

Simplifying the loan approval process in lending

Business objective

Process Optimization

Sector

Finance

Context & objectives

A **company active in the B2B lending sector** wanted to refine and automate part of its lending decision process.

The evaluation performed by a dedicated team of analysts was long and time-consuming: it could **take up to 8 hours per case**. Prioritization and automation of the financial demands were becoming urgent due to the growing number of loan requests.

The client wanted to exclude, before analysis, cases that were highly likely to be refused, accept those cases which were very likely to be accepted, and get further insights into the key determinants of loan approval.

With this objective in mind, Agilytic's set out to reduce the internal teams' workload by simplifying the lending approval/disapproval process.

Approach

Based on our extensive experience in the banking sector, we looked to achieve the objective and deliver more value by creating sectoral/ecosystem indicators.

By classifying companies according to one of Europe's 27 sub-sectors, we determined the indicators correlated to the financial health (e.g., risk of bankruptcy) of the company for each of the sub-sectors (specific approach). For instance, solvency and depreciation ratios are relevant for capital-intensive companies, while liquidity and inventory ratios are more relevant for retailers. Then, we could position the companies already financed by the client and the new applications.

In terms of indicators, we used balance sheet values to ensure the generality of our findings, such as:

- Solvency
- Short/long-term debt ratio
- Trade receivables ratio
- Cash flow after tax
- Liquidity
- Cash flow and retained earnings
- Inventory turnover
- The gap between customer and supplier payment terms

The advantage of this approach is that it gives a greater richness of analysis and can more precisely identify certain companies' shortcomings. The approach can also be automated and give relevant benchmarks to improve the sectorial understanding of the client.

We divided the project into three phases to select relevant indicators by sub-sector.

In the **first phase, we identified the most important variables that drive the loan approval** (solvability, margin, turnover, quick ratio, etc.).



In the **second phase**, our analysis was based on a **representative sample of historical loan applications made by the client**, both accepted and refused. We identified the most important variables that drive the financing decision (e.g., accounting variables, sector, age) and defined “accept” thresholds above/below which financing is favorable.

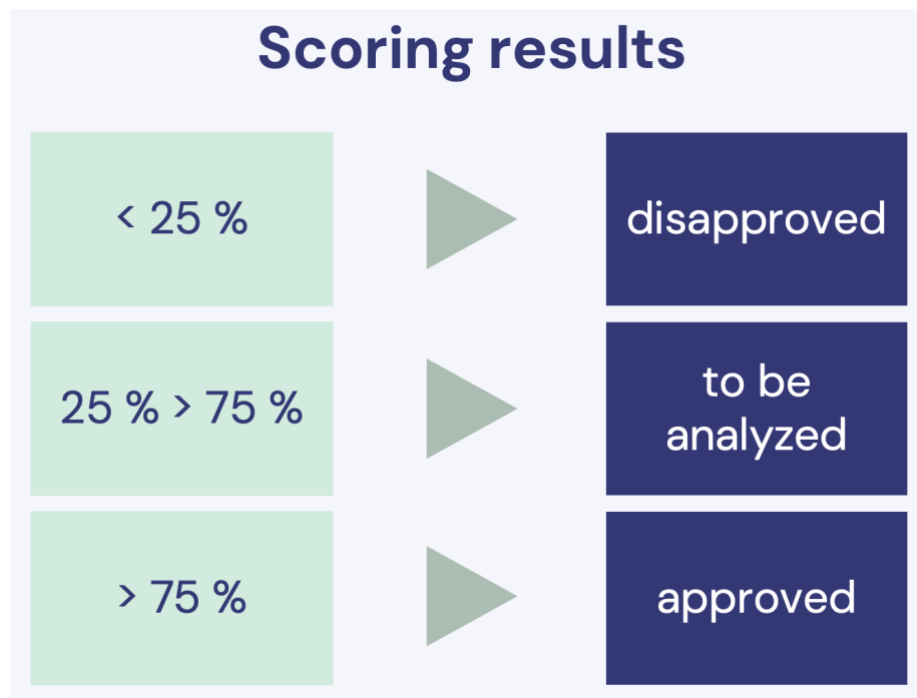
Lastly, we created a rating model giving a score from 0 to 100% to new loan applications. Each rating provides an explanation so that internal teams can interpret the reasoning behind the score. The rating model leads to an automatic approval or disapproval of the case or flags for further investigation.

Results

In less than two weeks, we delivered the following results:

- More accurate lending decisions: the model significantly reduced the risk of defaults while increasing the number of loans.
- Improved team's productivity reducing the allocated time per lending request from 8 hours to 4 hours, a 50% reduction.
- Safer ROI for the financial institution's backers.
- Easier onboarding of new collaborators thanks to a common set of rules.

The automated loan application and rating system helped our client save time and improve their own clients' qualification and onboarding process.



About Agilytic

Since 2015, Agilytic helps innovative leaders solve their biggest challenges through the smarter use of data. With over 150 successful projects to date, we have perfected a pragmatic approach to putting data at the service of business goals, be they commercial, operational, financial, or human. Reach out today for a quick introduction, we'd love to hear from you.