

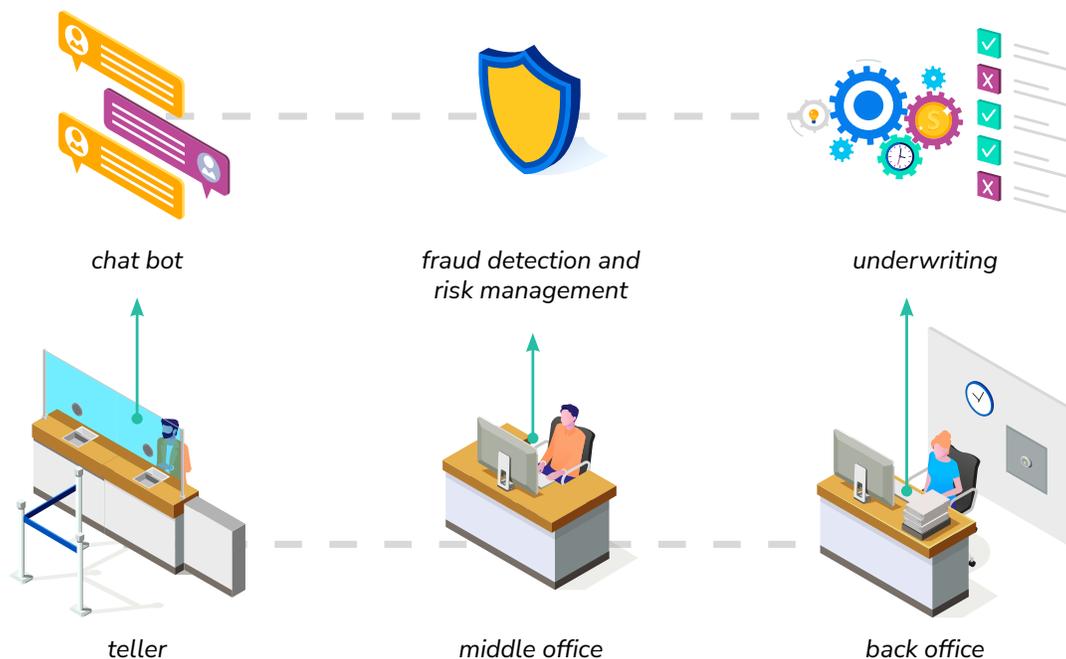
Alkami

A Guide to AI Predictive Modeling for Financial Institutions



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In simple terms, artificial intelligence (AI) means using technology to do things that usually require human intelligence. It combines computer science with large sets of data to enable problem solving for many industries. For financial institutions (FIs), AI can be the key to growing at scale. AI can impact the FI's entire workflow: from front office to middle office to back office.



“AI is an umbrella term that refers to any methodology in which machines or computers emulate decision-making capacity based on available data like human operators. Machine learning is specifically the application of AI in the form of algorithms to enable automated tasks. A key attribute of machine learning is that as it churns more data, it learns and makes better decisions over time.” - Intel

The creation of AI predictive models to support advanced analytics can be done in a three-phase process. Models use various types of algorithms to recognize patterns in a data set and draw conclusions in a manner that emulates, but surpasses, human ability and expertise. Simply put, AI modeling is the creation of a decision-making process, too taxing for a single human brain, that can be automated.

1 Data Prep

While AI can help identify predictive elements within large data sets more effectively than an individual human analyst could, a predictive model still relies on quality data inputs. Clean, organized, and well-labeled data sets are an essential element to building an effective predictive model. Garbage in, garbage out, as is often said.

An FI has a wealth of account holder data that can be used to make strategic business decisions. Transaction data, payments to other institutions, and product and channel utilization behaviors all paint an incredibly detailed picture of a consumer's past and future — the problem is accessing and understanding the data.

Taking an FI's unwieldy core and transaction data and transforming that into a well-labeled and contextualized data set, takes an expert skill set. Best practice for preparing data for analysis is to tag each account holder with a set of metadata, that describe the account holder based on their transaction and banking behavior. Data prepared in this manner is the ideal input to the predictive modeling process.

2 Build a Predictive Model

Building a predictive model involves first identifying a population within your current data set that has the attributes that you want to model. Think of it as pulling a list. If you wanted to build a model of account holders likely to leave your institution, you'd pull a list of those that had already left your institution. Then, the model is built by analyzing all the data elements associated with the members of that list. The result is a model that can be used to predict account holders who are likely to leave in the future. In simple terms, AI is looking at the past to understand how to predict things that will occur in the future.

The right data partner will use automated processes to sort through tens of thousands of data points predictive of whatever business operation your FI wants to model a solution for.

3 Deploy the Model

Finally, once a model is built, it can be used to score existing account holders. If an account holder's data matches what the model is looking for, that account holder will be flagged as positive for whatever the model is trying to predict. This is how the predictions are made. In order for financial institutions to truly operate at the speed of data, the ideal data partner will be able to deploy a model that is continuously scoring account holders. No list pulls, but a true connection between the data source and the model, revealing new opportunities or threats on a daily basis.



The Opportunities Are Clear for Financial Institutions

AI isn't a nice-to-have anymore. It's a competitive advantage that data-driven FIs should be harnessing now. [As of 2021 only 10%](#) of small to mid-sized banks and credit unions identified as using AI data frequently. Last year, despite 75% of surveyed banks with over \$100 billion in assets actively using and implementing AI, [only 46% of surveyed banks](#) with less assets said they were actively using AI strategies.

Using AI allows FIs, of any size, to identify opportunities and scale their retention and revenue growth efforts. In the past, to successfully implement AI modeling in an FI, an in-house team of data professionals would need to endeavor for months in development.

This perpetuated the common misconception in smaller banks and credit unions, that AI modeling was too costly or too complicated of a project for them to take on.

Alkami challenges that mindset. The truth is, AI modeling is no longer out of reach for regional and community FIs. Two of the most common use cases we have developed AI models for are for attrition and cross sell.

Attrition Model

Attrition, or the loss of an account holder, is a major factor hurting FIs that accounts for a significant reduction in gross revenues every year, just how significant depends on the individual FI. An attrition model should analyze key indicators such as banking behavior, account history and merchant spend patterns to identify

account holders that have a high-risk of leaving your FI in the near future. Using this model, an FI can flag those account holders as "Attrition Risk Positive" so they can implement actions and offers to hopefully turn those high-risk individuals into long-term loyal account holders.

With AI powered attrition monitoring, FIs are able to activate a business recovery strategy which learns and adapts to trends in their unique ecosystem.

Cross Selling

Another key benefit of AI modeling is the opportunity to cross-sell account holders at the right time.

Using insights from account holder transaction data, FIs can identify and target those who are most likely to positively respond to new product offerings. Through this AI process which spots behavior trends, FIs are given an ideal audience which would feel understood and catered to when offered a mortgage refinance, credit card, auto loan, or other product or service offer that is relevant to them.

Contact Alkami Today!

AI isn't reserved for the big banks with massive tech teams and budgets. AI is a necessary strategic tool for any financial institution looking to increase revenues and stay ahead of the competition.

What problems are you having that you're currently unable to solve? [Contact](#) Alkami today for a consultation and demonstration of our powerful data tools changing the way banks and credit unions approach their businesses every day.