Case Study:

20 x increase in accuracy of customer targeting

Leveraging AI in consumer sales and marketing

Sumitomo Mitsui Trust Bank, which is actively using digital technology to transform its business operations, introduced dotData to build more precise targeting when selling financial products to potential clients. By using AI to identify customers who are likely to have a high closing rate for financial products, they have succeeded in increasing their close rate. In addition, sales, marketing and product planners who do not have advanced data science skills can now construct AI models leveraging "feature values" used in model construction can demonstrate the usefulness of AI, increasing buy-in from sales representatives.

"It is easy to test hypotheses without specialized skills, and dotData is a very useful tool for promoting business-led AI applications."

- Keisuke Kondo
  Data Management Team Assistant Director, Retail Business Planning Department, Sumitomo Mitsui Trust Bank, Limited

https://dotdata.com

CHALLENGES

- Building target lists manually had too many constraints and limitations.

- Few people in the company had both data and business knowledge

- Existing AI statistical tools were difficult to use and took too much time to conduct analyses in a timely manner

- Undocumented skills of outstanding salespeople needed to be structured and shared with others

How to Improve Targeting Accuracy for Individual Customers

Sumitomo Mitsui Trust Bank, Limited plays a central role in the Sumitomo Mitsui Trust Group as a specialized institution that handles banking and trust operations in an integrated manner. The company operates a wide range of businesses, targeting retail and corporate clients, asset management, as well as real estate.

In recent years, the company has been actively engaged in digital transformation (DX), with the utilization of digital technology and development of digital human resources as major pillars of its mid-term plan. Masahiro Nagao explains the company's DX direction, saying, "We are accelerating our digital strategy with four pillars: "Challenge new technologies, Advancement and expansion of data science, Advancement of business infrastructure "and "Reskilling human resources.".

One of these initiatives involves using AI to provide services to individual customers. Target clients are the elderly, who pass on assets and businesses to their families, such as inheritances and trusts. In addition, in recent years, the company has developed digital channels such as smartphone applications and has focused on targeting the "asset building demographic "who intend to create assets for the future in their 30s to 50s. The goal is to provide comprehensive financial solutions through consulting services for all generations, from middle to senior.

Mr. Keisuke Kondo says that AI has been used early on to support sales activities of such products for individual customers.

"In the past, we used to create a target list based on experience, focusing on customers who had time deposits that had not yet matured and customers who had investment products.

However, as customer needs and attributes change and the pace of change accelerates, the company needed to improve the accuracy of targeting to provide total solutions that accurately responded to diversifying customer needs. One way to do that is to use AI. " says Mr. Kondo.

The company adopted dotData's automatic feature engineering technology to gain a deeper insight in customer behavior

Since 2016, Sumitomo Mitsui Trust Bank has piloted a statistical tool using AI machine learning in order to further analyze data on clients' trends and attributes and leverage the results in targeting. Although the results were positive, various issues emerged limiting overall effectiveness.

"To create a good AI model, it is necessary to fully understand customer behavior and input valid patterns into AI. However, this requires advanced skills, and the workload is very high and requires a lot of time to analyze. We felt that existing AI tools would be difficult to continuously refine the target list with limited manpower. "says Mr. Kondo.

To solve these problems, they leveraged on dotData, an AI technology that can automatically find hidden patterns (features) in data. Through dotData's automated feature discovery, they can identify which customer behaviors they should focus on.

"Many AI tools and products have black-box features leading to ML models that are understood by programmers but that create targeting lists that are not easy to explain to sales reps. dotData can quickly develop sophisticated AI models without advanced data science skills. We were also interested by the fact that we could discover useful features for business and visualize them in a way that anyone could understand. "says Mr. Kondo

Close rate increased approximately 20x

Once dotData was deployed, the company started creating target lists using dotData. The huge data set included five million items including information on clients' age and occupation, and past transaction histories, such as deposits, investment trusts and insurance, that were managed by the company. This vast information store was analyzed using dotData to build an AI model to identify financial products likely to have higher closing rates. In the process of analyzing the data, some unexpected features were discovered.

"For example, when targeting clients for investment products, we found a number of features that we had previously thought were not directly related to investment products, such as the balance

RESULTS

- Close rate increased approximately 20x by utilizing customer target lists generated by dotData

- Business users can build complex AI models without specialized skills

- Since AI models can be built quickly and easily, repetitive model-tuning can be performed for gaining more accurate predictions.

- Data supports salespeople's perceptions and enables to transfer undocumented sales skills

"With dotData, users who do not have advanced skills in data science can build and tune AI models on their own."

- Masahiro Nagao,
Digital Transformation Department (transferred from NEC)

of housing loans, the status of holdings of inheritance-related products, and the number of time deposit cancellations. Some experienced sales representatives may have been aware of these trends, but now that they are clearly visible, they can be shared as knowledge widely among younger and newer employees. I believe that dotData analysis will lead to a stronger sales force ". says Mr.Kondo

Creating a customer target list using dotData
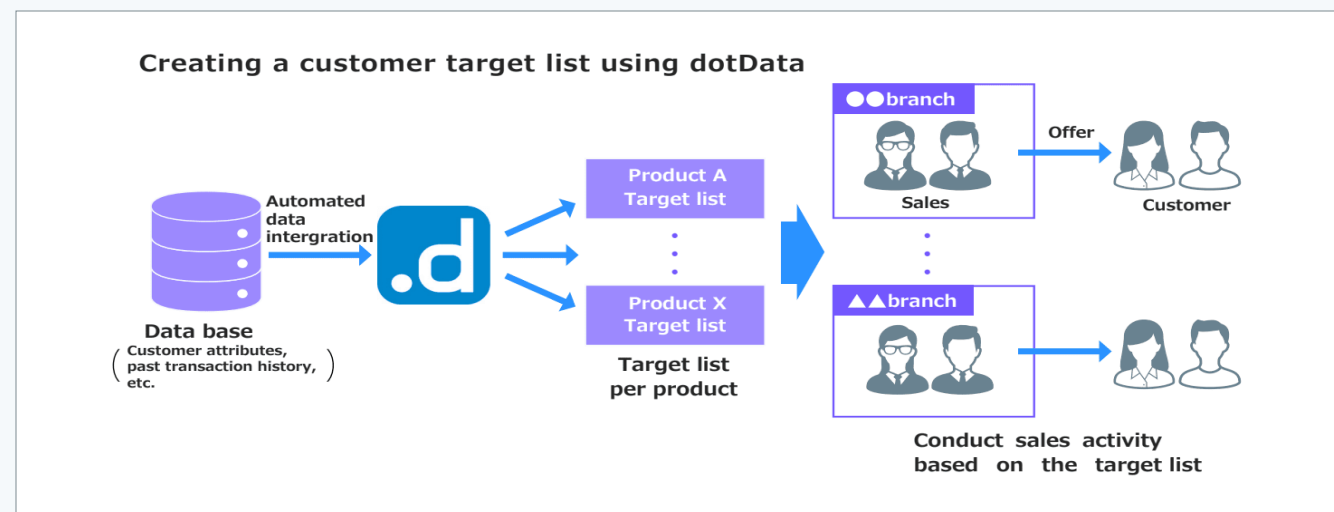
Based on the information discovered through AI, we included products to be offered to customers as "product-specific needs flags" in the target list and provided them to our sales representatives. At the beginning, there was some hesitation and resistance, however, based on the information about the features provided by dotData, we created a document to explain the basis of each product's specific needs flag in a way that was easy to understand.

 Above all, as we continued to use the needs flag for each product, we were able to demonstrate its effectiveness in our "contract rate," and the confidence of our sales representatives changed dramatically. Now this information-based sales style is firmly established.

"We found a 20x difference in the success rate between customers flagged with 'needs' and those flagged with 'no needs'. These concrete effects have earned the trust of our sales representatives, "says Kondo.

Plan to deploy dotData for a wider range of operations

Based on the results of the target list, the company is moving forward to introduce dotData to other operations. For individual businesses, dotData is already used to target direct mail with AI. According to Mr. Nagao, the introduction of dotData is under consideration in other businesses.

 "In the marketing field, we are considering using dotData to analyze the effectiveness of campaigns. We are also trying to use dotData to predict the volume of calls at call centers. " says Mr. Nagao.

Plans are also underway to implement initiatives for corporate clients similar to the "target list" project. To benefit from dotData in more businesses, Digital Transformation Department is providing hands-on training. "Our ultimate goal is to enable each business to build and tune AI models independently using dotData," says Mr.Nagao.

 Needless to say, we will continue to improve the accuracy of our target list policies for individual customers by repeatedly tuning them through dotData.

 "When tuning an AI model, if the feature value is visualized in an easy-to-understand form like dotData, it is easy for users without specialized skills to test hypotheses and to tune by trial and error. In this sense, dotData is a very useful tool for advancing AI utilization in each business." says Mr. Kondo.

About dotData

dotData is the first and only company focused on full-cycle data science automation. Fortune 500 organizations around the world use dotData to accelerate their ML and AI projects and deliver higher business value. dotData's automated data science platform speeds time to value by accelerating, democratizing, augmenting and operationalizing the entire data science process, from raw business data through data and feature engineering to machine learning in production. With solutions designed to cater to the needs of both data scientists as well as citizen data scientists, dotData provides unmatched value across the entire organization.

dotData's unique AI-powered feature engineering delivers actionable business insights from relational, transactional, temporal, geo-locational, and text data. dotData has been recognized as a leader by Forrester in the 2019 New Wave for AutoML platforms. dotData has also been recognized as the "best machine learning platform" for 2019 by the AI breakthrough awards and was named an "emerging vendor to watch" by CRN in the big data space. For more information, visit www.dotdata.com, and join the conversation on Twitter and LinkedIn.

About Sumitomo Mitsui Trust Bank, Limited

Founded in 1925 and headquartered in Tokyo, SuMiTB provides banking and trust services in Japan. SuMiTB offers financial services such as syndicated loans, real estate finance, project finance and other finances. It also provides asset management and real estate management service, as well as consulting services, including M&A advisory and consulting for corporate clients.