E-BOOK

ZEST AI

PRESENTS

A TALE OF TWO 700s

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INTRODUCTION

A better way with AI-automated underwriting

Credit unions want to be able to accurately and fairly lend to their members. However, the gaps and gray areas in a given member's risk profile, particularly in the middle credit tiers, often make it more difficult to accurately assess each member. These middle-tier applications will often need to be manually reviewed, opening the door for inconsistent decisioning due to inherent, and usually unintentional human bias.

There is a better way. AI-automated underwriting.

AI-powered underwriting allows you to dig deep into each member, use more data and better math to accurately assess risk, stay competitive, and increase your efficiency. Through this ebook, you'll learn:

- Why traditional scoring models are obsolete
- How AI-powered underwriting assesses risk
- Why AI-powered underwriting is smarter, more inclusive, and more efficient than traditional scoring models

Let's take a closer look at two members, who are from the same community, have the same industry score, but are very different in terms of their financial needs and level of risk. AI-powered underwriting can help us more accurately assess each of these members, and your credit union can best decide how to serve them.

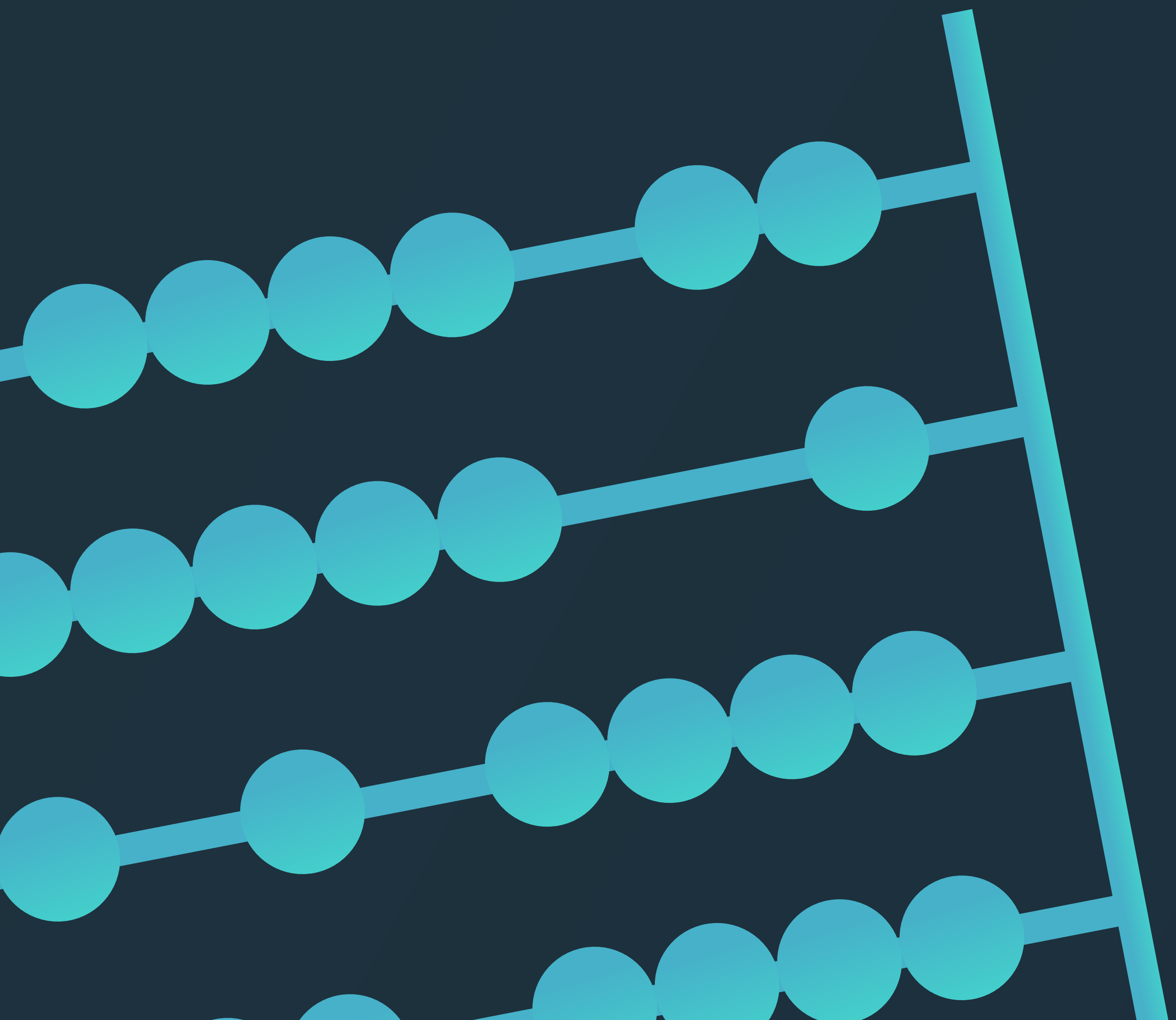
Meet Ben. He's a 36-year-old teacher who lives in Los Angeles, California and loves his pet golden retriever.

Meet Darcy. She's a 45-year-old registered nurse who lives in Los Angeles, California and is a single mother of two boys — a 10 year-old and an 8 year-old who love to play soccer.

Ben and Darcy don't live very far from each other, but they have different needs and lifestyles. Both have come to your credit union for an auto loan. Ben is thinking of buying a new car for his commute to work. Darcy wants a bigger car so she can join a carpool group with her sons' soccer teams.

CHAPTER ONE

From traditional scoring models...



01

Across financial institutions, traditional credit scoring models don't provide a clear picture of a potential borrower when it comes to credit underwriting. These industry scores often leave borrowers in the gray area of middle credit tiers — or leave them out completely. A report from the Consumer Financial Protection Bureau revealed that one in five American adults are difficult or impossible to score, leaving millions out of the equation entirely.

Without a clear, accurate picture, underwriters can miss an opportunity to lend to borrowers who are actually low-risk and in-need of that loan. As a credit union, you want to say yes to more members and make smart lending decisions, which can be difficult to accomplish with limited and inaccurate scoring methods.

Industry scores are also based on limited national data, despite the United States having different proportions of diversity regionally. For instance, members in Hastings, Nebraska have different financial needs and habits from members in New York or in Las Vegas. Already, Ben and Darcy are being scored against data that isn't considering their own communities, potentially putting both of them at a disadvantage.

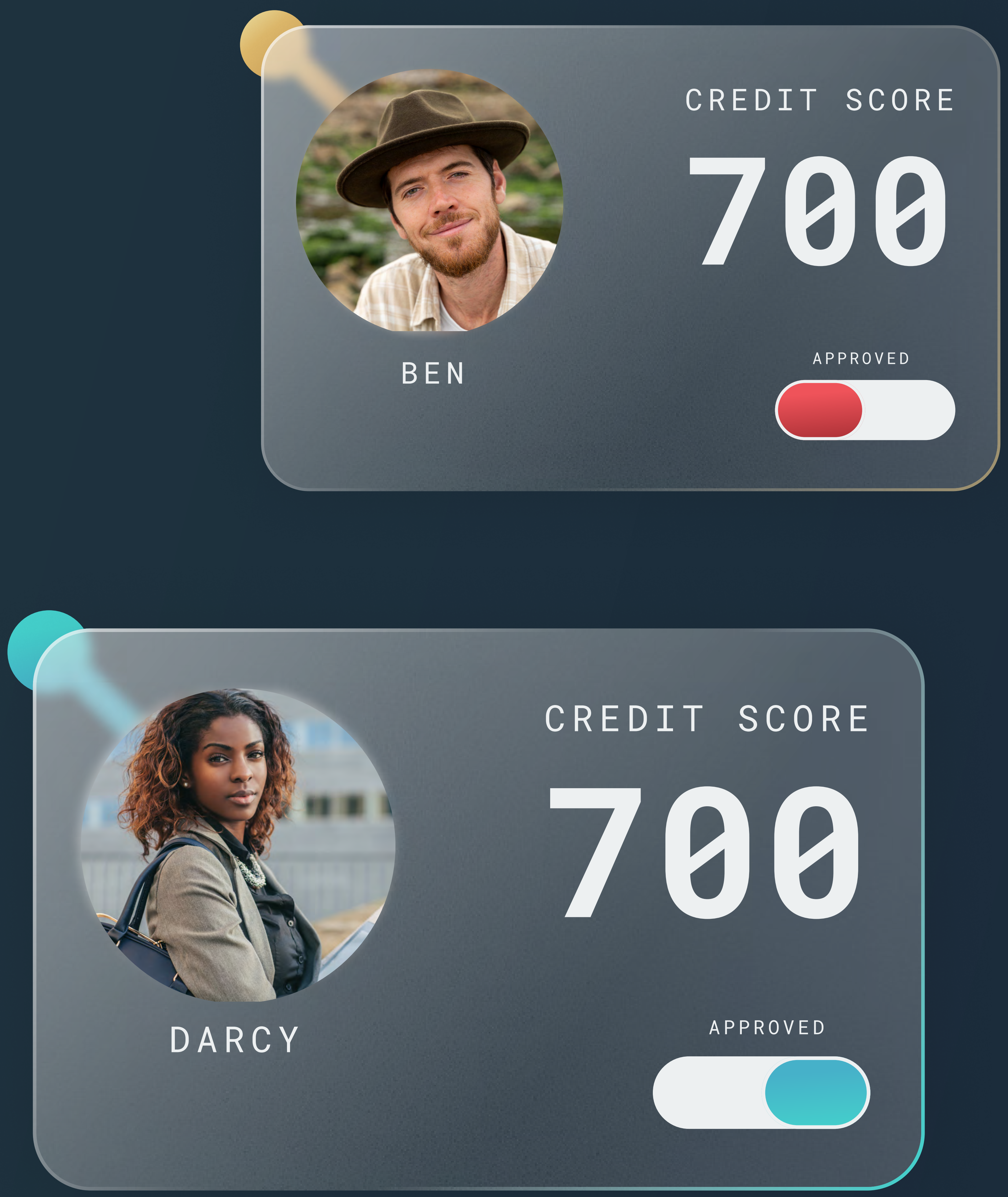
Furthermore, spending time on manual reviews isn't just time-consuming, it leads to inconsistent decisioning. Because Ben and Darcy's credit scores fall into the middle tiers, it's likely that their files will need to be manually reviewed. This introduces human bias into the lending process.

For example, a loan officer may look at Ben or Darcy's zip code and decide they will or won't qualify for an auto loan because of the loan officer's preconceived notions about the neighborhoods they live in. In this case, Ben and Darcy wouldn't be considered individual members with their own unique credit histories, but as stereotypes based on where they live. The inconsistencies could be left up to even more arbitrary factors — the underwriter could be having a great day and approving more loans, or a bad day and becoming more aggressive in decisioning.

INTRODUCTION

Both received an industry score of 700. With traditional scoring models, these two members appear to carry the same level of risk. As a credit union, you want to say "yes" to more members, but find both of these members to be in a middle tier, gray area.

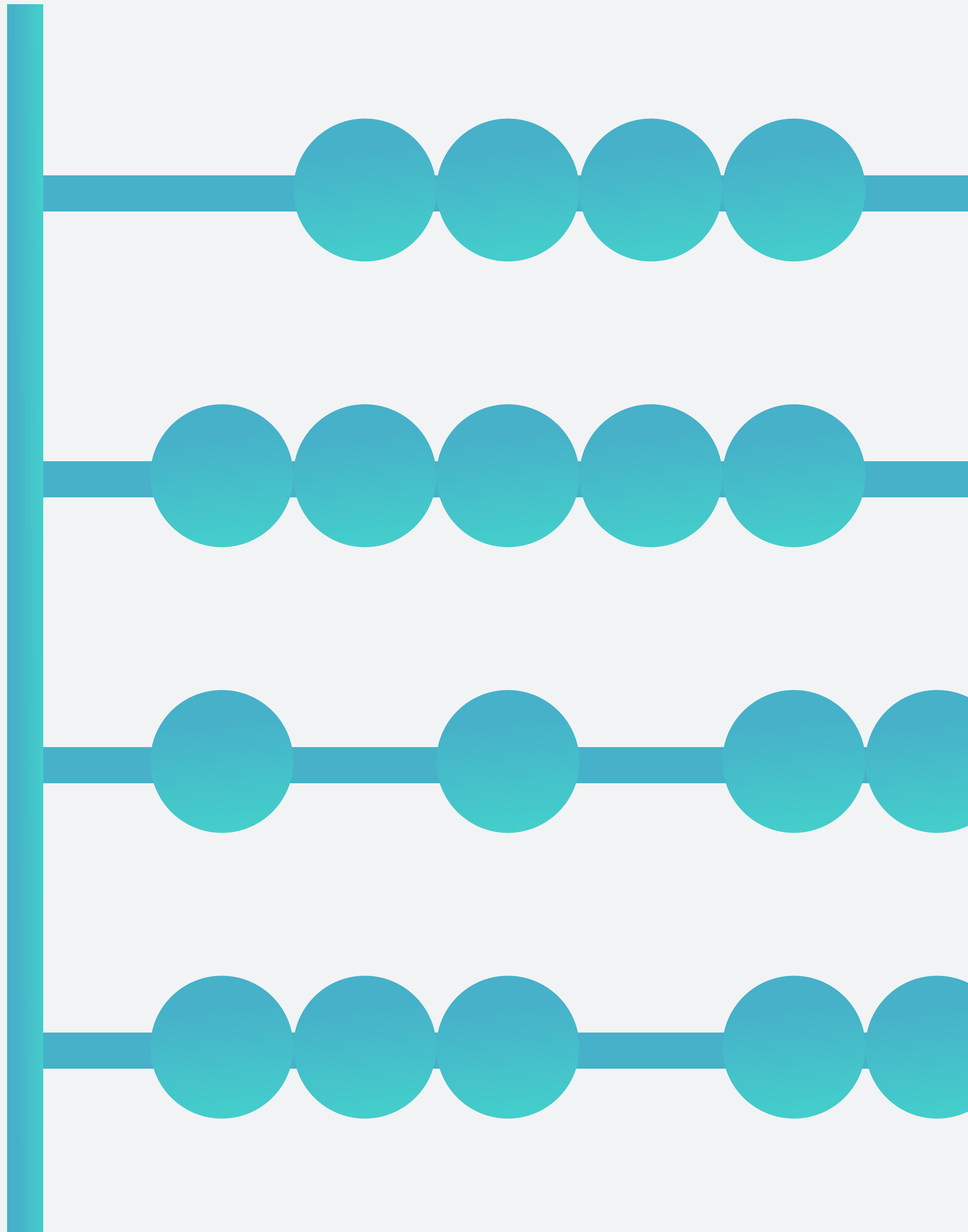
Ben and Darcy are, in fact, on opposite sides of the credit spectrum. However, the good news is that your credit union can still instantly decision their loan qualification through an accurate, fair risk profile, using AI-powered underwriting. But how did Ben and Darcy appear so similar? Let's dig in…



> “Efficiency and automation are also critical in delighting members – Zest AI’s 2020 Harris poll revealed that 74 percent of credit union members believe a credit decision should be instantaneous.”

If credit unions take 30 minutes or longer for a significant percentage of their applications, they’re not being competitive.

To ensure consistent, accurate, and equitable access to credit for all of your members, the way we underwrite credit needs to evolve. Credit unions, at their core, are people helping people — and using the right technology can help make the vision of saying “yes” to helping more members possible.



CHAPTER TWO

... to AI-automated underwriting

02

If credit bureau data looked like personal — not financial — information, traditional scoring methods would look like taking a snapshot of a person on a single day. We could see some details in the photo, like hair color or clothing choice, but it wouldn't really tell us a story.

In contrast, AI-automated underwriting methods, like the technology of Zest AI, would be more like a movie montage of a single person over two or three years. Now, we have a much richer and detailed story, showing each person's journey, how they've grown or changed over the years, and providing context for their financial needs in the present day.

AI-automated underwriting can deliver deep insights and accurate credit analysis for more of your members. Using a credit union's existing credit bureau data (not alternative data), Zest AI can tell a much deeper story — showing trends over time, finding connections between data points, and making accurate predictions about each member. Instead of looking at each individual on the surface, AI-automated underwriting can dig deep.

Let's return to Ben and Darcy, who both initially received an industry score of 700. When Zest AI uses more data and better math, we find they're on opposite ends of the credit spectrum: Darcy's updated score is 800, and Ben's updated score is 630.

How did their scores end up being so different?

National credit scores — which scored both Ben and Darcy at 700 — ignore regional differences and barely scratch the surface of available bureau data, only leveraging about 20 data features. Zest AI learns more from the same credit report, turning thousands of inputs into approximately 300 data features with machine learning.

Those 20 data features used by national credit scores include inputs like the number of inquiries, length of credit history, or credit utilization. To simplify how traditional scoring uses data, consider a static snapshot of credit utilization that adds weighted inputs — A, B,C, etc. — to arrive at a linear borrower credit score. These inputs are shallow and static indicators of credit risk.

On the other hand, Zest AI uses around 10,000 raw data points from a credit report and delivers around 300 data features to assess a person's credit risk, allowing for more relevant and accurate scoring.

> "In fact, Zest AI's technology can accurately assess 98 percent of American adults."

Additionally, Zest AI ensures that no feature or combination of features is a proxy for race or protected class. The result is a much more accurate and fair lending insight.

CHAPTER TWO

More data and better math

Let's compare the methods behind traditional scoring and Zest AI, using Ben and Darcy's credit card utilization as our example. Both Ben and Darcy have four credit cards with a $20,000 credit limit and around $7,000 in balances, utilizing about 35 percent of their limit.

To simplify how traditional scoring uses data, consider a static snapshot of credit utilization that adds together weighted, linear inputs — like payment history, inquiries, and credit utilization — to arrive at a credit score. In the case of Ben and Darcy's credit card utilization mentioned above, they both appear to carry the same amount of risk. At the time of this credit score, they have similar balances and utilization. But traditional credit scoring methods generally only take about 30 days worth of data into account when deciding someone's credit risk.

Zest AI, on the other hand, digs deeper into credit bureau data. After assessing data trends over a longer period of time than the industry methods, our machine learning algorithms make for a more powerful and accurate risk assessments. By examining trends over time, non-linear correlations between relevant and client-tailored data sets arise to deliver a high-definition member picture. For example, the Zest AI algorithm takes into account that:

- **Darcy has been paying down her balance significantly, and frequently, and her newest credit card is more than three years old.**
- **Ben just opened two of those credit cards in the last two years and his balance has been trending up over time.**

The result of this extra data (along with other data insights) is an incredibly accurate risk assessment that underwrites Ben with a 630 credit risk profile and Darcy with an 800. While your loan officers might want to take a second look at Ben, your credit union can auto-decision Darcy's loan application approval.

Machine learning models take more data, features, correlations, and connections to generate an incredibly accurate score for your members, enabling you to say yes more often and find extra time for members who need a helping hand.

CHAPTER TWO

The Zest AI advantage for your credit union

"Experian estimates as many as 40 percent, or approximately 120 million Americans, have scores below 700."

Think about how many of your members, like Darcy, who are reliable borrowers, but your credit union isn't lending to them due to outdated scoring methods. Zest AI can accurately lift loan approvals by 20 percent or more than the industry standard, without changing a credit union's risk tolerance.

Use more data and better math to provide efficient, accurate, and inclusive credit underwriting to your members. More of your Bens and Darcys that traditional scoring methods place into the middle and lower credit tiers will be able to be more accurately scored. Low-risk borrowers stuck in lower tiers will be able to get the credit they deserve, and those higher-risk borrowers will be better identified and can get the help they need from to improve their risk profile.

Zest AI also sets the standard for transparency and regulatory compliance, delivering end-to-end explainability in model risk management and fair lending reporting. You can help your members and ensure your credit union delivers the fairest credit decisions on the market.

CONCLUSION

Discover smart, inclusive, and more efficient lending with Zest AI

When deeper lending insights and better calculations inform your decisions, more of your members can get the credit they need and the help they deserve. Less risky members stuck in lower tiers can move up, thin files can be accurately assessed, and risky members are easier to spot and easier to help. Decision more members like Ben and Darcy confidently, accurately, consistently, and efficiently.

ZEST AI

About Zest AI

Faster decisions, expanded access, happier members — Zest AI is a tech company on a mission to make fair and transparent credit accessible for everyone. Since 2009, Zest AI has been innovating and perfecting AI credit underwriting technology. A CUSO since 2021, Zest has over 100 credit union customers, has partnered with the credit union leagues, is running over 250 active models, and is helping our customers better serve over 13 million members across the country. Zest aims to make best-in-class AI underwriting technology available and accessible to all credit unions.

SMART

Lend confidently and make better credit decisions with deep, accurate lending insights.

INCLUSIVE

Help the underserved and ensure all of your members get a fair shot with inclusive, equitable lending.

EFFICIENT

Deliver more decisions faster with powerful AI, without increasing underwriting resources.

Visit us at zest.ai or contact us at hello@zest.ai to learn more.

ZEST AI