

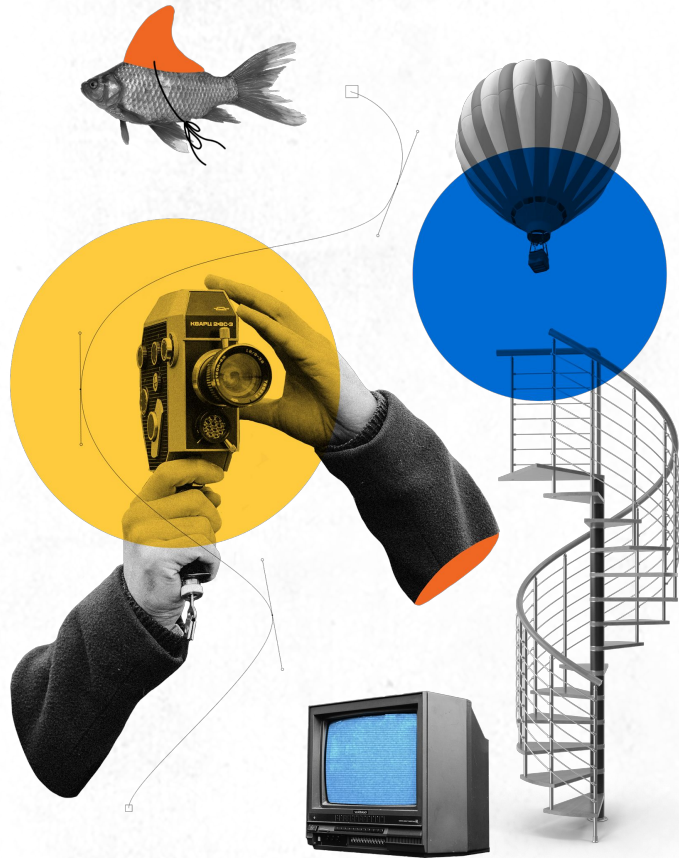


# The Behavioral Bank: Superior Performance from Behavioral Economics

**Dr. David R. Lewis** MBA, CFA, PhD  
President, BEworks Research institute

# We are among the world's leading experts in the science of behavior change

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## RESEARCH



## STRATEGY



## IMPLEMENTATION



# Overview of Behavioral Economics



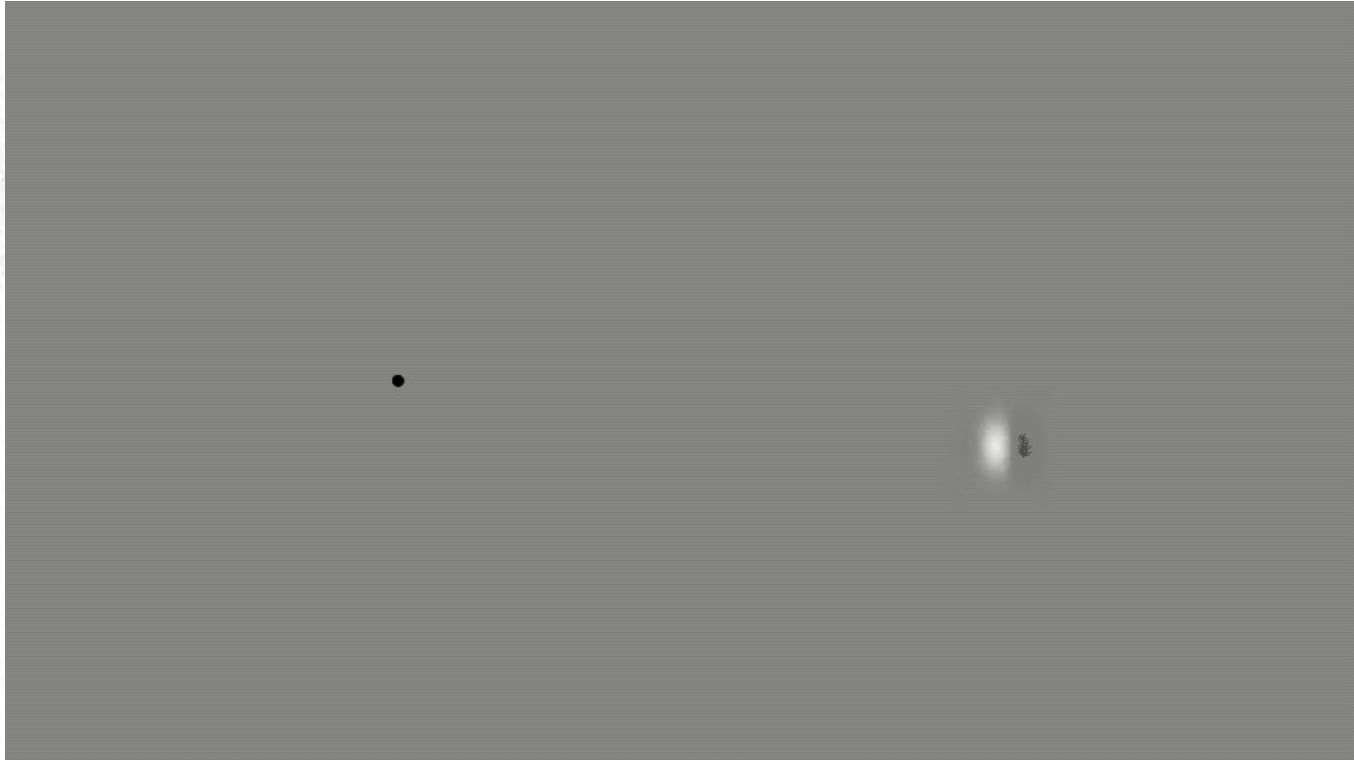
# A Foundation of Traditional Economics: Decision Makers Are **Rational**

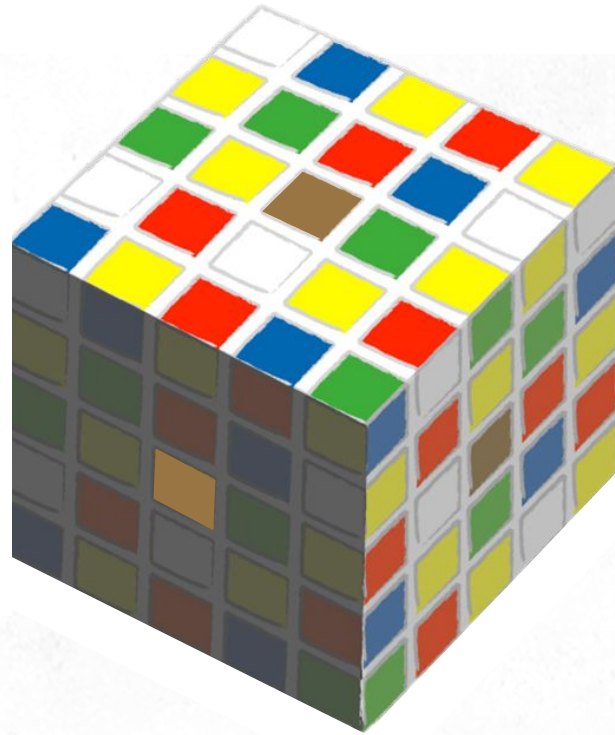
To better understand Behavioral Economics, we first need to understand some important assumptions of Traditional Economics.

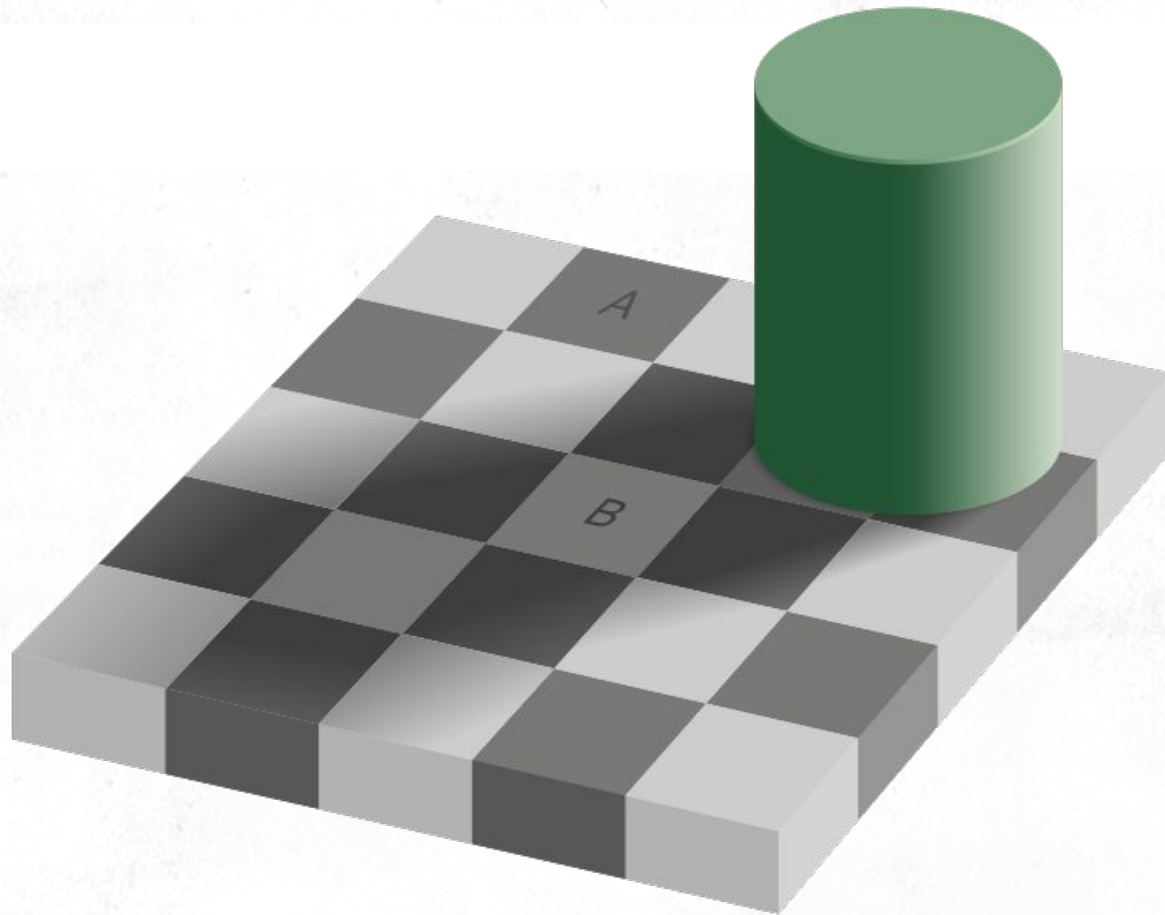
Traditional Economics assumes that people will seek and use all available information, accurately determine probabilities of outcomes, and carefully calculate costs and benefits of alternatives to inform their choices.

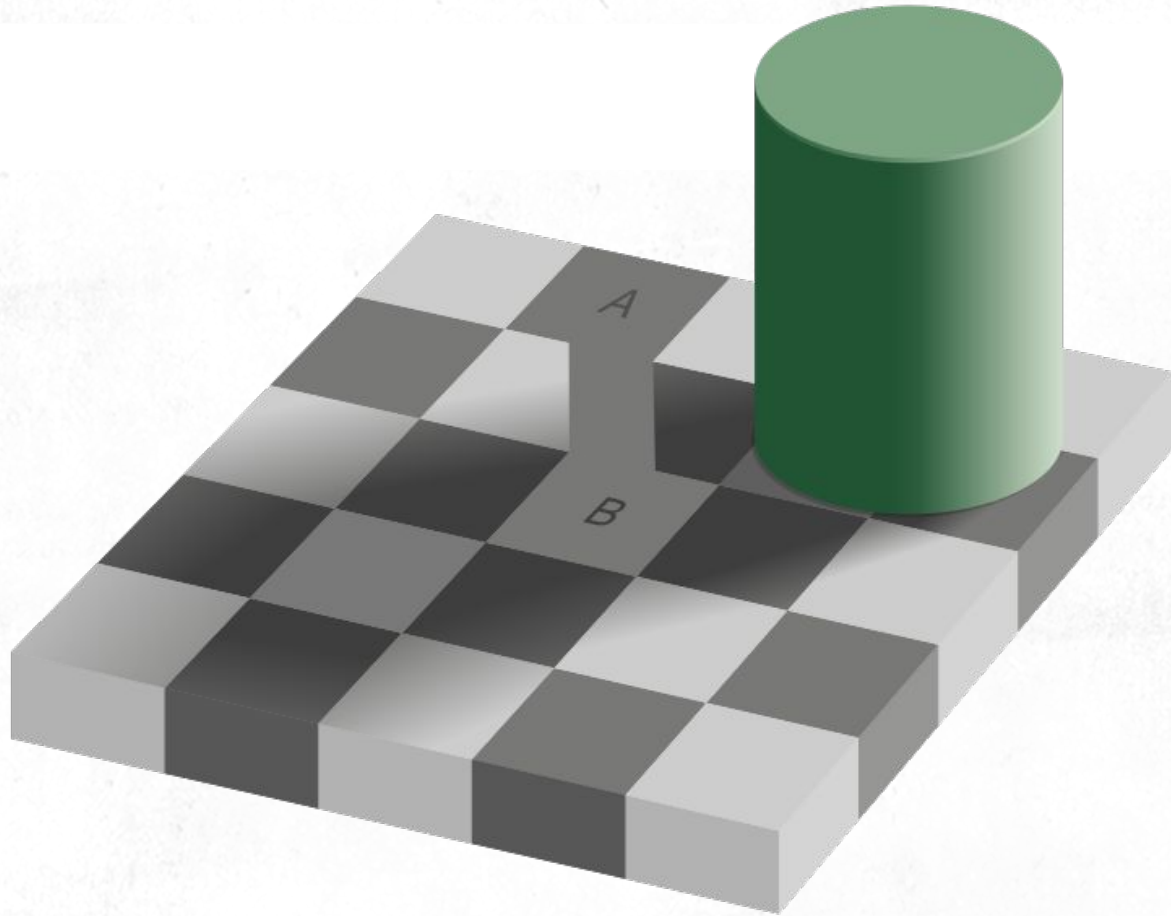




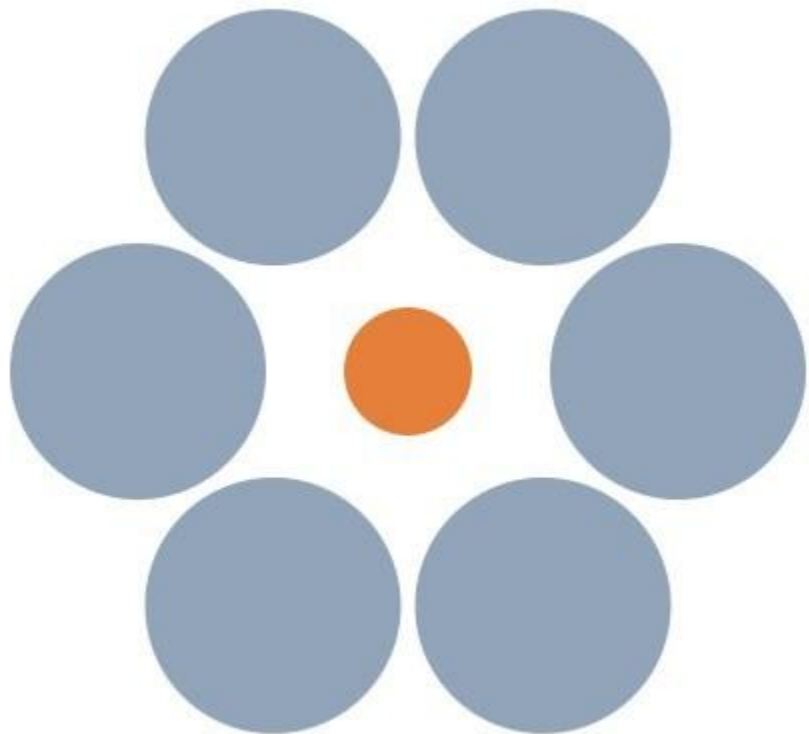


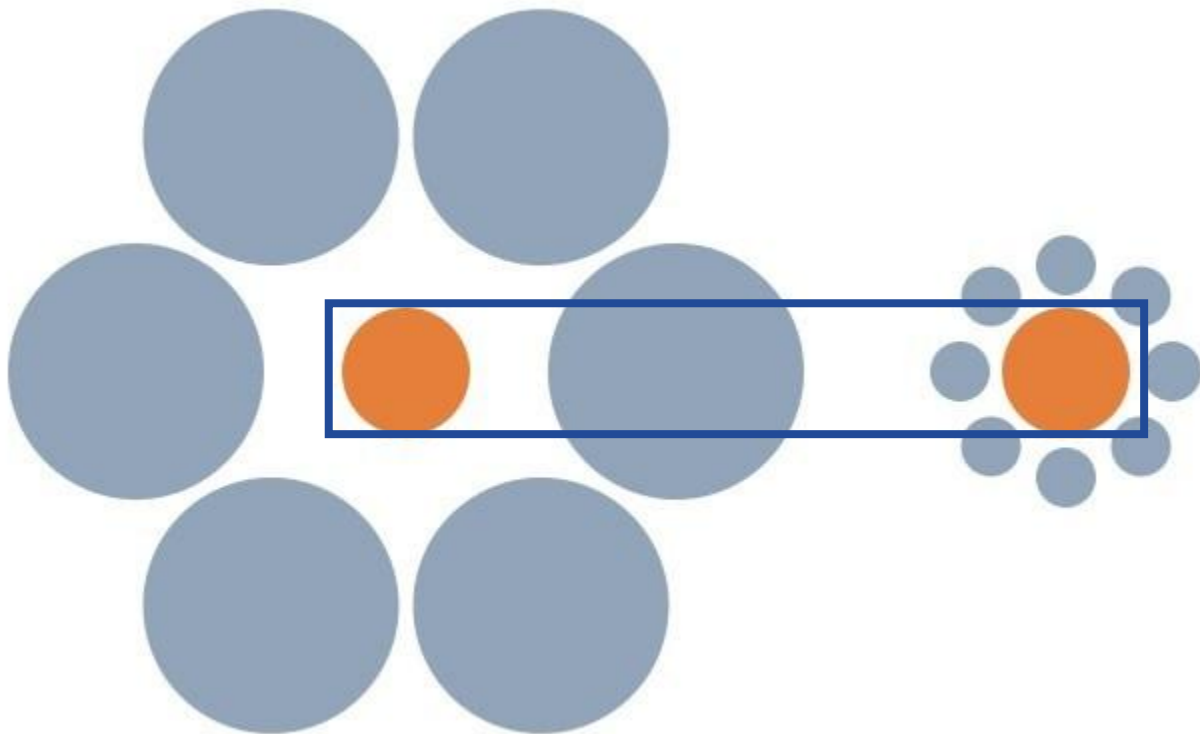












# INVESTING

Surely we are **more rational** when making **complex, risky consequential decisions** when we make decisions involving risk?...




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80% Chance to win **\$10,000**  
20% Chance to win **\$0**


100% Chance to win  
**\$7,500**  
0% Chance to win **\$10,000**





80% Chance to win **\$10,000**  
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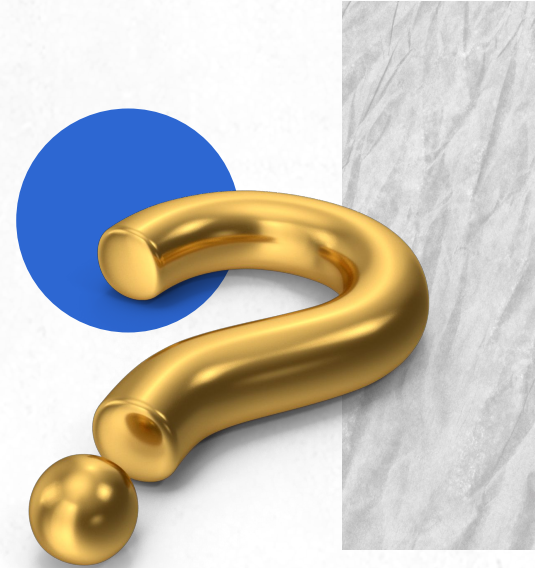
- 
- Most people choose **Option 2**
  - Probability theory demonstrates that **Option 1 should be preferred** (Option 1 Expected Value  $\$8,000 >$  Option 2 Expected value  $\$7,500$ )
  - People are **risk averse** when considering risky decisions framed as **gains**




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80% Chance to lose  
**\$10,000**  
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80% Chance to lose  
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100% Chance to lose  
**\$7,500**  
0% Chance to lose **\$10,000**

- Most people choose **Option 1**
- Probability theory demonstrates that **Option 2 should be preferred** (Option 1 Expected Value  $-\$8,000 <$  Option 2 Expected value  $-\$7,500$ )
- People are **risk seeking** when considering risky decisions framed as **losses**

# BE provides ground-breaking research to help us understand why people do what they do and the tools for how to drive change

*Five Foundational  
Insights*

BEworks

Humans do not operate as if we are logical robots:  
we are *boundedly rational* (Simon, 1957)

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Our decisions often rely on *heuristics* - mental shortcuts  
that compromise decisions, and we are also often  
affected by *biases*

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(Tversky & Kahneman, 1974; Kahneman, 2013)

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*Biases* result in choices can be inconsistent with our  
needs, preferences, and best self-interest

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(Beshears, Choi, Laibson, & Madrian, 2008)

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Human biases are large and systematic enough that we  
are *“predictably irrational”*

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(Ariely, 2010)

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With expertise, we can tap into these irrationalities and  
*“nudge”* people through choice architecture

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(Sunstein & Thaler, 2009)

# Behavioral Economics in action.....











## FOLLOWING FINANCIAL ADVICE

Improving investor decision-making and account performance through behaviorally-informed advice

### THE CHALLENGE

Multiple studies show that financial advice creates better outcomes. Unfortunately, there are more people who don't seek advice or ignore it completely than there are people who seek and follow advice.

Why don't investors seek and follow advice and how can they be encouraged to do so to create better financial well-being?





## Following Financial Advice:



## WHAT WE DID & THE OUTCOME

5 hidden biases – overconfidence, illusion of control, representativeness bias, loss aversion, and choice overload.

We developed a behavioral strategy consisting of 6 key things that advisors should be doing when they provide advice.

## THE IMPACT

Tested with 3,000 investors who were asked to make an investment decision and could choose to follow financial advice or not.

- Investors were more likely to follow behaviorally-informed advice
- Selected more diversified portfolios
- Had higher Sharpe Ratios
- More likely to seek and follow advice
- Perceived more benefits of financial advice
- More trusting of the financial advisor



### SAVINGS CONTRIBUTIONS

Driving savings contributions with a new behaviorally informed product offering

### THE CHALLENGE

One of Mexico's largest banks and a leader in providing savings accounts to high-risk clients who otherwise would not have access to traditional banking products, realized that despite large numbers of new savings accounts being opened each month, many account balances remained low and were eventually abandoned altogether.





Driving savings contributions and loyalty



When the wallet overflows, savings grow

## WHAT WE DID & THE OUTCOME

We combined insights with existing scientific research with an analysis of historical transaction data from 6 million clients.

Clients were actually using their savings accounts as short-term digital wallets, not as savings vehicles. To help meet clients' desire for a digital wallet while simultaneously helping them to accumulate long-term savings, we leveraged the psychological principles of **mental accounting and defaults** that automatically partitioned client deposits into “savings” and “cash-flow”.

## THE IMPACT

This psychological partition helps clients to mentally allocate their money to different purposes and they saved more and showed increased loyalty.



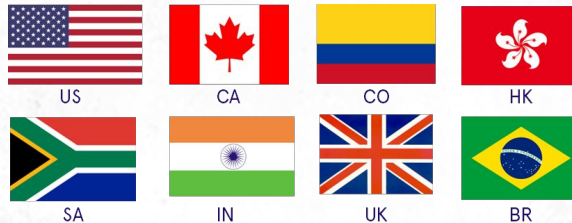


### MANAGING CREDIT

The temptation to buy now and pay later is encountered across many countries and cultures

### THE CHALLENGE

Our client, TransUnion, wanted a global understanding of decisions regarding credit, how and why people use credit, and how people rank the importance of repaying credit compared to other obligations such as rent, utilities, food and cell phones.

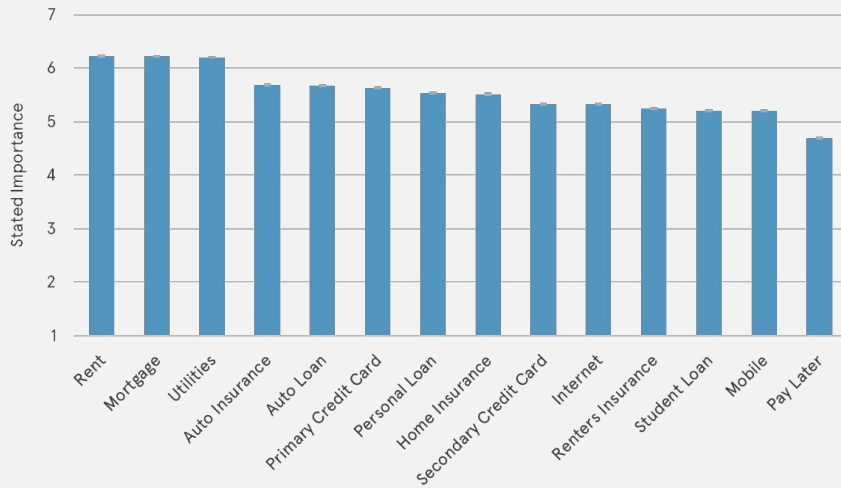






## Payment Hierarchies:

We determined many factors that influence credit decision-making



## WHAT WE DID & THE OUTCOME

We analyzed the factors associated with credit use and repayment across eight countries and compared similarities and differences.

## THE IMPACT

Our research provided empirical evidence of the many underlying economic, social, emotional, and psychological factors influencing credit-  
**present bias, scarcity mindset, atypicality neglect, differences in attitudes regarding default, licensing effect, social pressures, and psychological distance**, all of which influenced credit usage and repayment.

TransUnion incorporated the insights into the Global Payments Hierarchy Study.



### SAVE MORE FOR RETIREMENT

How can we encourage people to be more generous to their future selves and save for the long-term using a new savings app?

### THE CHALLENGE

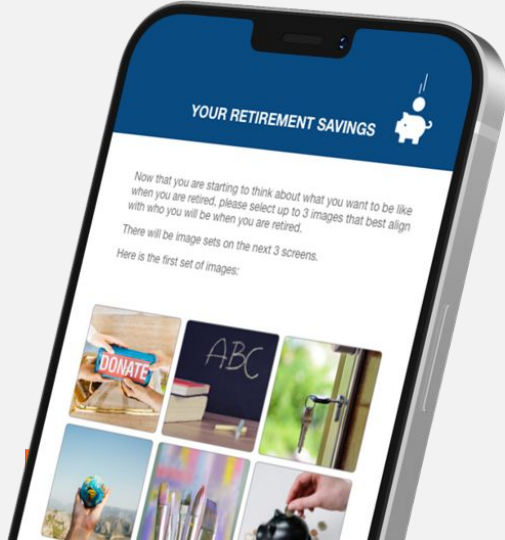
People have access to many existing personal finance apps, helping with budgeting and spending or saving for near-term needs and wants like home renos or vacations.

We set out to design a new type of savings app, one that would help people save for the far distant future – retirement.





Using the app onboarding experience, we developed consisted of a self-reflection activity that helped people imagine their future selves.



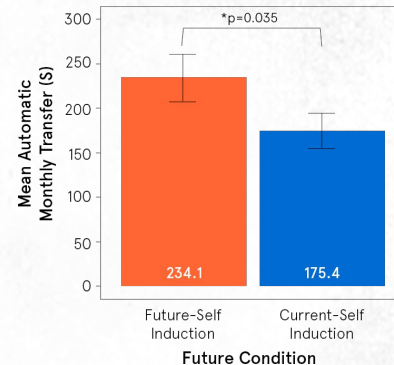
## WHAT WE DID

Saving for retirement is like giving money to a stranger. There is a fundamental empathy gap between the **present and future self** that means people aren't motivated to save for retirement and when they do, they don't save enough.

We developed an app onboarding experience that encouraged **mental time travel** to get to know their future selves.

## THE IMPACT

An average of \$59 more in committed weekly savings or \$3,052 in additional savings, per year, per client.



Because **BE** works.



BE works