## Problems

#### Time and labor costs

Preparing practice tests consumes a significant amount of time and effort sometimes stretching over several man-months. In the case of our e-learning platform, <u>Shikaku Square</u>, a single paper can cost between ¥500,000–¥1,000,000 (\$5,000–\$10,000).

### Inconsistent quality

Matching the difficulty of official examinations isn't easy, and test writers at varying levels of expertise will inevitably produce widely divergent practice papers.

### Missing the forest for the trees

An examinee's ultimate goal should be to gain real-world experience in order to advance in their career. It's easy to lose sight of this when passing exams becomes the goal in and of itself.

# Solution

Miraimon's AI analyzes past-year papers and predicts questions for the upcoming year. These questions double as practice tests for your students, saving you the expense of preparing your own practice tests from scratch.

Miraimon uses deep learning to categorize textual data from past-year papers, textbooks and the Internet at large. It then identifies yearly trends for each of these categories and compiles a set of categories likely to appear in the upcoming examination.

## Effects and Results

Miraimon accurately predicted 78% of the questions appearing in the Japanese Real Estate Transaction Agent Examination in 2018. In 2019 it predicted 74%. Both times this exceeded the 70% needed to pass. In a 2018 survey, 62.1% of respondents agreed that Miraimon had been able to simulate the official examination, and that it had a positive effect on their chances of passing. The next year, approximately 20 thousand examinees used Miraimon, and 79% of the examinees registered with Shikaku Square passed the Real Estate Transaction Agent Examination.

In 2019, Miraimon accurately predicted 60% of Japan's Preliminary Bar Examination.

## Return on Investment

 $\frac{36,400,000\,JPY}{5,000,000\,JPY} \times 100\% = 728\%$