

Application: 26454

RealPage, Inc.

Started at: 8/1/2019 12:20 PM - Finalized at: 9/13/2019 08:23 PM

Page: Contact Information

Your Company's Role

Internal: We are applying on behalf of our team

Company Being Submitted For Consideration

RealPage, Inc.

Company Contact First Name

Jonathan

Company Contact Last Name

Breakstone

Company Contact Email Address

jonathan.breakstone@realpage.com

Company Contact Job Role

Sales

Street Address

2201 Lakeside Blvd.
Richardson Texas 75082 US

Page: Company Information

Region of Company Headquarters

North America

Size of Company

5000+ Employees

Industry

Computers/Technology/Internet/Consumer Electronics

2018 Revenue

\$250,000,000 – \$499,999,999

Projected 2019 Revenue

\$500,000,000–\$749,999,999

Company Website

<https://www.realpage.com/>

Company Facebook

<https://www.facebook.com/realpage/>

Company Twitter

<https://twitter.com/RealPage>

Company Instagram

<https://www.instagram.com/realpageinc>

Page: Project Information**In one sentence, state the mission of your company:**

Our mission at RealPage is to provide our global real estate industry clients with software, services and data analytics enabling them to outperform their industry peers.

Describe the innovations you achieved in 2019 to advance your mission:

RealPage AI Screening

RealPage AI Screening is a revolutionary solution—both technological and human in scope—that screens applicants who are looking to rent an apartment. Traditional methods provide important data derived from applicant credit reports, but, in addition, AI Screening predicts which applicants will be good renters or higher-risk renters with much greater precision.

RealPage's AI Screening machine learning predictive algorithm is the foundation of the first-ever tenant screening system that not only identifies a prospect's capability to pay rent but also his or her willingness to do so. This data- and technology-enabled innovation reduces industry operating losses and could potentially drive an estimated increase in real estate asset values of over \$8 billion.

Accurate prediction is critical: One third of all Americans today are renters. This represents over 100 million people, including millions of families with children and pets who need a place to call home.¹ The tenant screening process must treat this many people equitably.

Creating a vastly improved screening method was imperative for our clients and renters. AI Screening provides that method, which fulfills our mission by delivering remarkable value to everyone we serve.

¹Source: National Multifamily Housing Council, 2019 <https://www.nmhc.org/research-insight/quick-facts-figures/quick-facts-resident-demographics/>

Explain how your company's innovations connect to larger issues within your industry:

The story of RealPage AI Screening follows two intertwining paths. The first is a path to prediction that is disrupting the entire multifamily rental industry's concept of screening. The second is a path to people that addresses societal needs to create a fairer way to identify good renters.

The path to prediction began with an assessment of multifamily rental industry screening methods currently in use. RealPage Resident Screening and Data Science teams saw that existing credit reporting-based screening methods, while useful, had not been significantly updated in a decade, with no improvement in predictive quality. The teams' advances in data science, Artificial Intelligence and renter behavior analysis opened a new road to greater predictive precision. In 2019, RealPage launched RealPage AI Screening, the first and only AI-based applicant scoring model built specifically for the multifamily industry.

RealPage AI Screening pairs data science and machine learning techniques that combed through more than 30 million actual lease outcomes to evaluate renter performance over the course of a lease. RealPage's massive proprietary database, augmented by consumer financial data, was core to the screening algorithm's success in exceeding the performance of all other models available in the industry. The scoring model continuously learns and is updated with data and outcomes to dramatically improve predictability regardless of economic conditions in the market.

Existing credit-based models measure the ability of a renter to pay. RealPage AI Screening also considers willingness to pay, utilizing financial data, behavioral data and patterns within that data to obtain greater specificity. This risk assessment model proves to be superior at predicting a renter's likely outcome, resulting in a potential cost savings to the industry in excess of \$400 million annually and potential savings to current RealPage screening clients of about \$100 million per year if they all use AI Screening. A \$100 million cost savings would drive an increase in asset valuation in excess of \$8 billion.

A key challenge to the adoption of machine learning and AI by property management companies is gaining their trust in a new technology. To ensure client confidence, RealPage determined its screening model's capabilities through testing and piloting by industry leaders. Highlights included extensive randomized testing with over 750 property management customers in over 7,500 sites, observing over 1 million applicants in more than 100,000 conventional apartments.

Today, more than 2.5 million units are actively using RealPage AI Screening to better assess renter risk and predict ability and willingness to pay rent, and thus avoid financial loss.

Explain how your company's innovations connect to larger societal issues:

The second part of the RealPage AI Screening story is about building a path to people that offers a fairer process for apartment rental applicants who may have previously had difficulty renting. Complicating this issue is the growing risk to property management companies of not meeting fair housing compliance requirements, which may skew resident selection decisions.

Property management companies desired far more accurate screening models to accomplish the increasingly demanding task of resident selection. RealPage AI Screening provided a breakthrough solution to create a significantly more equitable process for potential renters and the predictive specificity property management companies require to avoid risks.

RealPage developed industry-specific insights that showed that combining the financial-based ability to pay, which existing screening methods determine, with the behavior-based willingness to pay creates a risk assessment model with significantly improved predictability. The benefit to good renters is a better chance to be approved.

The AI Screening model features the capability to assess rental history—behavioral and payment patterns that drive predictability. The model also takes into account evolving applicant trends such as the increasing number of people with no or little credit history (thin files). Historically, renters with a thin file or no file would be excluded from successfully obtaining a lease.

RealPage has completely transformed the method by which rental payment history is considered. AI Screening looks at consumer patterns, both behavioral and transactional, that drive predictability using both positive and negative payment data. The proprietary rental history database—more than 30 million records—contains explicit and itemized lease information such as move-out balance, damages assessed and payment behavior. These elements allow the software to reward a number of thin-file applicants.

RealPage AI Screening treats debt-to-income liabilities differently from current models, another innovation. Existing models do not distinguish different kinds of debt-to-income data, weighting high- and low-risk liabilities similarly. However, long-term, low interest debt (like student loans or car payments) are not the same as higher-risk, revolving debt (like credit cards) or short-term loans at higher interest rates. Considering the differences in various types of debt allows AI Screening to more accurately assess applicants based on greater specificity in their financial lives. By reducing the impact of educational loans, AI Screening provides an opportunity for previously discounted demographics to be considered.

Finally, RealPage AI Screening uniquely assesses rent-to-income data, preventing some applicants from gaming the application process. Too frequently, prospective renters falsify true income data and "sneak" through application processes. These criteria are deprioritized within RealPage AI Screening, so applicants who inflate their stated income in their applications will be less likely to be approved based on this falsified data as compared to traditional screening models.

Please cite 2019 metrics that reflect the impact your innovations have had on your company:

The launch of this new innovation has been the most successful, widespread product roll-out in RealPage's history. Within the last 6 months, RealPage has gone from a pilot with 5 clients to having over 2.5 million apartment units and hundreds of clients actively benefiting from using AI Screening. In addition to the tremendous value creation for our clients, RealPage has been able to create a profound competitive advantage in what had previously been a commoditized business.

Please delineate any metrics that reveal the positive impact your innovations have had on your industry, and the culture at large:

Average savings from reduced bad debt of \$31 per unit per year, with no decrease in occupancy. This translates to a potential annualized impact of approximately \$100 million if all current RealPage screening customers use AI Screening. \$100 million in operating efficiency equates to an \$8 billion increase in real estate market valuation.

Who worked on the project?

Team Members

Company: RealPage

Name: Richard Hughes

Title SVP, Data Science

Company: RealPage

Name: Matt Davis

Title SVP, Financial Services

Company: RealPage

Name: James Hilliard

Title VP, Screening

Company: RealPage

Name: Pavithra Ramesh

Title Senior Product Manager, Data Science

Company: RealPage

Name: Anne Hollander

Title Director, Strategy

Page: Category Selection

Which Categories Best Describe Your Innovation (\$795 / fee per category)

Data Science

Page: Confirm Entry Finalization

You can go ahead and pay now so your entry is saved in our system, and then continue working on the content as often as you'd like until the final deadline of September 13.

However, if you'd like our editors to begin reviewing your submission right away just let us know it is ready for judging by checking the box below.

Finalize Entry

Ready For Judging