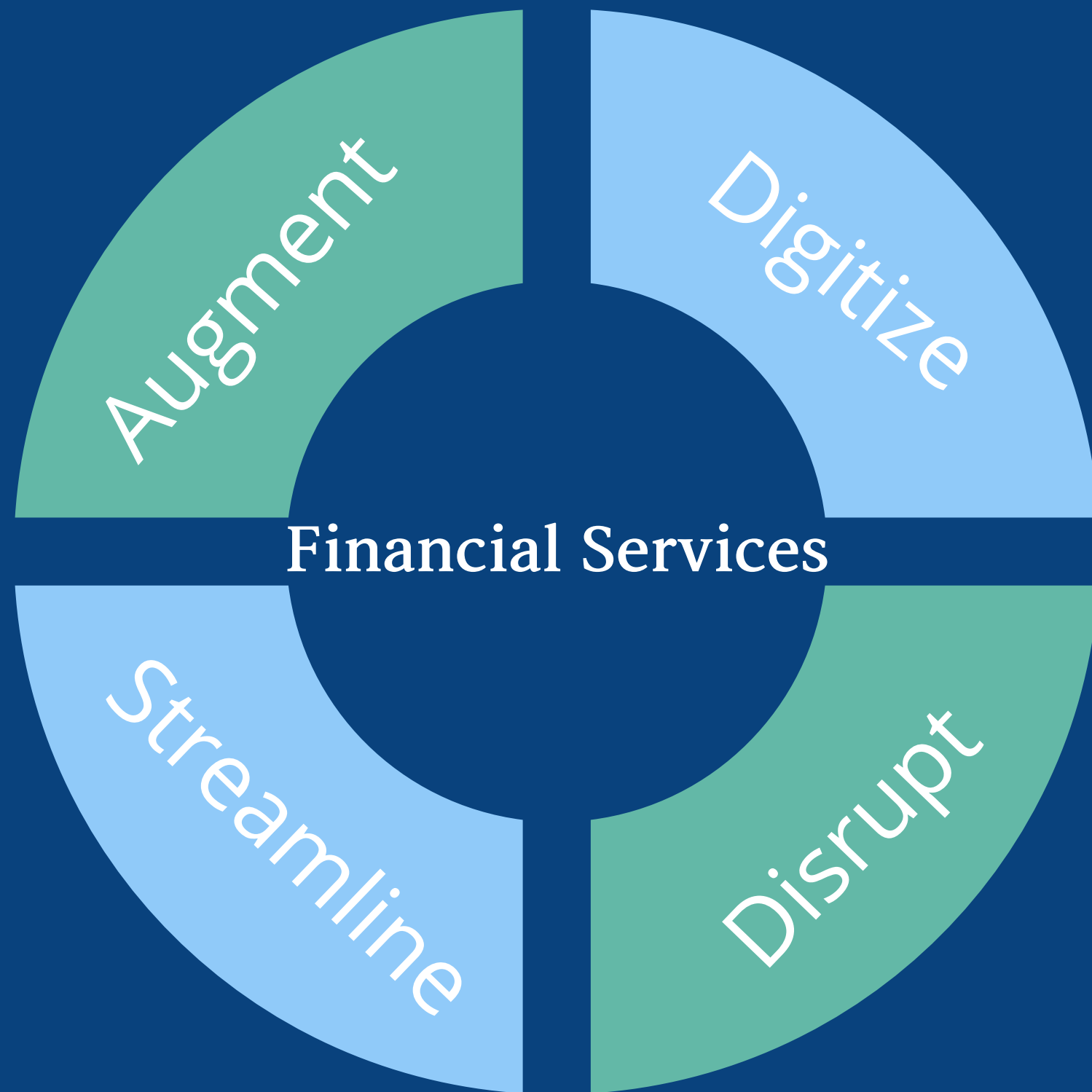# Swift Loan

IE MBD
Financial, Fraud & Risk Analytics
Team D: A. Black, D. Cheng, A. de Roni, F. Mansilla, D. Pedersen
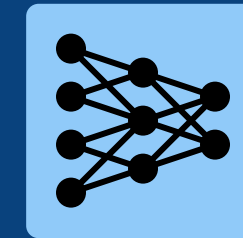
Agenda

- What is a Fintech?
- Business Model
- System Architecture + Demo
- Improved Machine Learning Model
- Why You Should Use Swift Loan

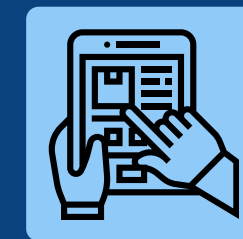# What is a Fintech?

Financial Services

Augment
Digitize
Streamline
Disrupt

Software / Hardware

Algorithms

Applications

Tech Concepts
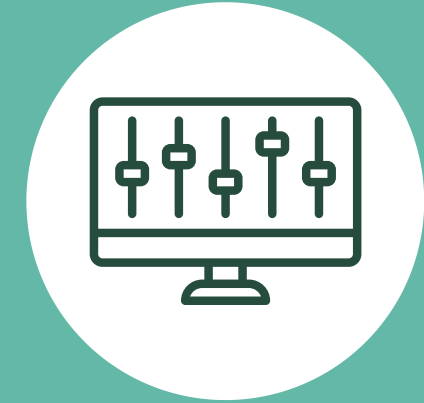
Business Problem

WHAT

Lenders need to accurately predict who will default

WHY

More powerful model = more profits

HOW

Input parameters given by borrower + machine learning

Useful information + transparency

Swift Loan:
"The only fintech that banks love"

Our Customers:
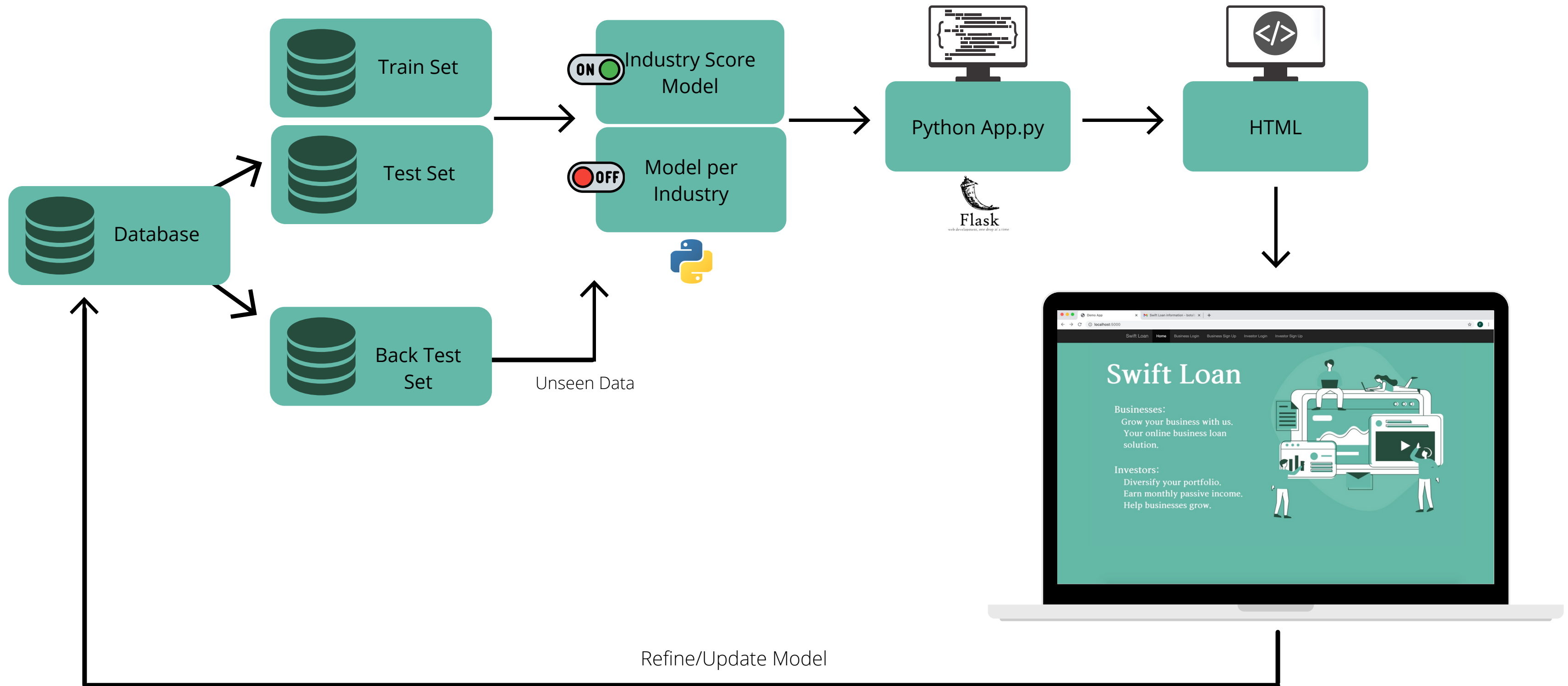Lenders

Our Business:
B2B Subscription Model

Our Promise:
Better Results at Lower Costs

System Architecture + Demo

pythonanywhere

Database

Train Set

Test Set

Back Test Set

Unseen Data

ON Industry Score Model

OFF Model per Industry

Python App.py

Flask
web development, one drop at a time

HTML

Swift Loan

Swift Loan | Home | Business Login | Business Sign Up | Investor Login | Investor Sign Up
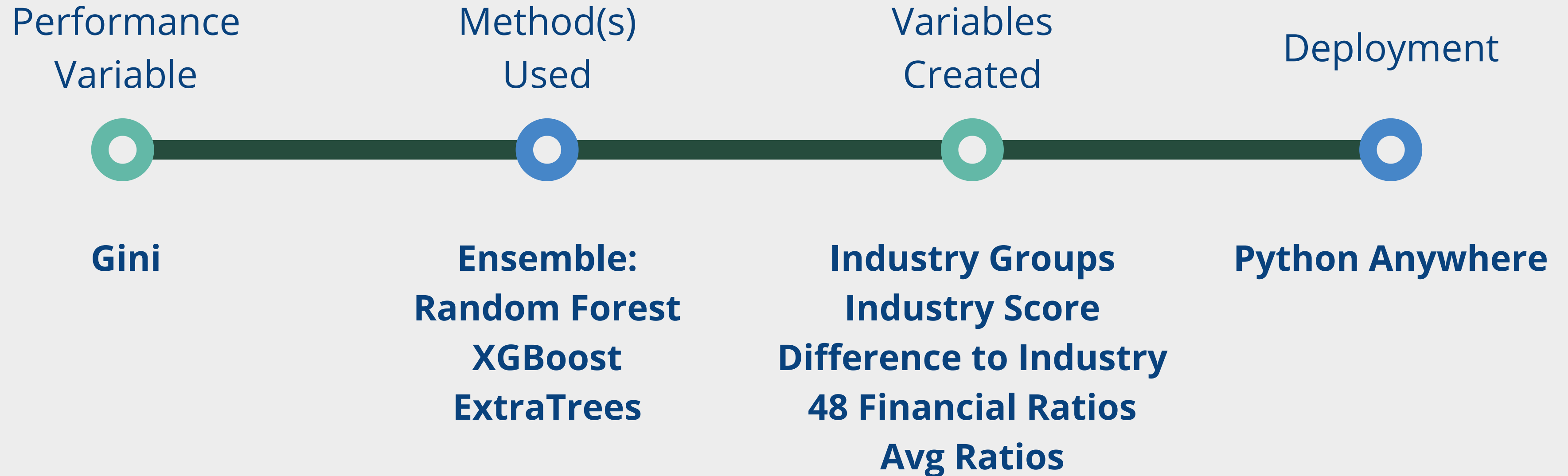
Swift Loan

Businesses:
Grow your business with us.
Your online business loan
solution.

Investors:
Diversify your portfolio.
Earn monthly passive income.
Help businesses grow.

Refine/Update Model

Machine Learning Model

Performance
Variable

Method(s)
Used

Variables
Created

Deployment

Gini

**Ensemble:
Random Forest
XGBoost
ExtraTrees**

**Industry Groups
Industry Score
Difference to Industry
48 Financial Ratios
Avg Ratios**

Python Anywhere

Monitoring & updating our Model

- Continuous update of model
- Metric to asses: Gini score

Why Swift Loan?

	Swift Loan Approach	Business Results
Costs	Fixed monthly costs, no surprise fees	Less costs and more profits
Expertise	Dedicated team of experts making constant upgrades	Stay ahead of the technology curve
Sustainability	Monthly updates with aggregated data	More, better data means more powerful models

"A mid-sized bank might generate additional profits on the order of about **$4.8 million** per year after adopting a moderately more powerful model." (Stein)

Why Swift Loan?

Unbundled

Alternative Solutions
User-centric
Accesible

Untangled

Simple
Flexible
Future-Ready

Thank You!

We welcome your questions

Appendix: References

Roger M. Stein,
The relationship between default prediction and lending profits: Integrating ROC analysis and loan pricing,
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Further improvements

- Collaborations with cloud providers
- More analytics within the app
- Fine-tune user experience
- More performance metrics