Risk Classification and Loan Modeling Accelerator

Accelerate and enhance your Small Business Association (SBA) loan application assessments

Between the COVID-19 economic recovery and low-interest rates, more small businesses want to borrow through the Small Business Administration (SBA) network than ever before. With a **high volume of loan applications**, SBA partners face challenges using the data they collect to **accurately and efficiently evaluate risk and model loans**. This causes application backlogs delaying loan distribution and leaving lenders vulnerable to changes in borrowers' risk profiles.

The Risk Classification and Loan Modeling Accelerator uses predictive analytics and machine learning to estimate the optimal loan size that the SBA will approve for a given applicant. This enables lending partners to process loan applications and make data-driven lending decisions quickly.

Challenges

- **Reliance on manual and low-tech application processing** creates backlogs and errors.

- **High volumes of loan applications** lead to further bottlenecks and delays.

- **Delayed loan distribution** can cause applicants to lose critical business opportunities.

- **Inability to quickly run and re-run risk classification** limits the accuracy of assessments.

- **Lack of efficient loan modeling** makes it difficult to determine exactly what the SBA will approve.

> In 2021, [30% more](#) Americans applied to start new businesses than before the pandemic—a record number of small businesses with access to SBA loan programs.*

Benefits

Automate processes to ensure compliance with SBA guidelines.

Improve customer experience and increase customer retention.

Accelerate the loan approval and rejection process.

Support small businesses and the chain of industries dependent on them.

Right-size loans to increase the likelihood of complete and timely payments.

Easily launch using a pre-built, pre-configured accelerator.

*The White House: "Fact Sheet: The New Small Business Boom Under the Biden-Harris Administration", January 2022

Quickly assess risk and qualifications to streamline SBA loan decision making

Ingest and transform

Loan application data and SBA criteria are aggregated and prepared for ML model.

Analyze and predict

Model predicts the SBA loan amount the applicant will most likely be approved for.

Visualize and decide

View holistic analytics reports for one or multiple borrowers in SQL, Power BI, or custom dashboards.

Lender uses Synapse Analytics and ML to streamline operations

Situation: A capital markets financial services company **needed to process loan applications more efficiently**, make approval or denial decisions, and determine loan sizes for those they approved.

Solution: The lender leveraged Azure Synapse Analytics and Azure Machine Learning to **customize a big data analytics and predictive modeling** accelerator to streamline its loan underwriting operations.

Impact: The accelerator significantly **improved the accuracy** of the organization's loan modeling, increased loan underwriting operational efficiencies, **reduced defaults**, and **decreased their risk**.

Speed time to SBA-approved loan decisions

Kick-off	Proof of value	Proof of concept
Learn more about the **Risk Classification and Loan Modeling Accelerator** and see a demo.	Optional accelerator code walk-through and prototype creation based on sample data for testing.	Proof of concept (POC) is built with support of specialists and partners. MVP is scaled for deployment.

With demo data create a POV in 1-3 days.

With your customer data and a prep session, create your POC in 2-5 weeks.

How to get started

Contact your Microsoft specialist for a demo and to discuss prerequisites, next steps, and your questions.

Microsoft Azure