

An Ultimate Guide To Credit Scoring Software Development



The ground rule for any lender is to check if a borrower is credible enough to provide them with a loan. Banks and financial institutions have long been successfully using various credit scoring models for that. However, a number of rising challenges in the financial sector due to the Covid-19 pandemic such as ROE decline and reduction in loan investments around the globe as well as the necessity to bring in new clients required financial institutions to use a more flexible approach to lending. That's why many of them are starting creating using credit scoring software today.

Credit scoring software allows banks and financial institutions to effectively expand their client bases while preserving the lending risks at a low level.

McKinsey Global Institute (MGI) [found](#) that the widespread use of alternative digital financing could boost the annual GDP in developing economies to about **\$3.7 trillion** by 2025.



Therefore, more and more companies are considering utilizing an alternative to conventional scoring models – AI-based credit scoring software.

In this article, you'll find out what is a credit scoring system, what are the main benefits of this type of software, and how to implement it in your FinTech solutions.

Traditional Credit Scoring vs Alternative Scoring

Before we get to the differences between traditional and alternative scoring, let's find out what credit scoring is and why it is important.

Credit scoring is a process of evaluating the creditworthiness of borrowers for providing them with a loan. When scoring is performed, an applicant receives a three-digit number that stands for a score. If the score is high, then financial institutions provide the borrower with a loan, though if it's low then lending is highly likely to be rejected.

Any customer interested in their score can check it as well as banks and various financial organizations once they gain their client's permission.

Traditional Credit Scoring

There are a number of conventional credit scoring models around the world. Let’s have a look at the most popular ones in the US as an example. They are FICO and VantageScore. Both have much in common though they pay attention to different factors for determining a credit score.

FICO

FICO is the most popular scoring model in the US developed in 1989. It’s used by more than 90% of top lenders in the US. FICO offers diverse types of scoring. For example, if a customer wants to get a loan for a car, they should check their FICO AutoScore whereas an application for a credit card will require checking FICO Bankcard Score.

When determining a score, the major factor FICO relies on is payment history. The score range in FICO is usually the follows:

- Exceptional – 850 - 800
- Very good – 799 - 740
- Good – 739 - 670
- Fair – 699 - 580
- Poor – 579 - 300



VantageScore

VantageScore is a competing model with FICO created in 2006. Just like FICO, VantageScore also offers its users several suites depending on the loan purpose. Along with this, different suites include various factors for tracking credit behavior, e.g. VantageScore 4.0 model includes trended data in its scoring decisions.

When determining a customer’s score, VanateScore focuses mainly on the customers’ credit card balances and credit utilization ratio. The score ranges include:

- Excellent – 850-781
- Good – 780-661
- Fair – 660 - 601
- Poor – 600 - 500
- Very poor – 499 - 300



The credit scoring models aren’t limited to only FICO and VantageScore which provide their own scores, though they are heavily based on these two most popular models.

Alternative Credit Scoring

An alternative scoring model derives from conventional scoring methods and statistical techniques that are effectively enhanced by digital innovations. It means that lending organizations don't have to request scoring data reports from credit bureaus. Instead, they can use the latest digital technologies to gather and evaluate customers' digital footprint.

Utilization of credit scoring software solutions is effective when conventional bureau data is unavailable, there is little access to diverse data sources, or when borrowers fall into the group of underbanked consumers. When these situations occur, lenders experience difficulties in the proper evaluation of loan risks.

How FinTech Companies Utilize Alternative Credit Scoring

Lending companies are becoming more interested in credit scoring software today. It allows lenders to expand their customer bases by shifting their focus from credit-worthy clients to potential customers who would gain low scores in conventional scoring systems. This way, companies can offer loans to those people who have no credit histories or bank accounts, e.g. students, freelancers, households with low income, unbanked people, and others while being assured that they will pay back their [loans](#) on time.

The FDIC in its Survey of Household Use of Banking and Financial Services states that **5.4%** of the US households which is equal to **7.1 million** were unbanked in 2019. The US [states](#) look encouraging when comparing them to the percentage of the unbanked population worldwide by country. According to Statista, there are **71%** of the unbanked population in Morocco, **69% in Vietnam**, **67% in Egypt**, **66% in the Philippines**, **63% in Mexico**, and the [list](#) just keeps going.



Another reason that more and more lending organizations are considering switching to alternative credit scoring is a sudden outbreak of Covid-19 pandemics in 2020. The pandemic rose a tide of unemployment and led to a significant drop in income in households. As a result, many people couldn't apply for loans due to the reduction in their scores. In the attempts to overcome the financial crisis brought by the pandemic, more and more lending companies turn to credit scoring software development. It allows them to use a more flexible approach in the evaluation of borrowers' loan risks and offer their services to a broader number of clients.

New Technologies in the Lending Industry

While data from credit bureaus can be insufficient as it usually takes bureaus some time to receive customers' data, credit scoring software processes data practically in real-time. This becomes possible due to the latest digital innovations that software developers use to create credit scoring applications. They include Big Data processing, Artificial Intelligence (AI), Machine Learning (ML), and others.

- **Big Data tools** process massive amounts of raw customer data and find the pieces of information suitable for scoring;
- **Artificial Intelligence and Machine Learning** identify patterns in various data types, analyze the data, predict outcomes, and determine borrowers' credit scores.

By using advanced analytic tools based on AI and ML, lending companies receive the most accurate and up-to-date information on their consumers' scores.

When evaluating a credit score, the software gathers and processes with algorithms a borrower's online activity data. This data includes alternative data sources such as phone bills, utilities, rental payment history, transaction data, and others. This way, alternative credit scoring software creates a "point of lending trust" where the companies that have the borrower as their customer trust them to pay their bills timely and, therefore, prove their creditworthiness.



Credit scoring software can go further than just estimating payments and bills. It can also examine the borrower's position at work and guess their income level, determine the value of their assets as well as check social media, emails, and subscriptions to online services to gather any payment-related data. For example, to ensure that a borrower really exists as a person and can be entitled to a loan, credit scoring software checks their activities online. If a person is registered on LinkedIn and has a detailed profile there, moreover, they have a Spotify subscription, the chance that they are a white-collar professional is rather high and white-collar employees usually have good scores.

Key Advantages of Alternative Credit Scoring

Alternative credit scoring offers a wide range of advantages both to lending organizations and their clients. Here are the key benefits they can expect from this type of software.

- **A comprehensive view of a customer**

Credit scoring software provides a more complete picture of each lender's client, by focusing on their current financial data as well as social behavior. Thus, the software creates a more holistic understanding of a borrower's client, indicating their readiness of paying back their loans.

- **Data-driven decisions**

Credit scoring software gathers and processes more client data than that one that reaches credit bureaus. It means that lending companies can use more client data sources to decide whether to provide an applicant with a loan. Moreover, they can customize their scoring, ensuring that more people can be entitled to a loan.



- **Instant data on scores**

Credit bureaus that gather consumer credit data usually obtain the information in some time intervals. This way, data can differ from bureau to bureau. Credit scoring software, in its turn, processes customer data in real-time, eliminating any human factor from the process. Apart from that, loan providers don't have to spend time requesting customer information from bureaus, receiving all the data almost instantly.

- **Easier accessibility to crediting**

Conventional scoring systems are rather rigid. They don't consider many factors for lending, e.g. consumers with a thin credit file. This deprives a wide range of potential borrowers of lending services. Credit scoring software has a more flexible approach to measuring the creditworthiness of loan applicants. Therefore, a wider public can be qualified for a loan and successfully obtain it.

Credit Scoring Software Development Process

Those companies and startups that consider investing in [financial software development](#) and creating their own credit scoring software solutions, should be well-prepared for that. They need to carefully allocate their software development budget, find the needed resources, and elaborate a detailed implementation plan.

The implementation plan will ensure that all the software-development processes will go smoothly and the company won't waste any budget or resources on unnecessary features or changes in their software.

Here are the steps companies need to include in their credit scoring software development process:

1. Creation of a credit scoring model

This includes gathering all the relevant external and internal data and combining it in such a way as to create a statistical credit scoring model.

2. Measurement of a default likelihood

At this step, the lender should identify the characteristics a borrower should possess that would indicate their inability to repay their debt.

3. Establishing risk classes

This involves determining the risk classes and their threshold values as well as creating measures that should be applied to each class in case a borrower won't comply with the established rules, e.g. application refusal, modifications of payment terms, adjustment of interest rates, etc.

4. Backtesting and calibration

When performing software implementation it's important to verify that the credit scoring achieves the desired target based on client data. Backtesting involves testing and adjustment of scoring systems that include classifications, credit scores, managerial advice, and others.

5. Application in practice

At this stage, lenders implement the scoring system as a part of their risk management in practice.

6. Monitoring

This includes documenting and monitoring credit and debtor data and their payment activities in order to keep technical maintenance of the scoring system and fulfill effective measurements of credit risks.

Conclusion

Credit scoring software is more often observed as an alternative to conventional scoring models. This popularity is explained by several factors – the Coronavirus pandemic that caused a serious crisis in the global economy, resulting in an inability of many households to apply for loans; the urgent necessity of lending companies to expand their customer bases; a large percentage of the unbanked population around the world.

Inflexible conventional scoring systems eliminate large categories of people from lending, including students, low-income households, people with little credit history, and others. Credit scoring software effectively addresses these groups, allowing lending companies to offer their services to a larger number of people. This is possible due to the implementation of the latest digital technologies in credit scoring software solutions such as [Big Data](#) processing tools, AI and ML.

Credit scoring software is becoming one of the mainstream solutions in the FinTech industry. If you're also considering developing a custom credit scoring solution, SCAND software development team is ready to help you with that. Our [software development specialists](#) have a strong background in FinTech development and over 20 years of experience in the international software development market.

Feel free to contact us and ask any questions: info@scand.com