MicroBank

MICROBANK'S PILOT ON PSYCHOMETRIC SCORING

Microbank

Objective of Good Practice:

Innovative scoring mechanism for thin-file clients in Spain using a psychometric grading methodology to reach "underserved" credit customers while achieving financial sustainability at the same time.

Timeframe of Good Practice:

2016 - Ongoing

Keywords:

Technology, Digitalization, Credit Scoring

Overview of Good Practice

By introducing the psychometric scoring methodology, Microbank is able to broaden its client base and offer loans up to EUR 25,000 to ¨thin file¨ customers who have no credit history, no bank track record, or who may have defaulted on their previous obligations in the past. The loans do not ask for guarantees as collateral.

The scoring methodology was developed in partnership with EFL (Entrepreneurial Finance Lab), a U.S. based fintech that builds risk assessment models using psychometric data to assess creditworthiness among thin-file customers. The methodology has evolved over 10 years, 6 of which included the commercial implementation. Spain was the fits developed market where this tool has been employed.

In practical terms, the client takes an interactive credit assessment that explores behaviour and attitudes on their electronic device (phone, tablet or computer). Traits are built into a 3-digit score that sorts customers according to two criteria: ability to repay the loan and willingness to repay the loan. Clients need an average of 25 minutes to complete the questionnaire.

Innovativeness

Microbank's customer base is not traditional in the sense that most of their customers cannot provide traditional information for risk-assessment (behaviour or financial data). Traditional banks use scoring models based on traditional data. That's why MicroBank cannot use traditional models to score their customers. The use of a non-traditional tool to be able to score non-traditional customers is an effective way to meet both the inclusive social goal and financial sustainability.

Outcomes

The pilot was launched within a small segment of business microloans (i.e. social microloan for self-employed clients wanting to start a business and who needed some help from social entities to develop their business plan) in July 2016 in Andalucía (south of Spain). By January 2017, the programme was deployed across Spain. As of September 2017, more than 2,100 questionnaires were completed and more than 1,000 loans were disbursed. Less than 0.1% fraud alerts were identified in the data thanks to a range of online controls that the tool includes to mitigate this risk.

Although it's still early to show a robust output, initial statistical tests say discriminatory power (measured by ROC ratio) could be in the range of 70-80% (compared to a 30-40% ROC offered by traditional models over the same "thin-file" population). This means that non-traditional data from underserved borrowers might offer nearly the same level of discriminatory power as traditional data for traditional customers.

In the future (when the model is up and running with a high level of accuracy), one can set up different risk policies aimed to optimize the credit process of these type of loans.

Institutional profile

Microbank is a social bank, subsidiary of Caixa Bank, that targets those customers traditional lenders do not: families facing adverse shocks and need financial support, self-employees starting up new projects, Micro and SMEs, Start-ups with an innovation component, Students willing to study in another European country. Understanding the characteristics of their target population, they do no ask for guarantees as collateral.

Type of Organization

Commercial Bank

Country

Spain

Products & Services provided

- Financial: Business microloan, Personal microloan.
- Non-financial: Financial education.

Gross Loan Portfolio

EUR 1.4 Billion
(As of July 2017)

Number of clients

190,000
(As of July 2017)

Target Audience

Urban Population, Unemployed people or people on welfare, Women, Youth, Ethnic minorities and/or immigrants, People excluded from mainstream financial services

Organization Website

https://www.microbank.com

Efficiency and Sustainability

With the tool, a lender can double the number of loans granted while keeping the default rate under control.

EFL's platform is also backed by machine learning, allowing the company's software to continually improve its risk modelling analysis by learning from its past evaluations and customer performance outcomes.

Lessons Learned

No traditional ways to include undeserved customers: if we want to include customers with no banking data and no collateral, we better start to "muddle through."

The decision making process should be faster in today's world where technology becomes quickly outdated.

In traditional banks with old governing structures, status quo bias might be a difficult to overcome.

For an MFI to adopt a model like this, it should have a critical mass of clients so that the credit model can be statistically sound.

There is no silver bullet to foster credit inclusion: non-traditional scoring tools like the psychometric should be complemented with a semantic approach, mobile and social data.

Once the customer is approved using non-traditional scores and is able to repay the loan, they can transition into the more traditional scoring models.

Further Readings

[Psychometrics as a Tool to Improve Screening and Access to Credit]

[How Financial Institutions and Fintechs are Partnering for Inclusion: Lessons from the Frontlines]

[FICO Financial Inclusion Initiative]