebook and we have a group of offline retailers as well. Apart from working capital, these merchants are availing three kinds of services: 1) They use our platform to run their daily operations such as inventory, order and customer management; 2) Both online and offline sellers are connected to the supply side merchants to source their products; 3) Both the sides use our delivery service all over Bangladesh. If the merchants use one of these services, they can access a working capital loan through our lending partners.

Now coming to the five-trillion-dollar credit gap problem for microenterprises, it has two sides. One is assessing the loan, because financial institutions lack the data, and the second side is the loan repayment collection cost. In our case, in the transaction flow without adding any extra cost, we can essentially deduct the repayment cost from their actual business. So, by combining both of these, we can significantly reduce the cost of lending to the micro and small businesses in general.

Khalid Hossain, SVP and Head of Business, CRAB
We have established a model using our own IP focusing socio-economic perspective of our country, which is risk assured for the financial institutions. We have focused on eight major issues: 1) Personal information authenticity which is important for every loan applicant from lenders perspective; 2)

KEY RECOMMENDATIONS			
	What is required?	Why is it required?	What will it do?
Banks/NBFIs/MFIs	Underwrite risk for loans below BDT 10 lakh using non traditional data sets	To generate reliable quantification of risks in a cost efficient manner	Enable unbanked customers to access loans from FIs Facilitate FIs to improve SME portfolio quality and meet BB disbursement targets Support FIs to access a market worth GBP 11 billion
MNOs	Develop pricing strategies for data sharing with FIs	To establish a standardised and structured engagement process with FIs	Create an alternative revenue stream from 85 million unique mobile subscribers Increase customer stickiness to respective networks
Regulators	Issuance of guidelines on using alternative data sets and data privacy Create cross regulatory committees comprising of representatives for BB, BTRC, IDRA and MRA	To instill confidence and compliance among financial market actors To provide a formal structure to deal with cross industry data sharing engagement	Encourage market actors to undertake pilots and mainstream ACS tools Streamline private sector interaction with the regulator
Development Partners	Provide targeted TA to pilot risk underwriting with non traditional data sets	To increase sectoral awareness about the use of non traditional data sets	Catalyse the adoption of using non traditional data sets to underwrite risks

Identifying characteristics which is basically giving the idea about the personality trait of the borrowers; 3) Financial wellbeing ability, whether s/he is financially capable and has the ability to take a loan and repay; 4) Consumption ability, whether the person has the capability to utilise the loan ticket efficiently; 5) Psychometric and behaviour preferences which stood out to be the toughest job; 6) Interconnectivity and social connection, which infer his/her belonging community with representative financial trends; 7) Credit history, which will be analysed from repayment behaviour that took place in different digital platforms; 8) Legal data can be inferred using some of the non-conventional data.

Peoples' mobile usage behaviour means voice and data will be the core source of data to generate Alternative Credit Scoring (ACS) globally. Other social data as well as digital footprint kept by the end user will be used in our ACS model. However, none are sharing any data with us; it is like we will enter into a pool of data with the consent of the end user, we will "swim" in that data lake with our scoring model and leave the lake only with the score.

No data comes into our scoring system; only the results which are converted into a reference number in an encrypted mode goes to the end user. Eventually, the score will not be visible to us. If the end users wish to share it with the lenders, they will get to see it. That means we are using the end user's data with their consent and sending the score only to end user to make sure their financial inclusion. It is fully encrypted maintaining all the data privacy laws of People's Republic of Bangladesh. We will use the repayment pattern of utility bills or available proxy data and other necessary information which have financial significance in the model. This model will use real-time data and the score will be in real-time.

Mahbubur Rahman, Deputy Challenge Fund Manager, BFP-B

In our traditional approach, a bank takes about 40-50 days to complete the whole process of credit disbursement. But it can be managed within a day and the cost can be reduced to 1/10th of what the traditional model requires.

The total capital required by ShopUp was GBP 619,000 and by CRAB was GBP 742,000. For both projects, BFP-B has invested about 40 percent of the total capital. We are expecting ShopUp to create an impact through disbursing at least GBP 1 million loan from formal financial institutions to 800 women entrepreneurs within a span of two years. CRAB is in the process of implementing infrastructure and business development services to 1,700 MSMEs. At the end of the project, CRAB is expected to complete 20,000 ACS and also 750 MSMEs should be serviced with a loan equivalent to GBP 1.4 million. There was a survey on ShopUp clients by 60 decibels which found that 96 percent of the customers said no good alternatives are accessible and 82 percent felt financially stable after they started using the ShopUp platform and seven percent felt that their quality of life has improved. 75 percent of the ShopUp loan

receivers are from low-income groups with per day income of less than 500 taka.

Sahed Shams Azad, Chief Operating Officer, BRAC Microfinance Programme

When ShopUp approached us, we saw that they are trying to help the young entrepreneurs who don't have access to finance in the mainstream services. ShopUp is trying to build up a platform to

hook up these entrepreneurs, 40 percent of whom are women, which is perfectly aligned with BRAC's agenda of empowering women. Partnering with ShopUp significantly helped in tapping into a new customer segment in a different way and using machine learning in solving various credit assessment issues.

Shajed Al Haque, Senior Manager, Business Transformation and Head of Trade Business, Emerging Corporate at BRAC Bank Ltd

ShopUp is acquiring clients for us whom we traditionally wouldn't have lent to because the data source that we usually look into was not there. We started two months back with ShopUp and have already disbursed

about 3.5 million taka worth of loans to seven clients. In the traditional way, our sales guys go into a market, bring the clients to our underwriting guys, then visit the customer, audit the customer, then we process the file. In the new model, ShopUp is acquiring the clients for us, we don't need to bear the acquiring cost. Since we are getting the digital data, our underwriting guys don't need to visit the customers at all. However, we are required to collect wet signatures from the client.

In the pilot phase, we are trying to see whether the business data from ShopUp and the data that we get through traditional means are matching or not. In most of the cases, we found it more or less accurate. After a year of trying out this model, we can eventually move on to a more digital and non-physical kind of model where we don't even need to visit the customer and will get all the data from ShopUp.

Arup Haider, Head of Credit & Collection, Retail & Small Business, The City Bank Ltd

The alternative credit scoring model brings standardisation using digital data which is already captured in the system. We will learn from the experiences of ShopUp and BRAC on how to make the best use of the alternative credit scoring model.

On the acquisition cost issue, this came up when the ticket size of the loans became smaller. The assessment cost and underwriting due diligence cost are getting bigger in terms of percentage. If this same cost, 7,000 taka, was applied to a one crore taka loan, it would have been 0.1 percent. That would not have been of concern. When we started financing on the credit card platform for two-wheeler

loans, which is typically of 100,000 taka ticket size, this question came up. We found that the underwriting and due diligence cost is actually around 5,000 taka so if we add the collection cost it becomes 7,000 taka. Direct acquisition cost is around 2,000 taka. So how can we make this one lakh taka ticket size loan a profitable one? Then this question of alternative credit scoring came up. Can we do something on the basis of which we will get past all these rigorous processes of underwriting, client visiting, and looking for financials?

Gazi Yar Mohammed, Executive Vice President and Head of Innovation, One Bank Ltd

We want to offer digital learning plus end-to-end customer acquisition because we don't want our sales officers to visit the customers. The customer will be able to apply directly to our digital wallet. So here the challenge comes with wet signature and the requirement of a lot of documents.

Md Mohaiminul Hasan, Manager, SureCash

One of our biggest client's operational procedure is fully manual. We have been working with them to digitise their old service system so that we can incorporate our system into their platform. Our biggest challenge so far has been dealing with the financial transactions and histories that have been going on with the specific banks.

Md Sumbinal Islam, Assistant Manager-Strategy and Planning, SureCash

We are disbursing stipends among one crore 37 lakh mothers across the country. We are planning to provide credit facilities to them. CRAB and ShopUp can really help us in the assessment part of this venture.

M Manjur Mahmud, Director and COO, DataSoft

Regarding information about SMEs, I want to share that there are 10.26 million equity borrowers in DataSoft platform whose financial records have been digitally preserved for the last 20 years. Collaborating with organisations like us to get this qualified data can act as actual data points for a financier.

Fumiko Inada, CEO and Co-founder, Bee Informatica
We are still on the way to creating an alternative credit scoring model. I found Bangladesh to be a kind of pioneer in this

kind of scoring model. So far, I see the lack of alternative data as a big challenge for creating an alternative credit scoring model.

Jeremille Raton, Business Development Manager-Asia Pacific, Tixia

In China we are now pilot testing with the big banks and MFIs. Their disapproval rate of loan is about 90 percent. Using the mobile scoring platform that we developed for them, it is now possible for

these institutions to provide loans to many of the previously disapproved clients. It is still up to the financial institutions to decide whether to approve these loans or not but we give them the ability to see an alternative.

I see that the primary concern of other partners is whether you will be liable for the misuse of data. We have proven through our scoring mechanisms that the partners are risk-free and we are compliant with data protection and privacy laws.

Akond Mohammad Rafiqul Islam, Senior General Manager, PKSF

In our case, we process our data manually. We tried to install some digital systems but have not yet found a good one. Microfinance is related to income generation activity (IGA). When an IGA fails, they can repay in another way. But without correct credit scoring, recovering big amounts is very difficult.

Anannya Wahid Kader, Senior Financial Sector Specialist, Finance and Markets Global Practice, The World Bank

We have identified four broad stakeholders to promote alternative data-based lending practices. They are financial sectors, women-led SMEs, regulators and fin-tech companies.

When we talked to top financial institutions such as BRAC and IDLC, we learned that they have started alternative data-based lending on an ad-hoc basis. The major issue we have identified to mainstream is that the financial institutions broadly lack awareness and capacity on alternative credit scoring. Also, how can they incorporate the credit scoring models within their existing ones or do they need to develop a separate one? Such knowledge is missing.

The major barrier for financial institutions is the source of data. We have heard of many organisations that have a wealth of database. But they haven't received consent from individuals or SMEs regarding whether they are eligible to share this data with the banks.

When we spoke with the regulators like Bangladesh Bank, they asked us to come up with recommendations on how we can aggregate it.

Finally, there are fin-techs. We have spoken to them on a one-to-one basis and we have heard their offerings but we need more such organisations so that the banks can build their confidence on their credit scoring because other banks need to see the business case.

Afsana Islam, Private Sector Development Adviser, DFID

The banks need to have some level of confidence on the scoring model itself - the data points that are going to be used, whether those data points make sense to develop a credit score that is usable by the financial institutions. So, it's about bridging these gaps.

The information discussed here about disapproval rate is very interesting. If it is as high as 90 percent, there is an opportunity to test whether by using an alternative credit scoring model they can get customers from their already disapproved cases.

The other piece is the regulatory cost. We have sort of figured out that it is somewhere around one percent. Is there a way of reducing the regulatory cost and passing on that reduced cost as a reduced interest rate to the customers? I don't think this is any single provider's game. There has to be a holistic solution from multiple players.