Should Lenders Use Machine Learning To Predict Small Business Default Risk?

How machine learning, and specifically augmented data discovery, create better predictive models for lenders looking to assess small businesses loan risk.

LOS ANGELES, CALIFORNIA, USA, February 3, 2021 /EINPresswire.com/ -- Small businesses looking for loans today have more choices than ever. Online providers are lowering barriers to entry, making it easier and faster to apply for credit. The trouble is, this also means more credit for the risky borrowers. A risk that is, of course, passed on to lenders.

Machine Learning for Lenders

But what's a lender to do? Raising the bar across the board means shutting out potentially valuable customers who will take their business straight to the competitors. Failing to improve standards increases the chance that a significant proportion of these new customers will default on their loan repayments.

Meanwhile, old-school indicators like lending histories and company financials only offer part of the picture. They don't take into account domain knowledge. They don't help lenders figure out where the gaps in their understanding are or what datasets they should look at to fill them.

The answer isn't over-caution; it's to be smarter about how lenders calculate and predict risk in the first place. Risk modeling today is a data science problem. Basing risk models on artificial intelligence — specifically, machine learning (ML) — offers a way to address these complexities, creating safer application and approval processes.

ML elevates risk models in three key ways:

It reduces the costs associated with false positives and negatives

Making the right decisions means accessing the right data. With an ML risk model, organizations

can look beyond limited, internal, historical data and take into account any relevant, up-to-date external data sources that aid decision-making.

This may sound very complex and sophisticated, but the beauty of ML is that a) it automates processes wherever possible and b) continually learns and improves its predictions, the more data that is fed into it. In other words, organizations can scale up and incorporate as many new data streams as they like without adding significantly to their workload. What's more, rather than overloading the system with bigger and bigger datasets, the more quality data fed in, the more help for a model to perform better. A machine learning risk model, by its very nature, becomes more effective the more it is used and the more up-to-date, accurate data it receives.

Quality is the key element here, rather than quantity: the need to consistently feed the model with good data, rather than just shoveling in more and more. An organization might have troves of their own data, but if all it's saying is the same thing, then their models won't evolve and get better at their tasks.
All of which boils down to this: using ML gives fewer false positives and false negatives. Fewer loans granted to those applicants that aren't a good fit for credit. And more loans for those who may look risky at first glance but are actually financially sound.

It adds nuance to default risk models

Using a rules-based system may help lenders learn from past mistakes and successes. And it may eventually, painstakingly lead to the right decision. But this is far from an elegant, effective solution. Often the process is convoluted and completely lacks nuance or context. The system is also designed to spot red flags rather than subtle weaknesses; to reward solid credit histories rather than to predict future success.

A risk model driven by machine learning, on the other hand, means the ability to trawl external datasets for valuable insights and choose better signals to feed the model. This allows for the contextualization of what is already known about the customer, gaining a complete and nuanced understanding of their history, behavior, and the risks associated with taking them on.

With a machine learning model connected to the right external datasets, companies can:

Take into account broader industry trends that indicate how a business like theirs will fare in the future.
Explore sales patterns and demographic information in their specific area.
Use figures on business rates and average rental costs in their zip code to assess how well equipped the company will be to survive, should business slow down for a month or two.
Enrich the data on their investors or funders to see the success rates of other startups in their portfolio.

All of which would help predict with far greater precision the chances of this small business

defaulting on their loan repayments.

It helps create a fast, reliable approvals system

As we've seen, the more data fed into a machine learning model, the more accurate predictions become, and the more reliable the decision-making process will be.

But there's more. By adopting this approach, organizations not only get better results; they also get them much faster. They can make lending decisions quickly and with confidence.

Final thoughts: predicting risk in a chaotic world

With a global business landscape this unpredictable, the case for machine learning in risk models has never been clearer. There is simply no way that either internal historical data or an outdated rules-based system are equipped to make sense of risk in 2020 or beyond.

To get the insights required to make accurate, reliable lending decisions, organizations don't need rule-based systems. They need tools like augmented [data discovery](#). This gives access to up-to-the-minute, relevant data on everything related to this small business, its product, the performance of the industry, and the mood and behaviors of its potential customers. There is a need for models that combine signals and data from across the spectrum to tease out patterns and risk predictors which might never have been considered otherwise.

Explorium offers a first of its kind [data science platform](#) powered by augmented data discovery and [feature engineering](#). By automatically connecting to thousands of external data sources and leveraging machine learning to distill the most impactful signals, the Explorium platform empowers data scientists and business leaders to drive decision-making by eliminating the barrier to acquire the right data and enabling superior predictive power.
For more information, visit www.explorium.ai

Shelby Blitz
Explorium
[email us here](#)

This press release can be viewed online at: https://www.einpresswire.com/article/535219173