

BANK LEUMI

Predict Loan Default Risk

THE CHALLENGE

Bank Leumi, the second largest bank in Israel, was faced with a very high loan default rate. They needed to find innovative technologies to reduce the default rate outside of the sophisticated financial predictive tools they were already using, such as financial status and payment history of their prospective borrowers.

The current loan approval system that Bank Leumi uses is purely financial, credit scores, payment history, financial strength, etc, along with the predictive models they created. Bank Leumi realized however, that while many loan defaults resulted from financial difficulties encountered by their customers, they also assumed that a percentage of loan borrowers were more likely to default based upon their personalities: risk taking, impulsiveness, low integrity.

Bank Leumi wanted to see what predictive models were available that were accurate, valid and worked within their system and could be used early in the loan approval process that involved a short web registration followed by a phone conversation.

THE SOLUTION

Bank Leumi, the second largest bank in Israel, was faced with a very high loan default rate. They needed to find innovative technologies to reduce the default rate outside of the sophisticated financial predictive tools they were already using, such as financial status and payment history of their prospective borrowers.

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THE RESULTS

Voicesense classified default risk predictions into three categories – High, Moderate and Low Risk. About 30% of the borrowers were classified as High Risk, 50% as Moderate Risk and 20% as Low Risk.

The results demonstrated that the default rate among the borrowers classified by the Voicesense Loan Default Predictor as High Risk were twice as high as the default rate among the borrowers classified as Low Risk.

Within the identified High Risk group of 306 clients, 173 people defaulted on their loan; whereas, of the 199 clients grouped as Low Risk, only 65 people defaulted.

Bank Leumi was thereby able to apply stricter lending parameters, early in the loan approval process, to those clients with High Risk classification.