Algorithm Based Decision Making

FINSCORE Predictive Lending Model

Good practices from Microfinance Association UK

EMN Webinar
27 October 2020
11:00 – 12:00 CET

with financial support from the European Union
What is FINSCORE?

It is a statistical methodology used for predicting future behaviour based on historical experience.

It is a numeric expression of a client’s creditworthiness that is used by lenders to assess his or her probability to repay a loan.

It can help lenders to be more efficient and objective when making decisions on who to lend to and how much to give out.

Credit score – a number that represents an assessment of the creditworthiness of a person, or the likelihood that the person will repay a loan.
What makes FinScore Unique?

FinScore, developed by the Microfinance Association UK, combines both qualitative and quantitative data.

No need to make changes to existing lending software, FinScore is an add on.

Customized for microfinance institutions target market segment to make algorithm-based decisions.

Easy To Make Report
Association was set up in 2008
Request a Demo, Subscription.
Sign up
Rationale Behind FINSCORE

- Increase Financial Institution’s Profitability
- Decrease loan defaults/overdues and reach out to more clients at a lower cost.
- Improve organization’s efficiency and lowering operating expenses
- Provide loan officers with tools to make more efficient credit decisions and reduce losses
- Manage a larger and healthier credit portfolio with reduced arrears
Benefits of FINSCORE for Clients

- Faster Application Process
- Possible reduction in Loan Pricing
- Equal Objective Treatment of Clients
- Increased Access to Finance For More Clients
Benefits of FINSCORE for FIs

- Increase Efficiency and Profitability
- Reduce Risks
- Increase Outreach
- Increase Speed
- Increase Consistency
- Improve Client Selection
How FINSCORE Works?

FinScore results in a score and links it to the different risk indicators.

All lending processes remain unchanged. FinScore is an additional datapoint to be used in the evaluation of a loan.

FinScore can be customised to FI’s needs.

Over time, new data and recalibration will enable the algorithm to offer even more realistic indications of risk, resulting in better, faster, credit decisions.

FinScore can be linked to any business loan product.

The algorithm is hosted on a secure web application.

It takes 2-5 minutes to fill in.
Process

Application available using laptop, tablet and smartphone

1. **Login to the app**: Each loan officer will have individual user login.

2. **Fill in first the quantitative and then the qualitative credit scoring form**: Just click on the category, it takes less than 5 minutes to fill.

3. **Results**: FinScore shows the result along with risk category of potential client

4. **Dashboard**: It gives each FI its own credit scoring dashboard.
FINSCORE Demonstration

Fill in the loan detail

Application Date
10/10/2020

○ Repeat Client  ○ New Client

Name of Client  optional
Enter here

Reference ID
Enter here

submit
FINSCORE Demonstration – A Simple Click

Quantitative Scorecard

Monthly Income

Monthly income is less than USD 100

Monthly income is between USD 101-200

Monthly income is between USD 201-300

Monthly income is greater than USD 300

Next
FINSCORE Demonstration-Quantitative Scorecard Results

Your quantitative Score is : 96

<table>
<thead>
<tr>
<th>Favourable Credit Risk</th>
<th>If weighted points scored are 91% and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Credit Risk</td>
<td>If weighted points scored are 81% to 90%</td>
</tr>
<tr>
<td>Marginal Credit Risk</td>
<td>If weighted points scored are 71% to 80%</td>
</tr>
<tr>
<td>Unacceptable Credit Risk</td>
<td>If weighted points scored are less than 70%</td>
</tr>
</tbody>
</table>
FINSCORE Demonstration-Fill In Qualitative Scorecard

Qualitative Form

Character Assessment

- Poor
- Satisfactory
- Good

Rationale for assigning this ranking

Why you choose this answer?
Your Qualitative Score is: 71

<table>
<thead>
<tr>
<th>Credit Risk</th>
<th>Points Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable Credit Risk</td>
<td>91% and above</td>
</tr>
<tr>
<td>Acceptable Credit Risk</td>
<td>81% to 90%</td>
</tr>
<tr>
<td>Marginal Credit Risk</td>
<td>71% to 80%</td>
</tr>
<tr>
<td>Unacceptable Credit Risk</td>
<td>Less than 70%</td>
</tr>
</tbody>
</table>
**FINSCORE DEMONSTRATION – CUMULATIVE RESULTS**

**Result of Credit Points**

Cumulative credit score is: 88.33%

<table>
<thead>
<tr>
<th>Credit Risk</th>
<th>Weighted Points Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable Credit Risk</td>
<td>91% and above</td>
</tr>
<tr>
<td>Acceptable Credit Risk</td>
<td>81% to 90%</td>
</tr>
<tr>
<td>Marginal Credit Risk</td>
<td>71% to 80%</td>
</tr>
<tr>
<td>Unacceptable Credit Risk</td>
<td>Less than 70%</td>
</tr>
</tbody>
</table>

**Home**

[Image]
Qualitative Vs Quantitative Matrix

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable</td>
<td></td>
</tr>
<tr>
<td>Acceptable</td>
<td></td>
</tr>
<tr>
<td>Marginal</td>
<td></td>
</tr>
<tr>
<td>Unacceptable</td>
<td>Unacceptable</td>
</tr>
<tr>
<td></td>
<td>Marginal</td>
</tr>
<tr>
<td></td>
<td>Acceptable</td>
</tr>
<tr>
<td></td>
<td>Favourable</td>
</tr>
</tbody>
</table>
## Applying Score in the Credit Process

<table>
<thead>
<tr>
<th>Promotion</th>
<th>Credit Bureau Checking</th>
<th>Data Collection</th>
<th>Reference Checking</th>
<th>Evaluation</th>
<th>Approval</th>
<th>Client Follow-up/Collections</th>
<th>Renewal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Officer (LO) contacts possible clients directly in the field</td>
<td>MFI check client financial history in Credit Bureau (if available)</td>
<td>LO collects client business and personal data in field</td>
<td>Call Center checks client references</td>
<td>Credit Analyst conducts financial analysis and makes recommendation</td>
<td>Credit Committee decides to approve or reject the credit</td>
<td>LO follows-up on client and participates in the collection process</td>
<td>At end of loan tenure, LO contacts client for potential credit renewal</td>
</tr>
</tbody>
</table>

### Selection Score

### Bureau Score

### Evaluation Score

### Collection Score

### Renewal Score
Sources of Input

- Socio Demographic Data
- Behavioral Data
- Pschometric Data
- Credit Bureau Data
- Big Data
- Possible Risk Indicators Post COVID 19
Cost of Deployment

It is subscription based.

Size and Turnover of the organization comes into consideration

Data → Credit report → Scoring model → Credit score

780
Thank you for your attention!

To know more, get connected:

https://www.european-microfinance.org/

Ommara Raza Ali, Director Europe and Asia, Microfinance Association
UK/Financial Inclusion Consultant: ommararaza@gmail.com

Author of “Microfinance, the Way Forward-Post COVID 19”

Thought Leadership Paper that talks about:
- The theory of “The Pendulum Shift”
- Current Challenges faced by MFIs Post COVID 19
- New Business Model Proposed for Microfinance