Theorem uses data science and machine learning to invest in marketplace lending loans



## WHAT IS MARKETPLACE LENDING?

Marketplace Lenders such as Lending Club and Prosper originate loans online, for purposes ranging from credit card refinancing to business loans, and sell them to investors.

The Marketplace Lending space is expected to grow to \$100 Billion in annual origination by 2020.

# THE NEXT TRILLION DOLLAR ASSET CLASS

Traditional lenders are weighted down by obsolete technology and high regulatory costs. Marketplace lenders directly connect borrowers with investors, cutting out expensive middlemen. This enables borrowers to get loans faster, at lower interest rates, while still providing great yields for investors.

### **OUR PROCESS**

## **BIG DATA**

We harness billions of data points to build proprietary models for borrowers, loan originating platforms and products, and to map economic cycle conditions in ways not previously possible.

Theorem's loan scoring technology analyzes 1,000+ data points to determine default probability and IRR for every loan

## HUMAN INSIGHTS

Industry-leading team of researchers and technologists combines data science and statistical discoveries with credit analysis and human insights to make more accurate credit pricing decisions

## BETTER MODELS

Theorem applies its independent underwriting and pricing systems to monitor loan origination quality to identify investment opportunities and to quickly react to deterioration in platform underwriting practices

## INSIGHTS



### BUS DRIVER OR ADMIN ASSISTANT

Bus drivers are 25% less likely to default than administrative assistants. Many bus drivers are unionized, reducing unemployment risk, which is a major cause of default. Turnover is typically higher among administrative assistants, increasing risk.



#### WEDDING LOANS VS BUSINESS LOANS

Wedding loans are 10% more likely to be repaid than business loans. Half of new businesses fail, wiping out the owner's savings and cash flow. Marriage, even if a couple's wedding is expensive, often creates financial stability. A married couple can fall back on one another in the case of adverse events such as unemployment or illness.

## WHO WE ARE

### HUGH EDMUNDSON

Hugh is the CEO and Co-Founder of Theorem. [Before Theorem, Hugh was a member of Morgan Stanley's Credit Derivatives team, where he structured and traded synthetic CDOs. He holds a BS in Computational Finance from Carnegie Mellon University.

### ABEER AGRAWAL

Abeer Agrawal is the CTO and Co-Founder of Theorem. Previously, Abeer worked at Google, before becoming a founding employee at MobileSpan. MobileSpan was subsequently acquired by Dropbox. He holds a BS in Electrical and Computer Engineering and BS in Computational Finance from Carnegie Mellon University.



Theorem is backed by several great investors, including Y Combinator and Two Sigma Ventures.

## RESOURCES

## MEDIA LINKS

Theorem Profile: Wall Street Journal

Co-Founder Profile - Hugh Edmundson

Co-Founder Profile - Abeer Agrawal

Hugh Edmundson - LendIt 2018 Speaker Bio

## IDEAS + RESEARCH

"Morgan Stanley--An Introduction to Alternative Lending"

"A Trillion Dollar Market, By the People, For the People"

"Can P2P Lending Reinvent Banking?"

"US Treasury: Opportunities and Challenges in Marketplace Lending"

OCC: Exploring Special Purpose National Bank Charters for Fintech Companies

2017 TransUnion Study: Consumers Place Personal Loans Atop the Credit Mountain

Lending Club Statistics

**Prosper Statistics** 

# CONTACT US

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