Welcome!

2018 Credit Union Advisory Council

October 2-4, 2018

Marriott Irvine Spectrum

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Welcome and Introductions

 © Experian Public | 2018 Credit Union Advisory Council

Today's Agenda

Wednesday, October 3, 2018

Time	Topic	Presenter
7:30-8:30	Breakfast	
8:30-9:00	Welcome and Introductions	
9:00-10:00	Keynote: Robots, Blockchain & Fintech, Oh My!	Matt Davis
10:00-10:15	Break	
10:15-10:45	Credit Union Industry & Credit Trends	Sue Schroeder
10:45-12:15	Insights & Innovation Discussion Group	Credit Union Advisory Council Peer Discussion
12:15-1:00	Lunch	

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Today's Agenda

Wednesday, October 3, 2018

Time	Topic	Presenter
1:00-2:00	Diving for Data: How Alternative Credit Data Can Help You Lend Deeper for Growth	Paul DeSaulniers
2:00-2:45	Best Practices for Membership & Loan Growth: Peer Presentation	Sandi Papenfuhs
2:45-3:00	Break	
3:00-3:45	Futureproofing Your Fraud Strategy	Skipper Mervin
3:45-4:00	Break	
4:00-5:15	New Product Innovation Showcase	
5:15-5:30	Day 1 Wrap-Up: Connecting the Dots	
6:30	Networking Event & Dinner	

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Keynote: Robots, Blockchain & Fintech, Oh My!

Matt Davis
Founder, gameFI, CUWatercooler.com & CoopWatercooler.com

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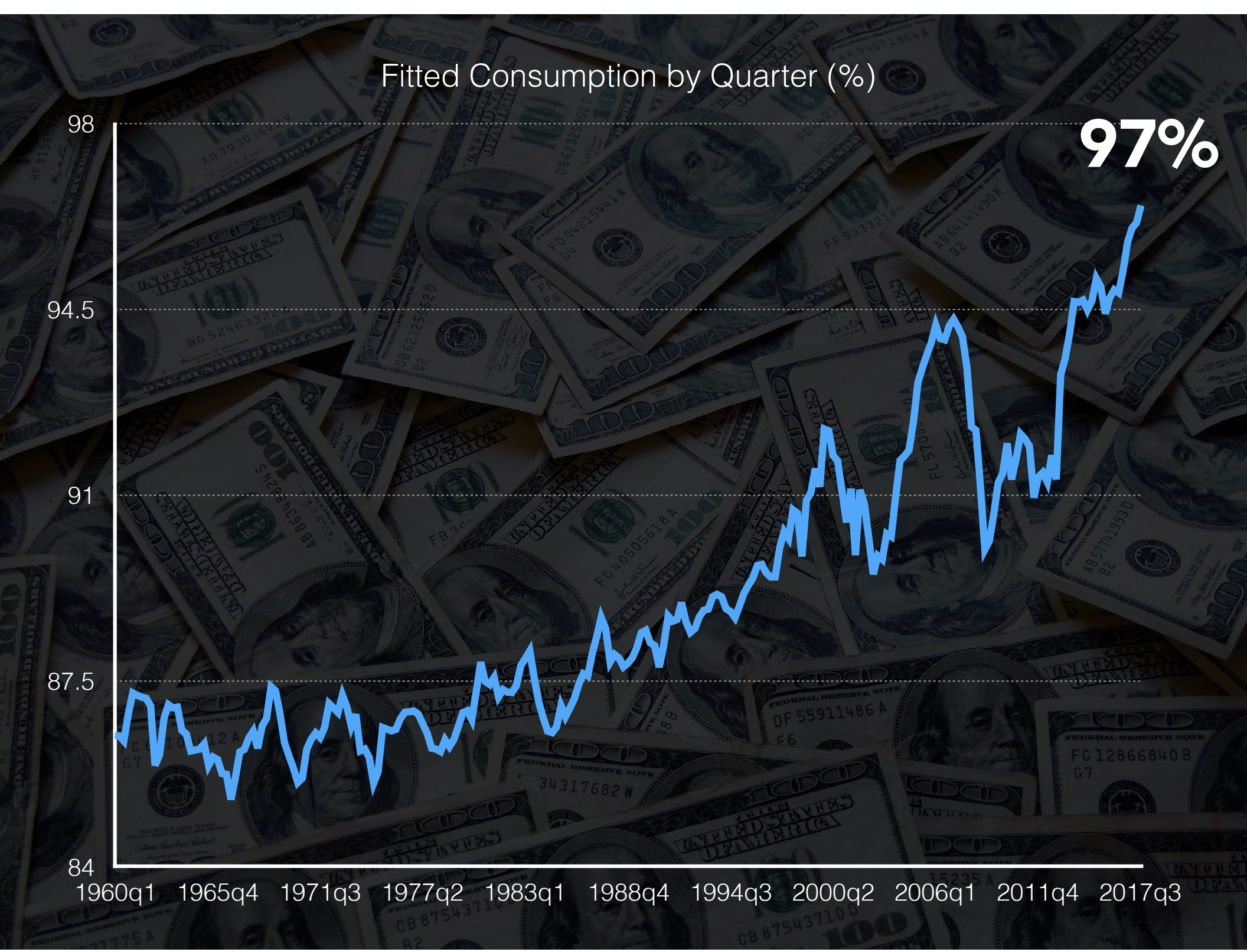
ROBOTS, BLOCKCHAIN & FINTECH

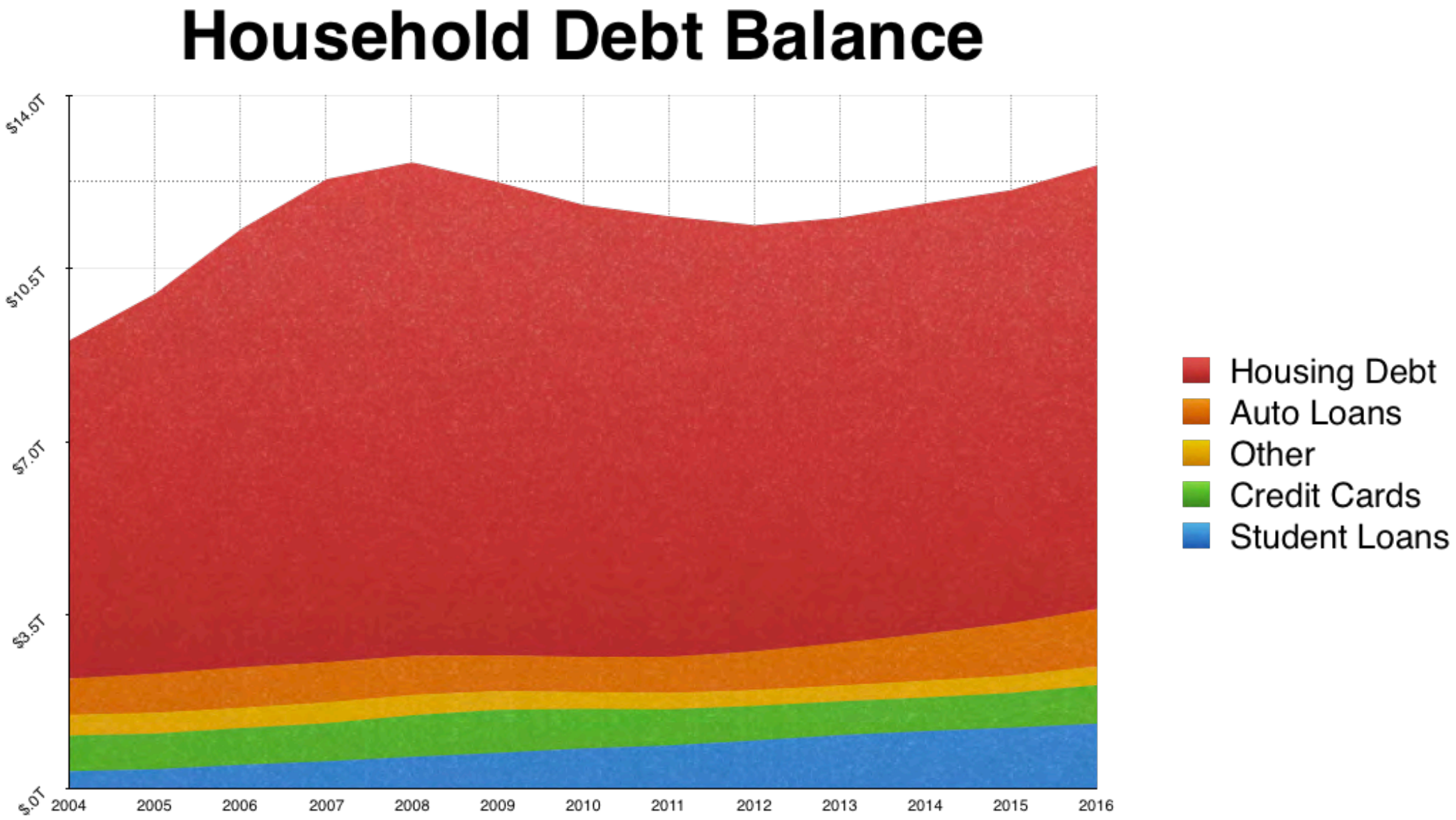
(OH MY!)

MATT DAVIS

NEW NORMAL?


Fitted Consumption by Quarter (%)
98
94.5
91
87.5
84
97%
1960q1
1965q4
1971q3
1977q2
1983q1
1988q4
1994q3
2000q2
2006q1
2011q4
2017q3

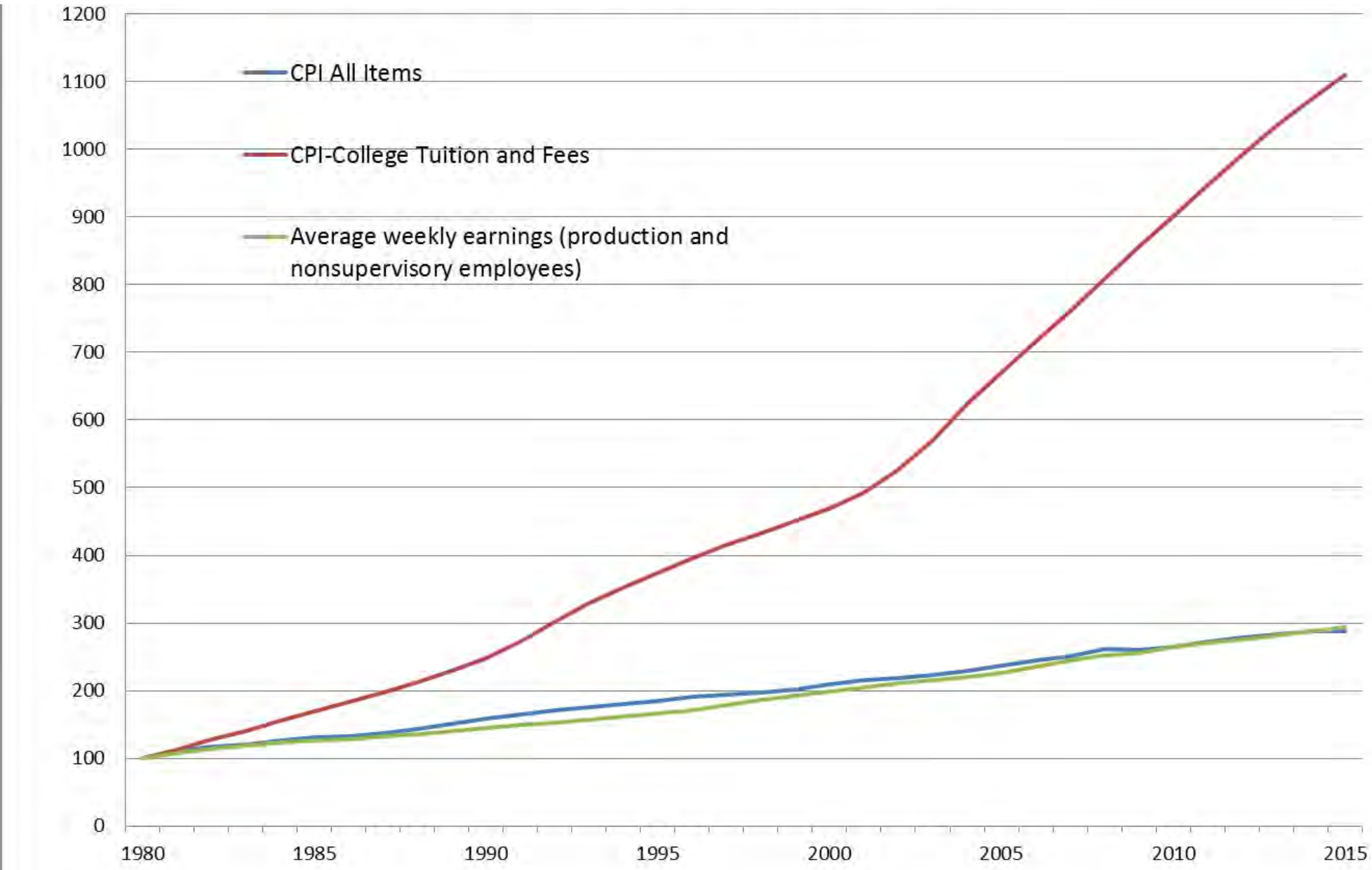
TOTAL HOUSEHOLD DEBT



Home affordability could reach an all-time low by 2023

Report from Black Knight says wage growth can't keep up with rising home prices

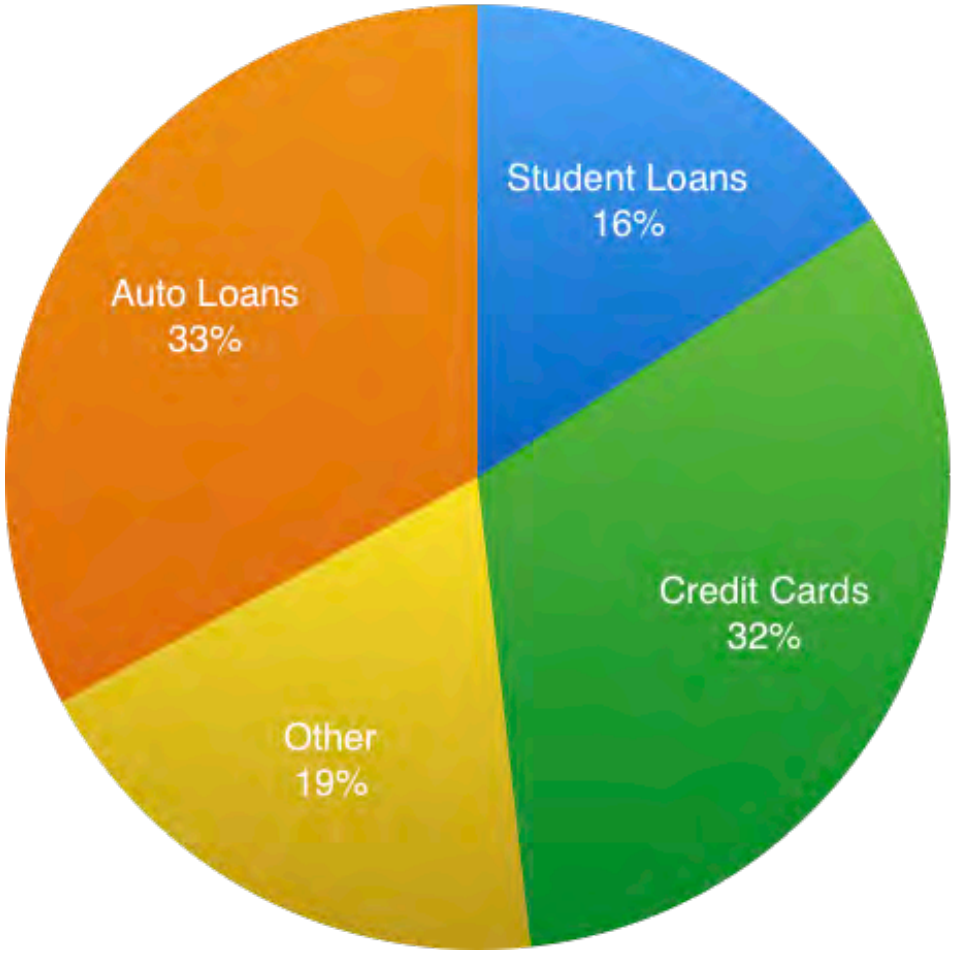
COLLEGE TUITION/FEES



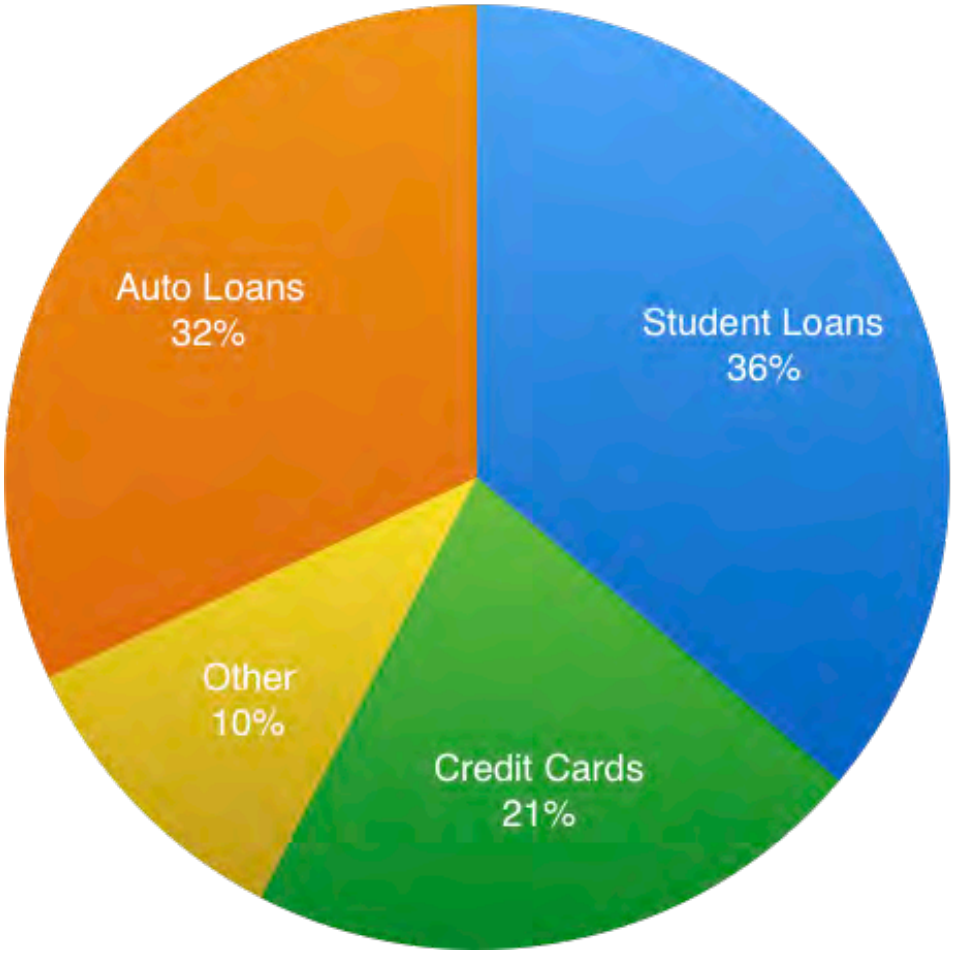
Bureau of Labor Statistics

NON-HOUSING DEBT

2004

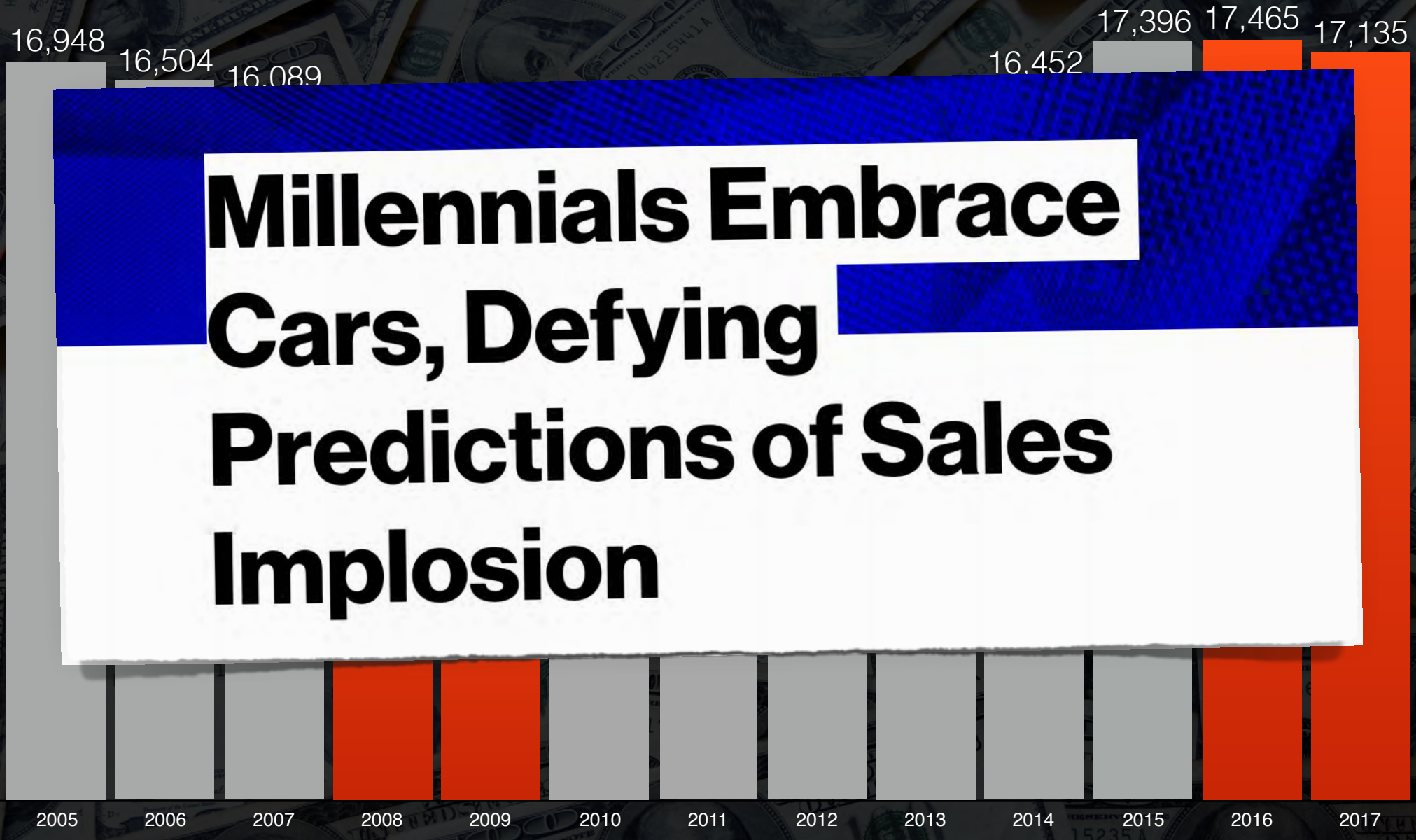


2016



BankofAmer

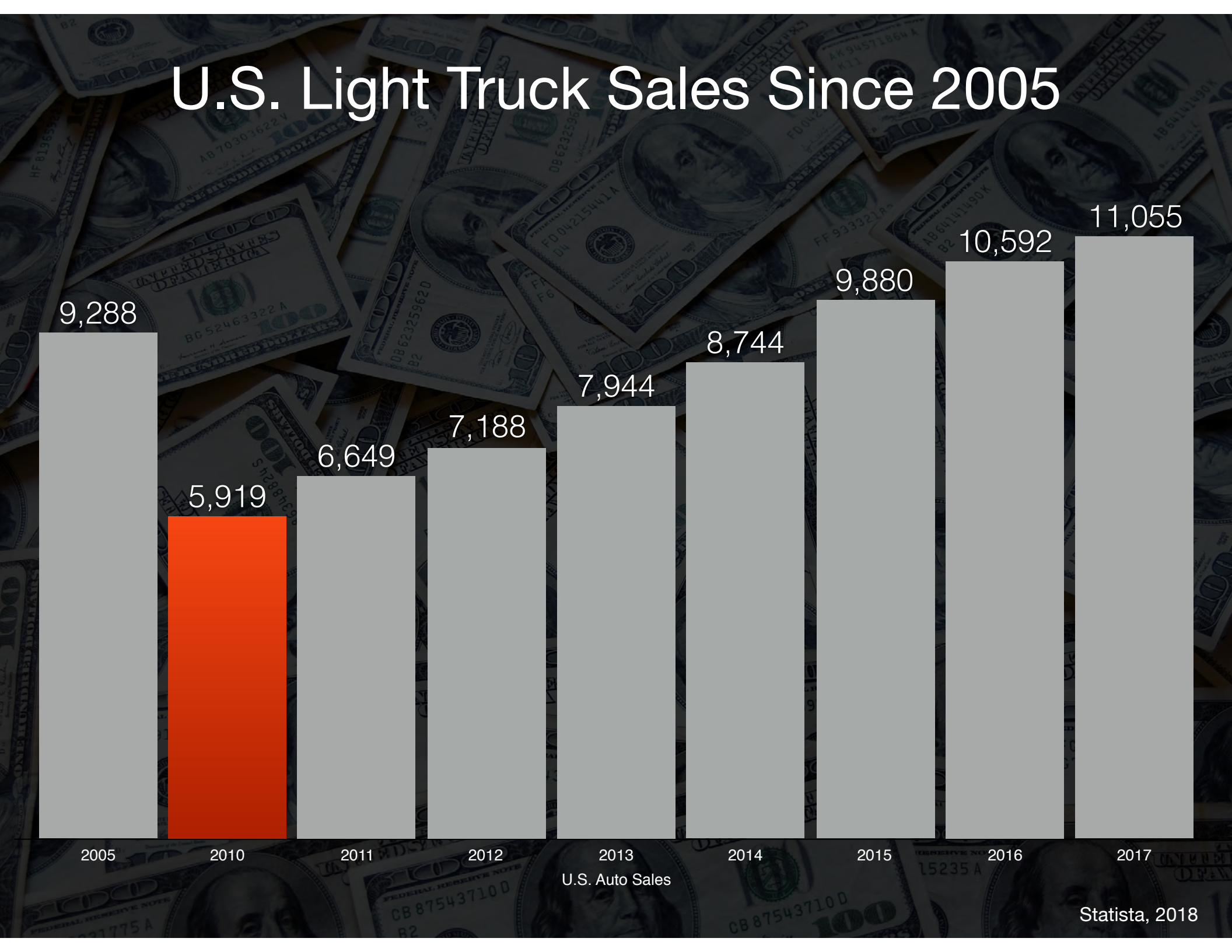
Light Vehicle Retail Sales (MM Units)

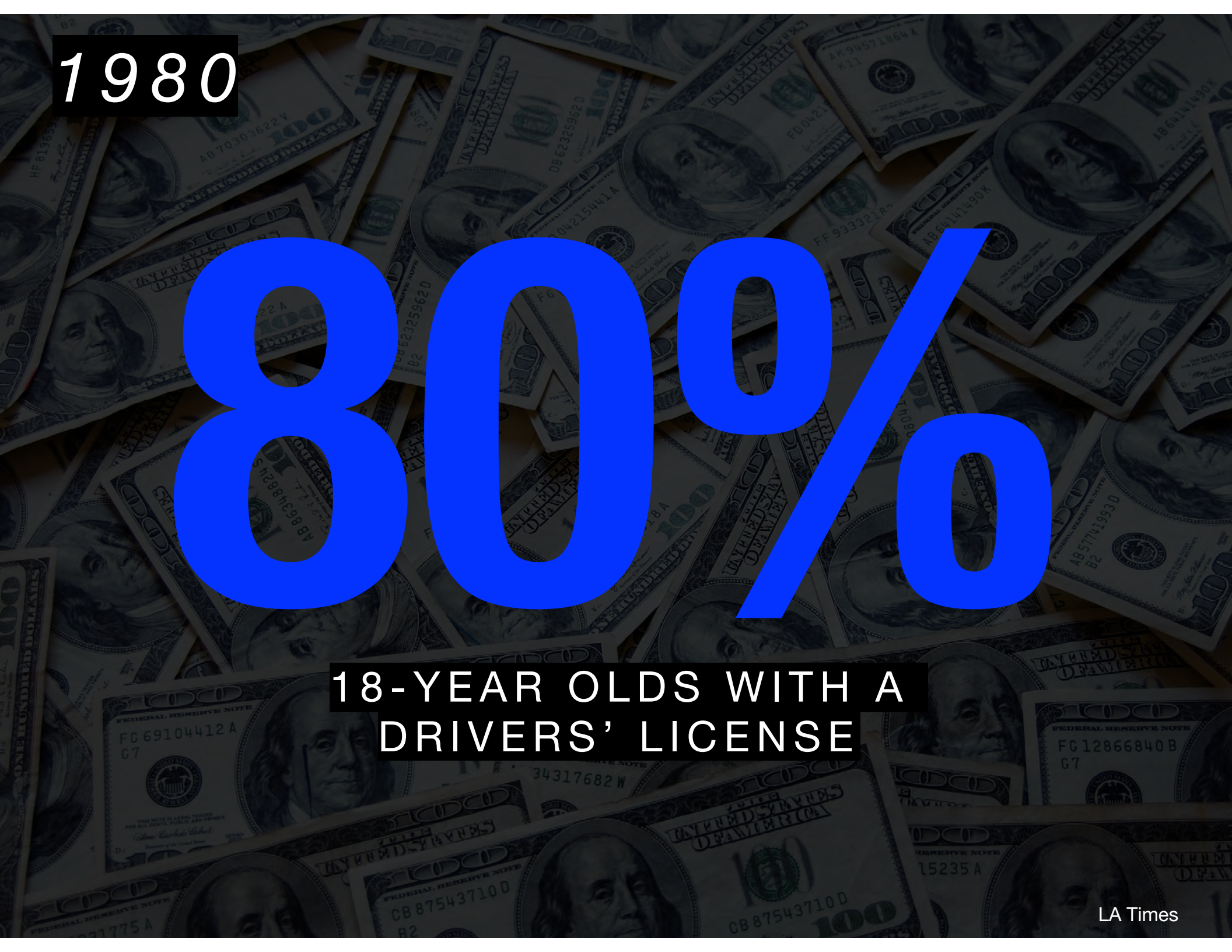


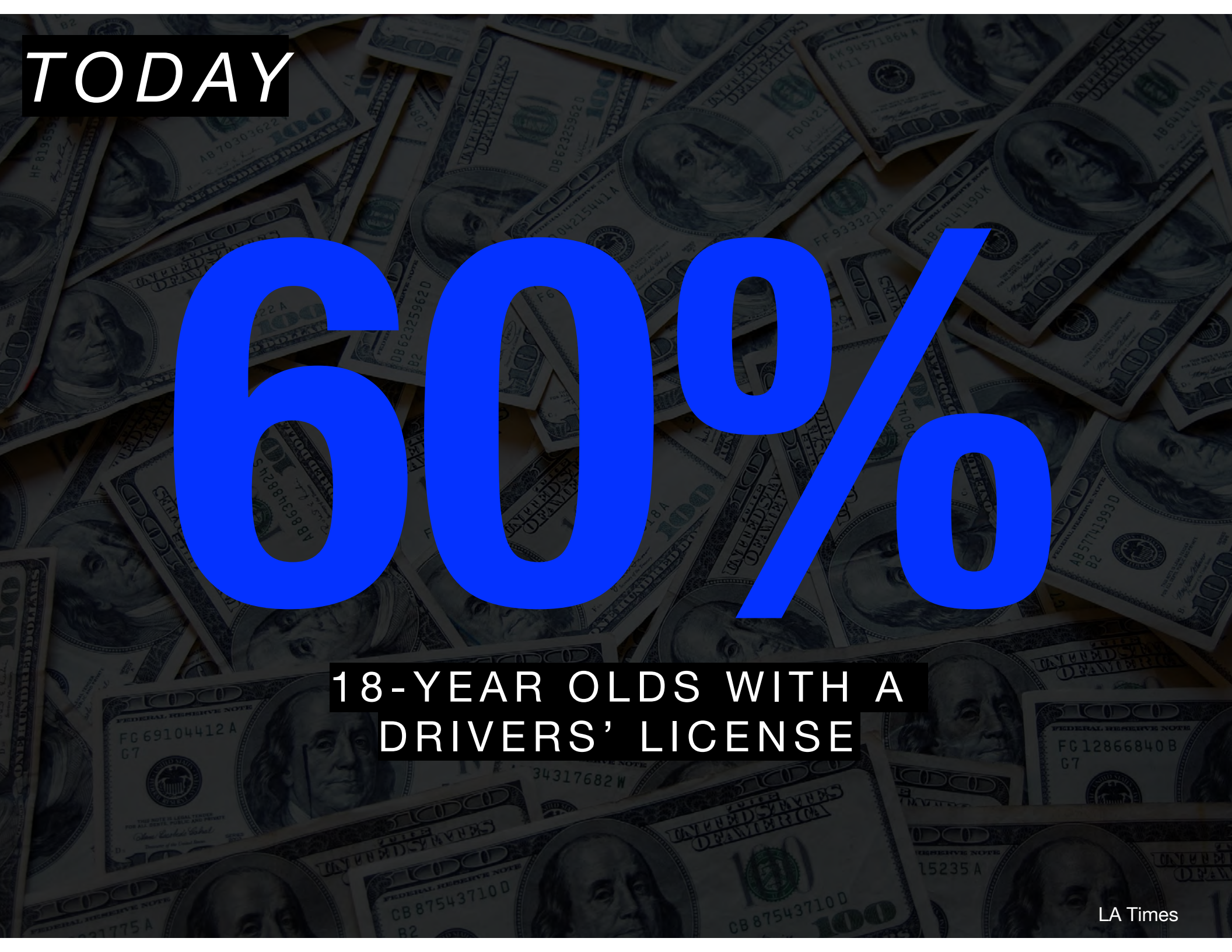
Millennials Embrace Cars, Defying Predictions of Sales Implosion

Statista, 2018

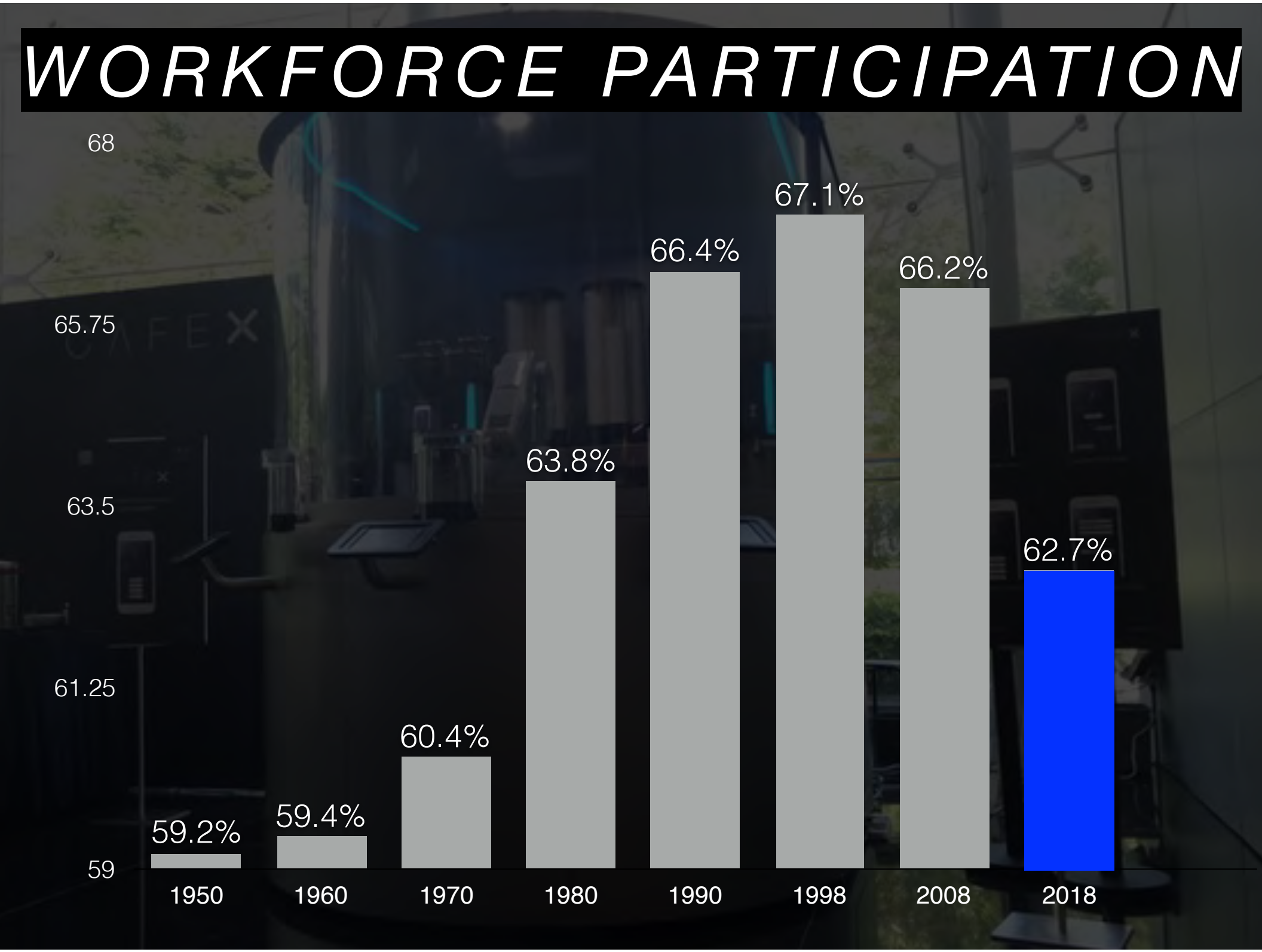
U.S. Light Truck Sales Since 2005



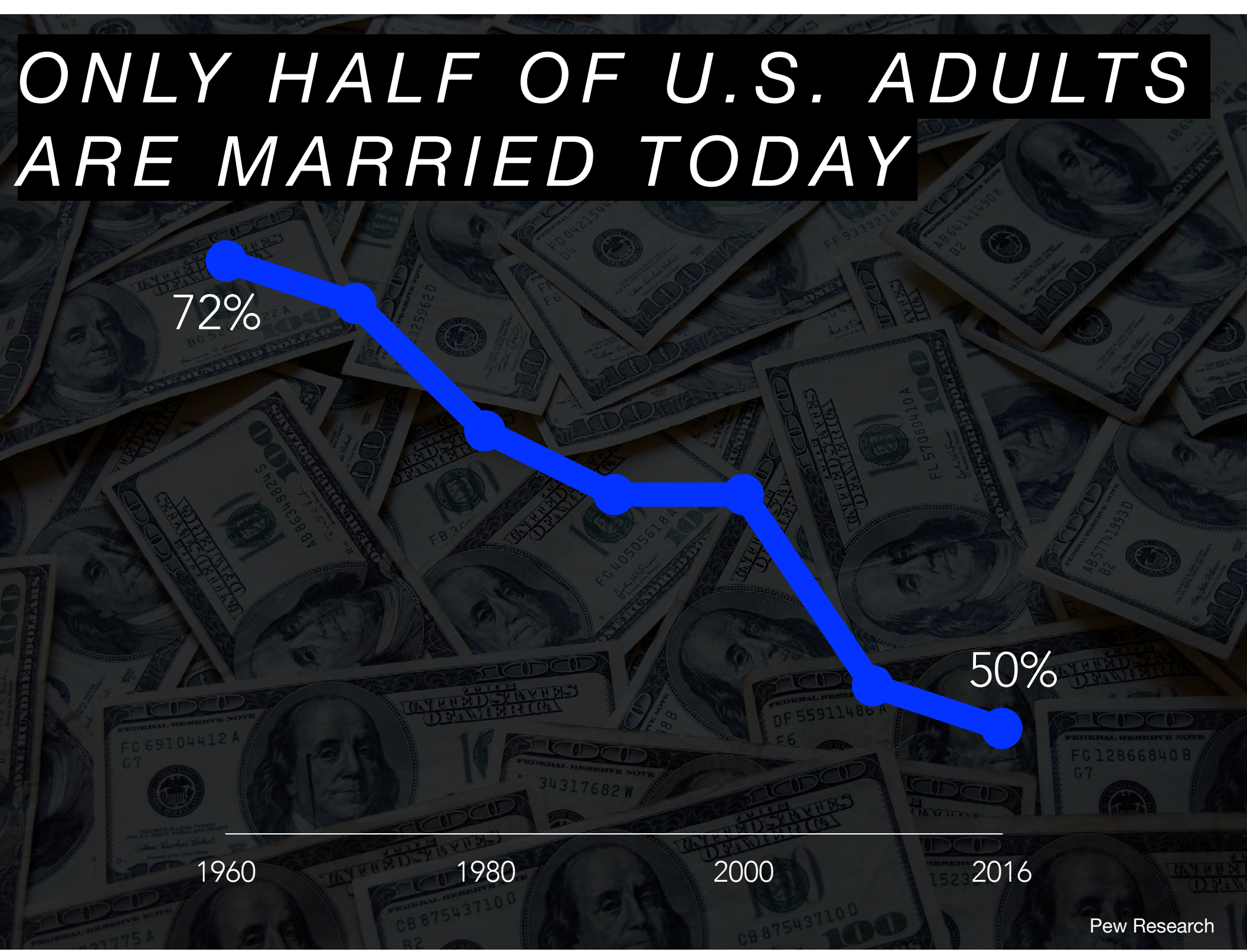

1980
80%
18-YEAR OLDS WITH A DRIVERS' LICENSE
LA Times


TODAY
60%
18-YEAR OLDS WITH A DRIVERS' LICENSE
LA Times

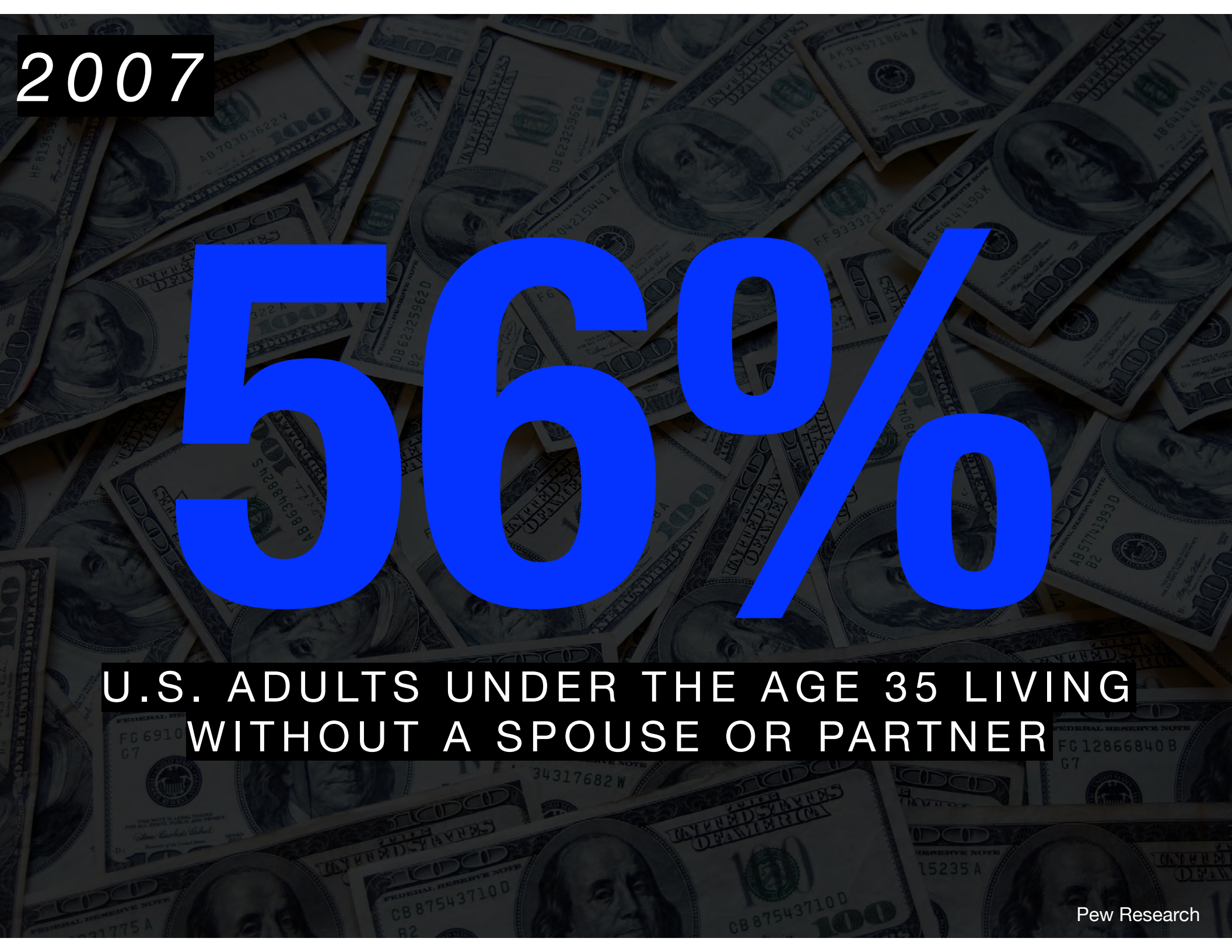
WORKFORCE PARTICIPATION

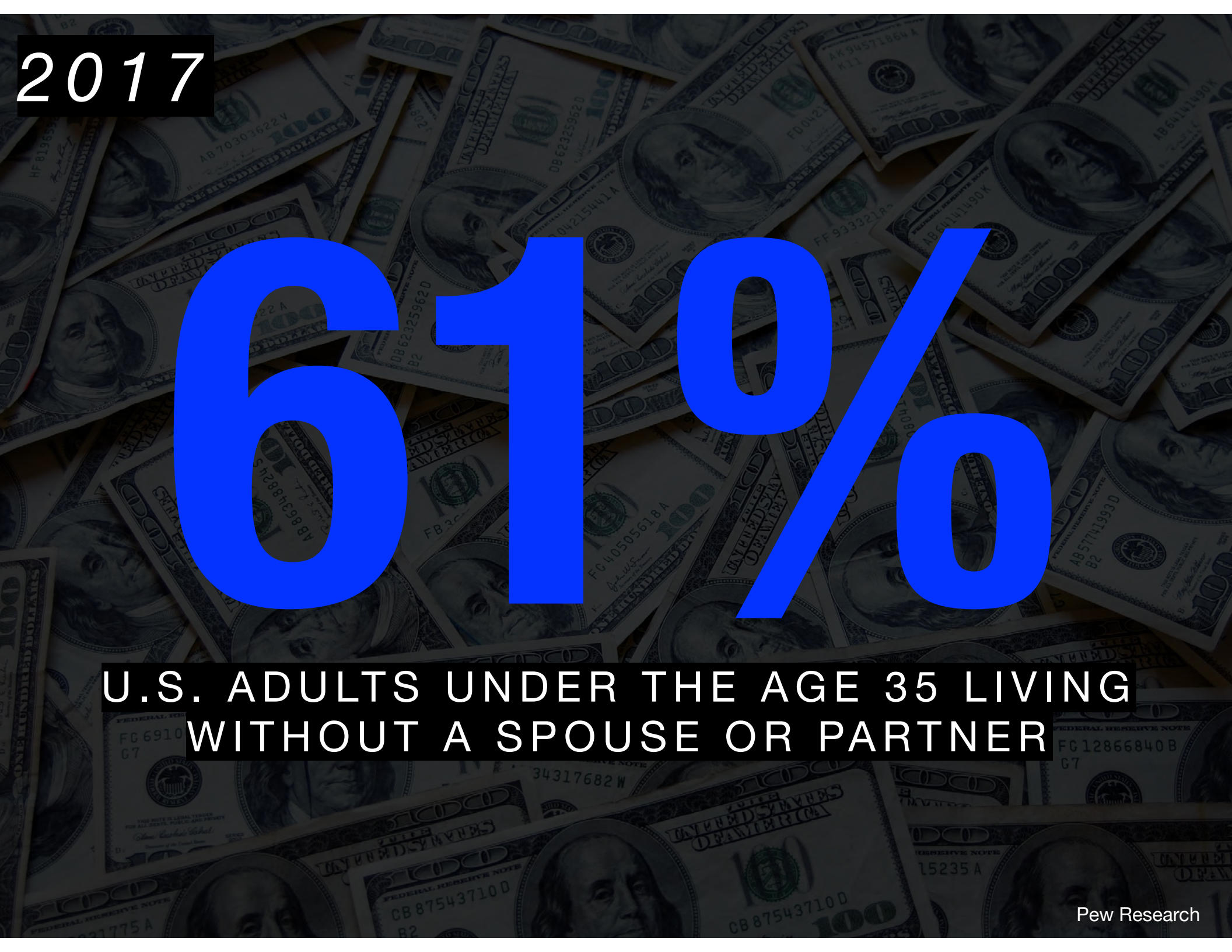


ONLY HALF OF U.S. ADULTS ARE MARRIED TODAY

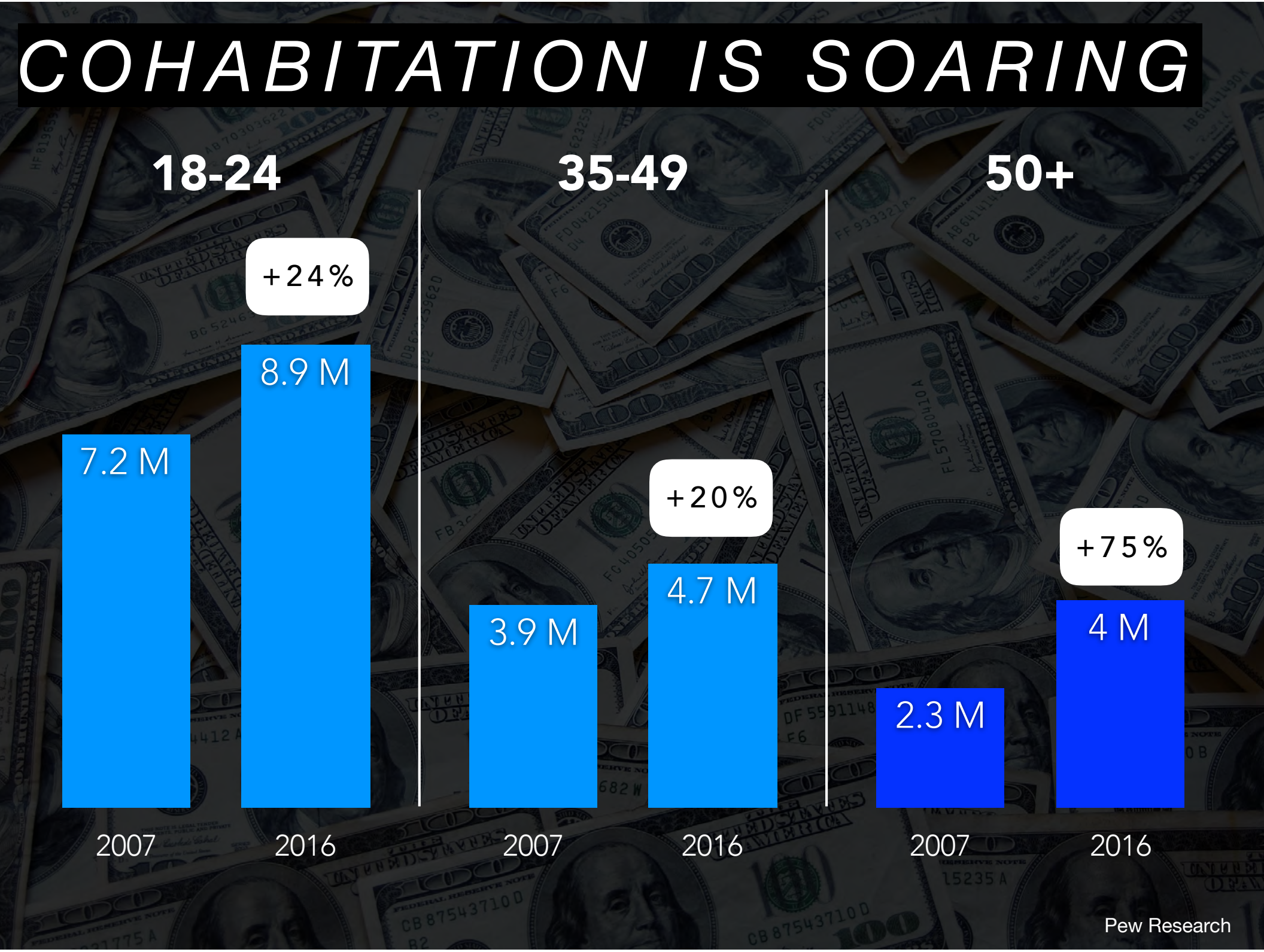


Pew Research


2007
56%
U.S. ADULTS UNDER THE AGE 35 LIVING WITHOUT A SPOUSE OR PARTNER
Pew Research


2017
61%
U.S. ADULTS UNDER THE AGE 35 LIVING WITHOUT A SPOUSE OR PARTNER
Pew Research

COHABITATION IS SOARING



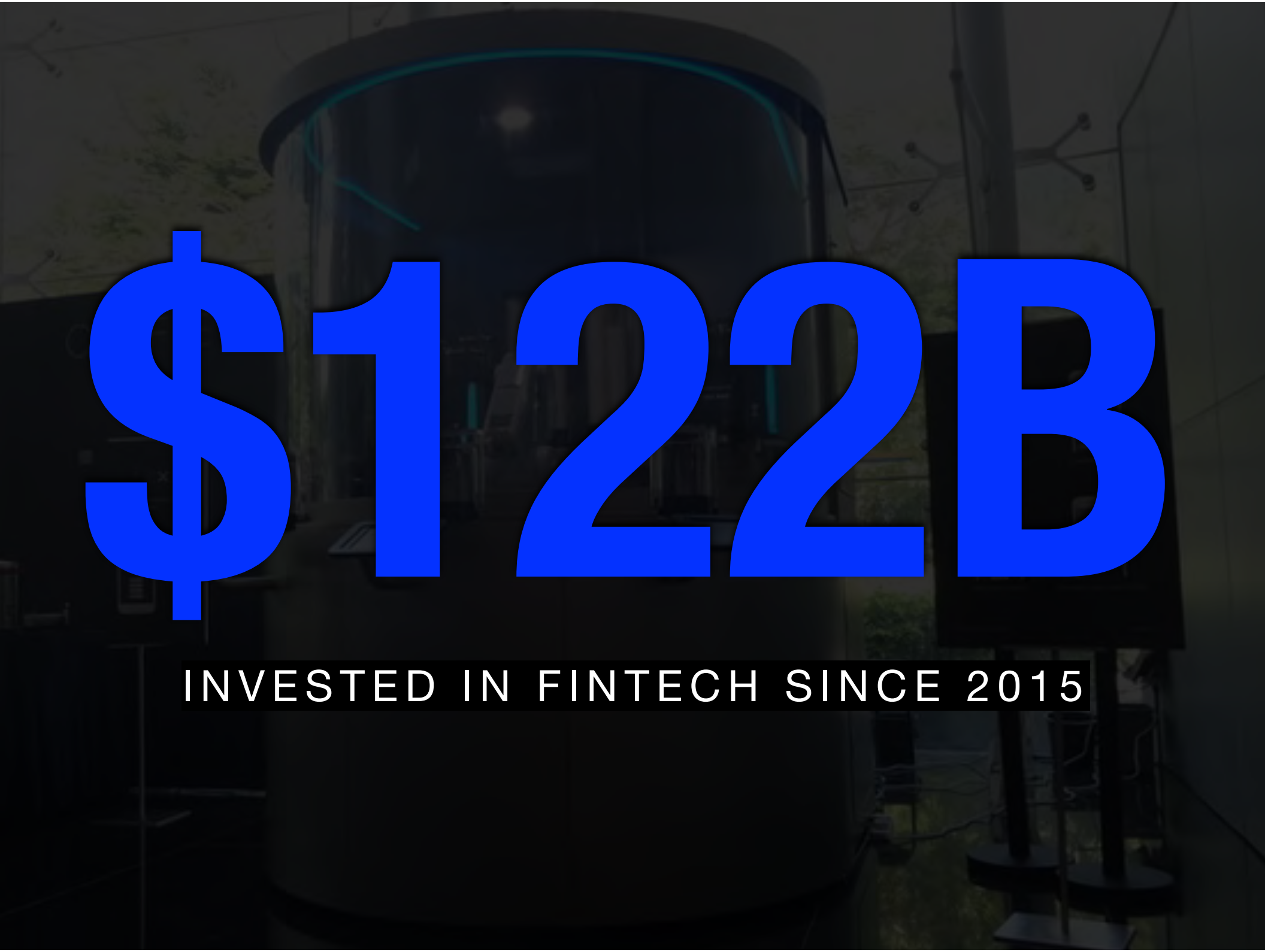
SPACEX
Reserved
TESLA
Roadster Sport
SEP California 2010
TSLA 10

The new normal requires a new way of thinking about co-ownership…

Lyft Raises $1 Billion, Adds GM as Investor and Partner For Driverless Cars

by Kia Kokalitcheva @imkialikethecar JANUARY 4, 2016, 8:30 AM EDT

INNOVATION THEATER


$122B
INVESTED IN FINTECH SINCE 2015

PAYMENTS

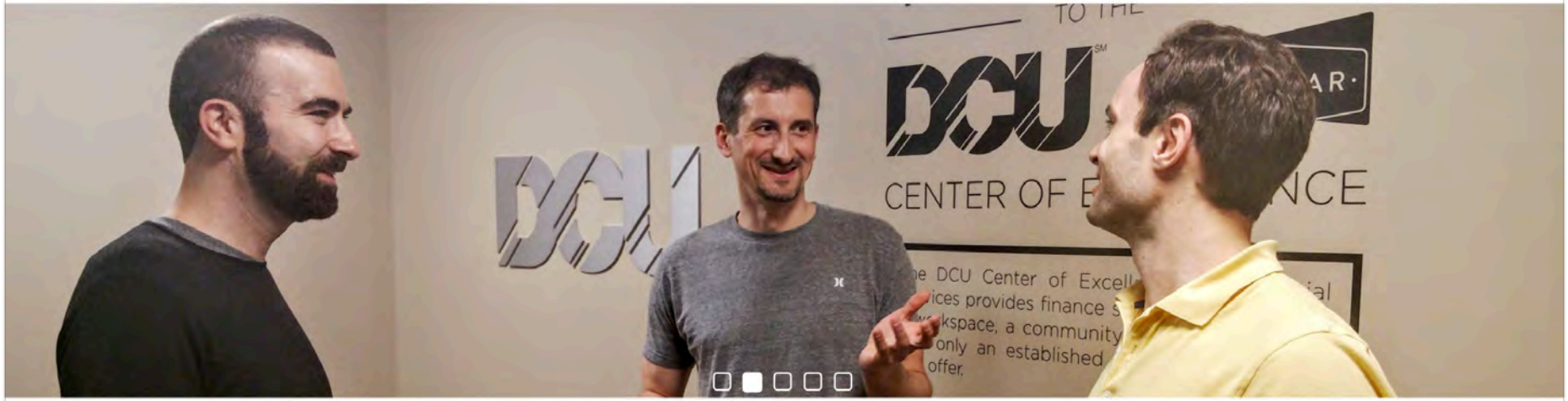
LENDING

GreenSky™

affirm

DCU FinTech
INNOVATION CENTER

ABOUT WHY DCU WORKBAR APPLY



An Innovation Center Dedicated to Fostering FinTech Startups and the Boston FinTech Community

Application Deadline Extended to May 12th, 2017

APPLY

AUG 16 2018
Credit Unions and Fintechs: The Case for Collaboration
This report showcases the benefits of collaboration through the experiences of six organizations. Their collaborative efforts are the rallying cries for credit unions to consider a different way of engaging and working with fintechs.
READ THE REPORT
experian
Filene

Key Takeaways

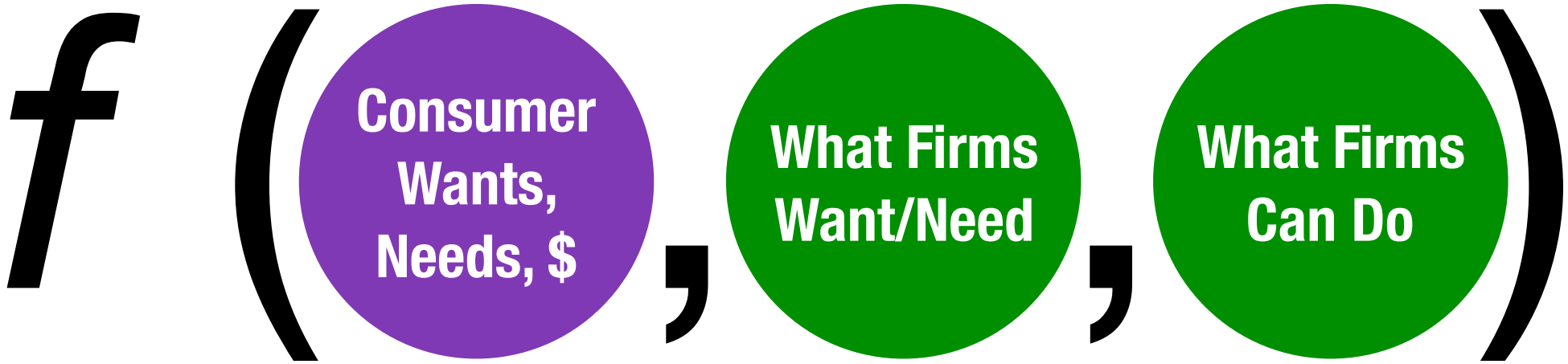
1. Shared Beliefs
2. Play to Strengths
3. Long Term vs Short Term
4. Talk Often and Ask Plenty of Questions
5. Embrace Divergent Perspectives

experian

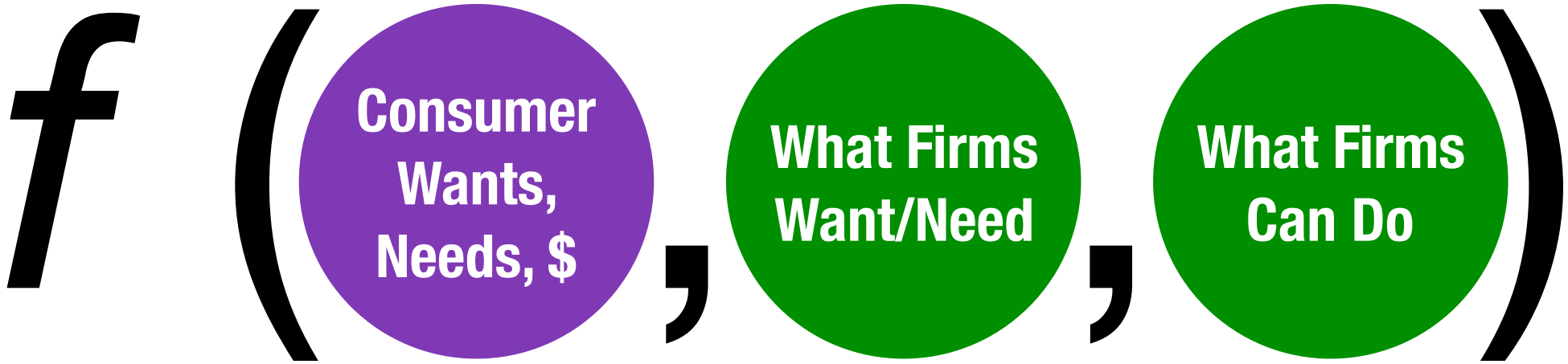
Filene

HOW CONSUMERS BEHAVE

HOW FIRMS BEHAVE



HOW FIRMS BEHAVE

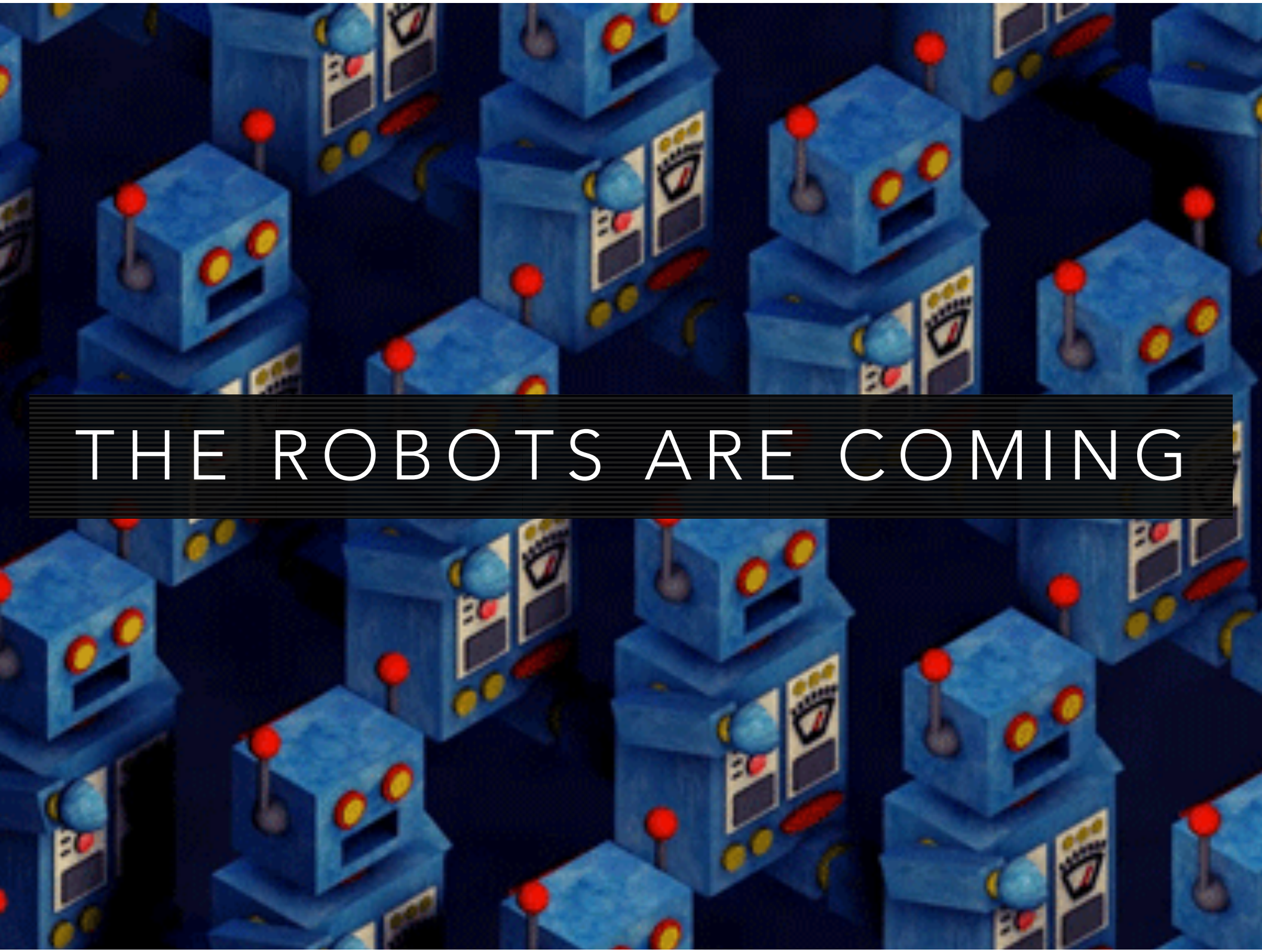


~~Chief Innovation Officer~~

Chief Collaboration Officer

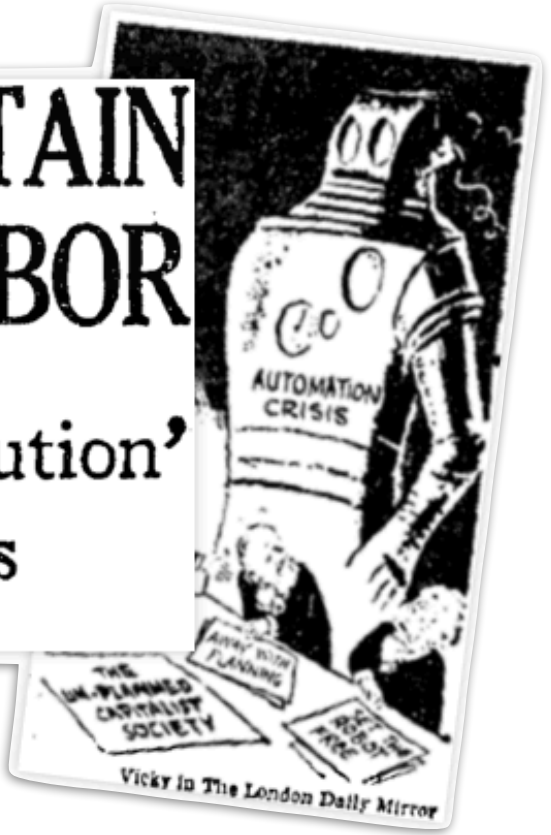
Chief of Strategic Partnerships

"We always overestimate the change
that will occur in the next two years
and underestimate the change that
will occur in the next ten
Don't let yourself be lulled into
inaction"


THE ROBOTS ARE COMING

AUTOMATION IN BRITAIN STIRS UNREST IN LABOR

Workers See 'Robot Revolution' Depriving Them of Jobs



David Suter

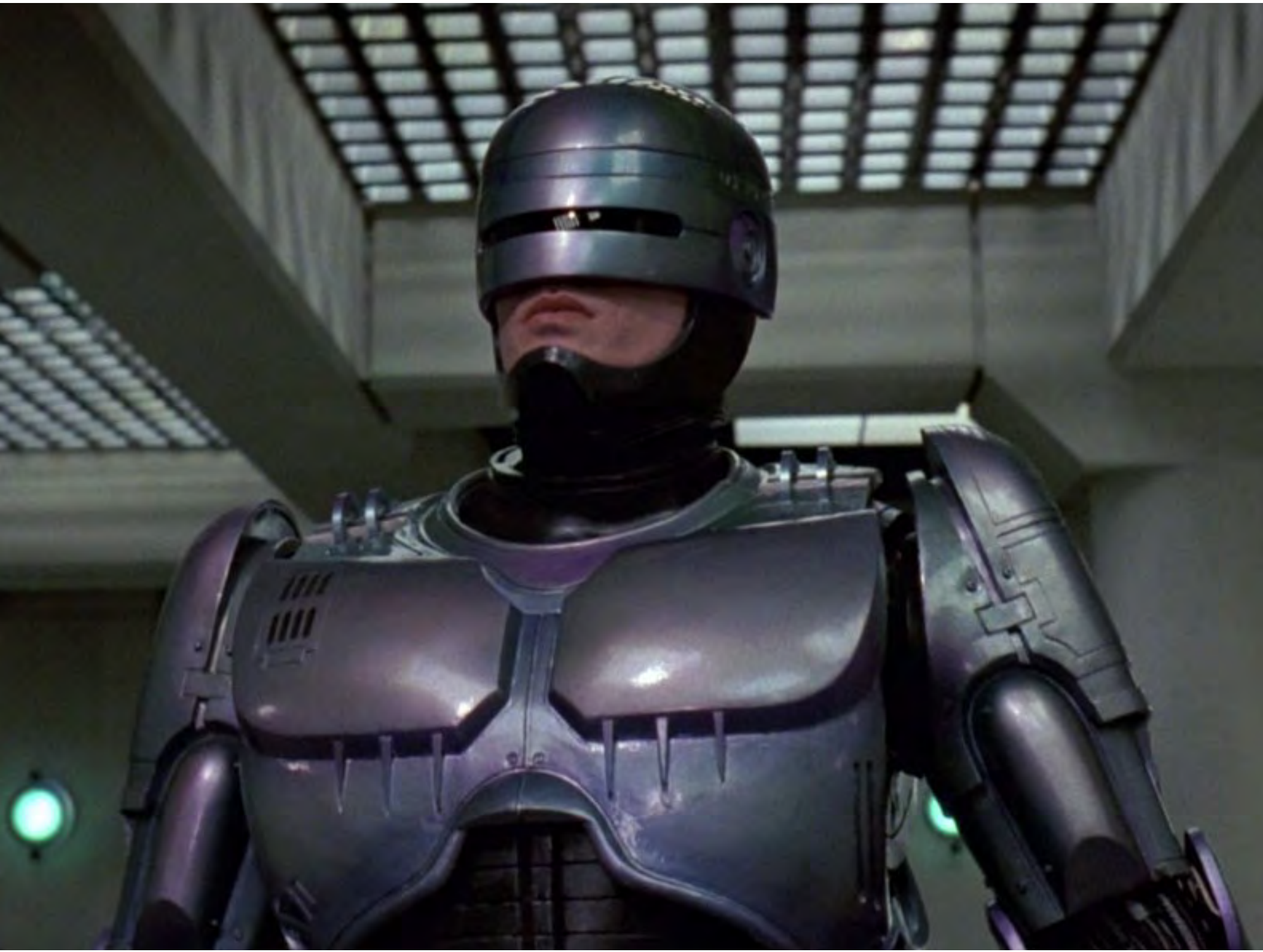
A Robot Is After Your Job

DETROIT — Technological innovation is widely billed as a miracle cure for the United States' economic doldrums. Its aftereffects, however, may be far from benign. The introduction of revolutionary new technologies such as robots — versatile computer-controlled mechanical arms — raise two painful possibilities: sizeable losses of jobs and a deteriorated quality of working life.

AUTOMATION LOOMING LARGE IN LABOR PICTURE

Automation' Might End Most Unskilled Jobs In 10 Years

Automation Linked To Jobless Count



TOMY
Omnibot 2000

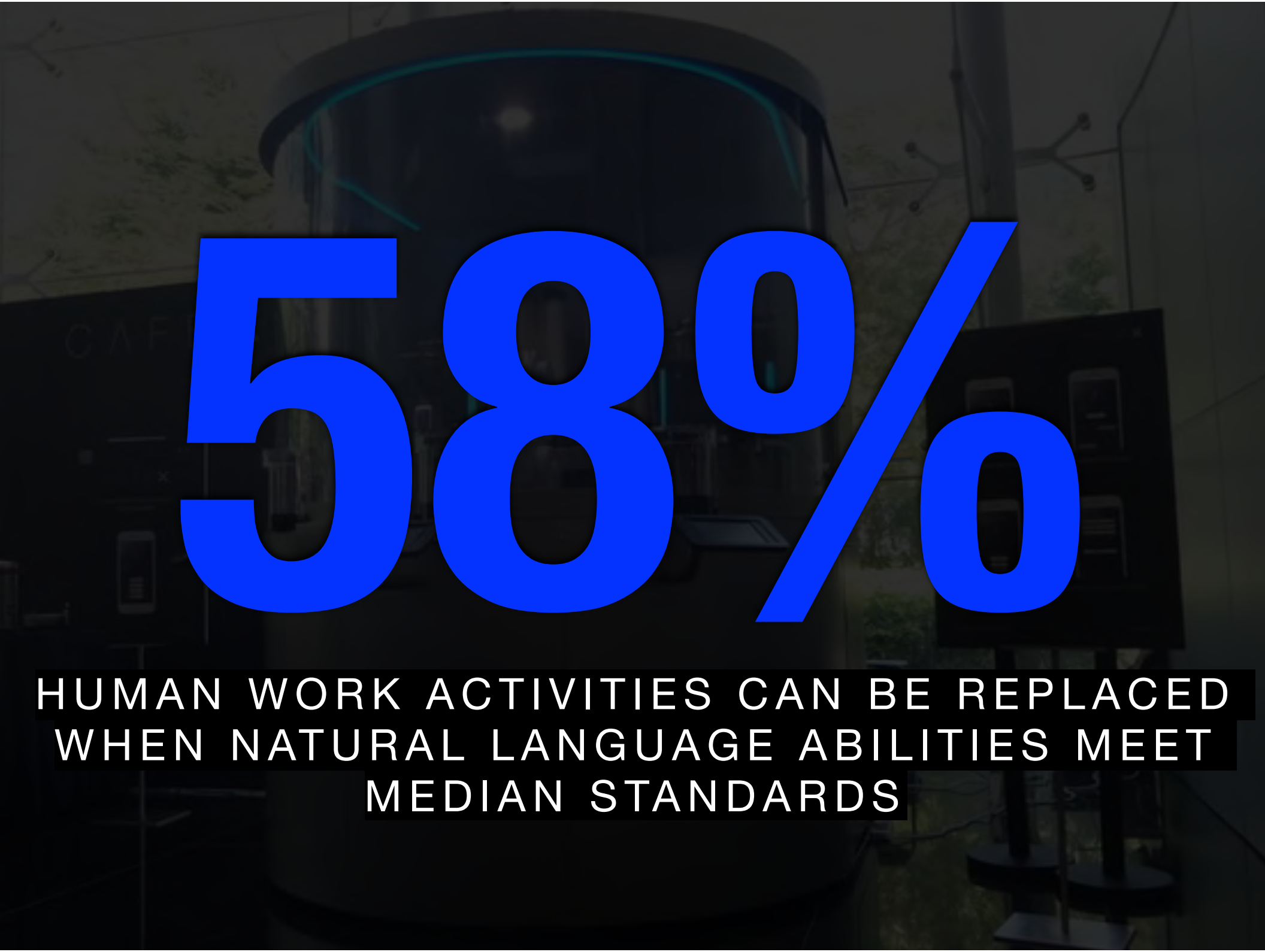
CAFEX

ABB

180
self-driving car

Autonomous Data Machines

45%
HUMAN WORK ACTIVITIES
CAN BE REPLACED


58%
HUMAN WORK ACTIVITIES CAN BE REPLACED WHEN NATURAL LANGUAGE ABILITIES MEET MEDIAN STANDARDS

Hi, how can I help?
Make me a haircut appointment on Tuesday morning anytime between 10 and 12.

CRANE
CREDIT UNION

Alexa, what is my checking account balance?

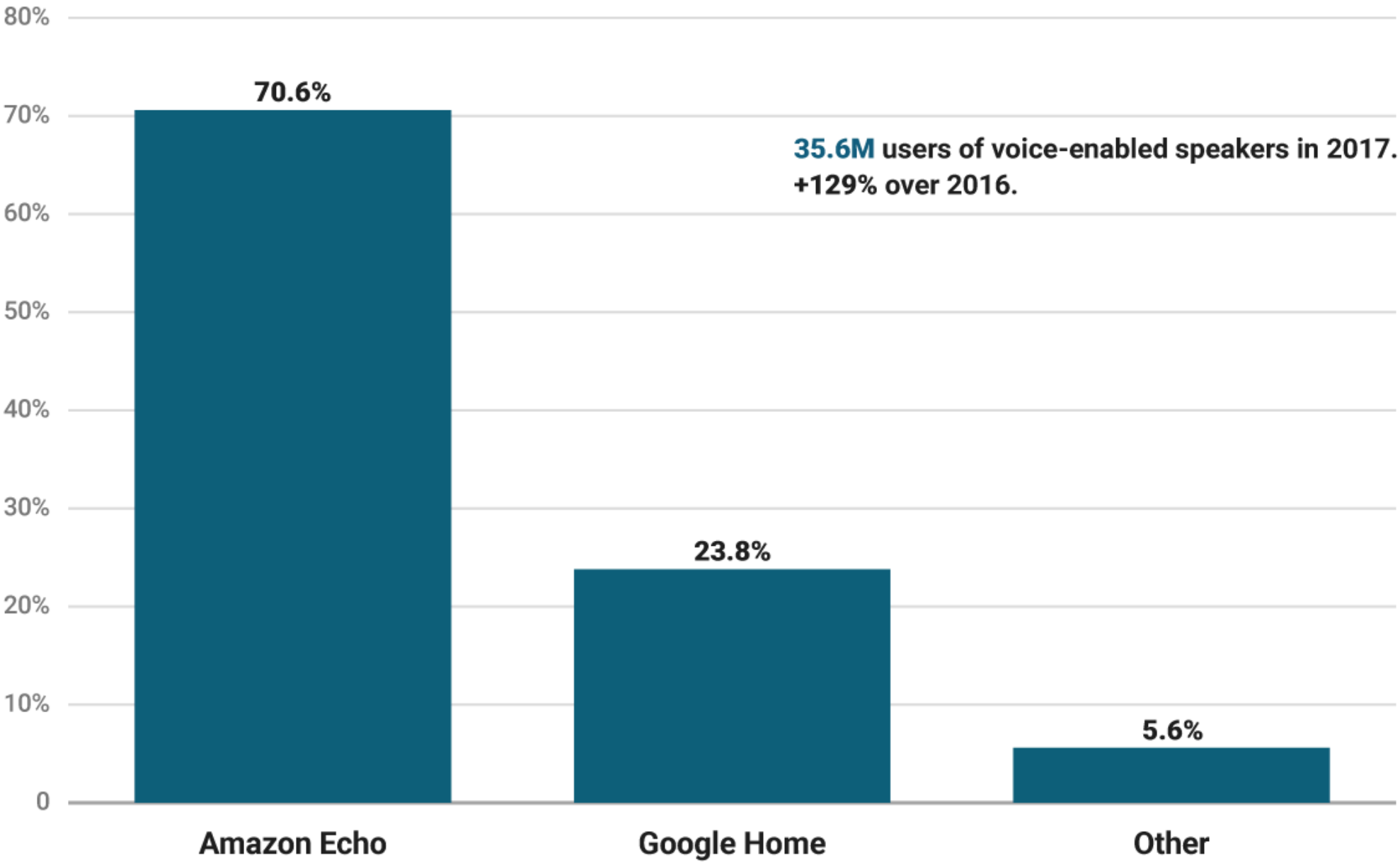
Your available balance is $745.25

Saratoga's Credit Union currently offers a 3.5% APR rate on a 30-year fixed mortgage. Would you like to apply?

Alexa, what's the mortgage rate in my area?

USER SHARE OF VOICE-ENABLED SPEAKERS IN THE US

Individuals in the US who use a voice-enabled speaker at least once a month in 2017



SOURCE: eMarketer

CONVENIENCE

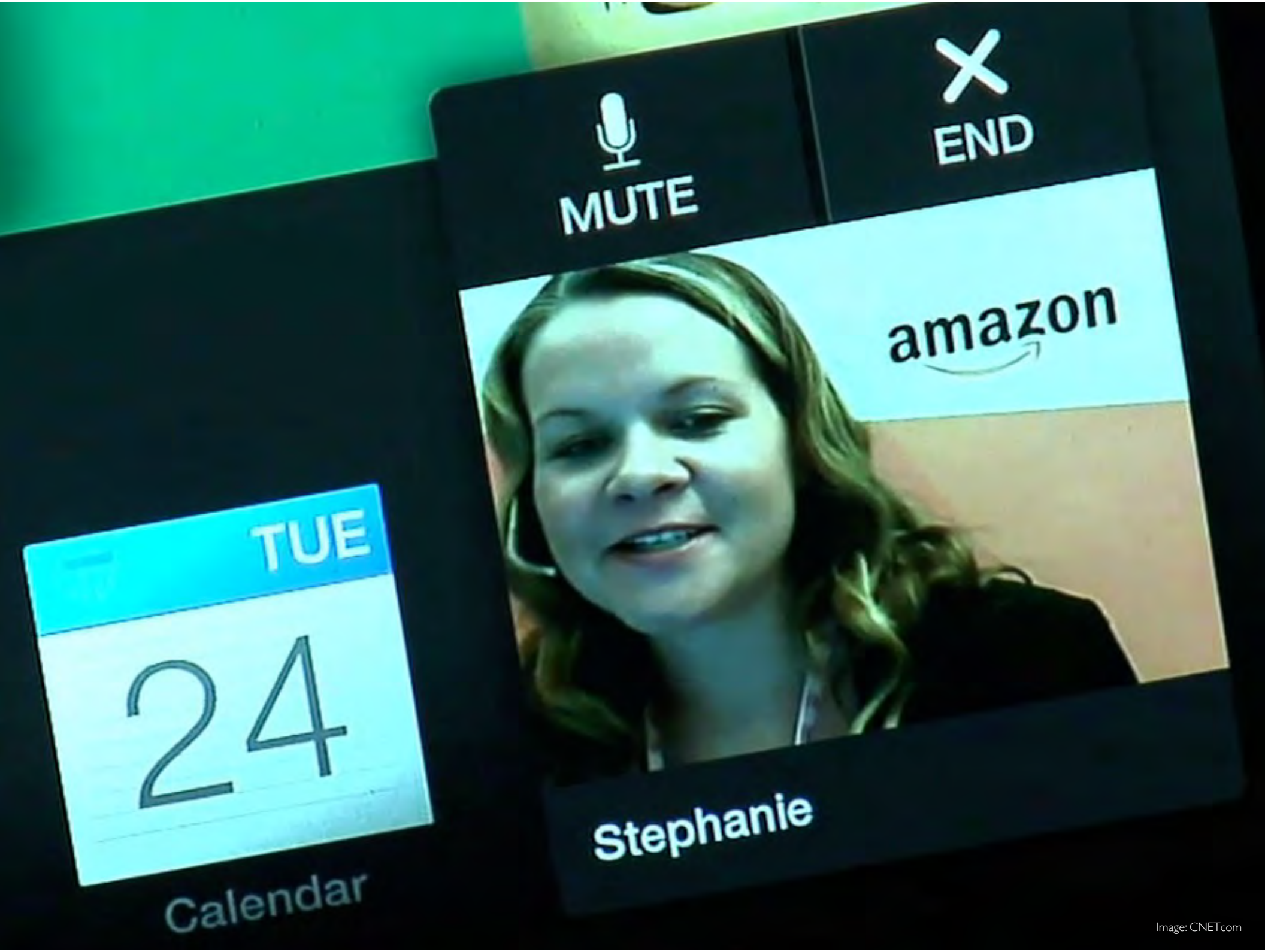


Image: CNET.com

WARBY PARKER

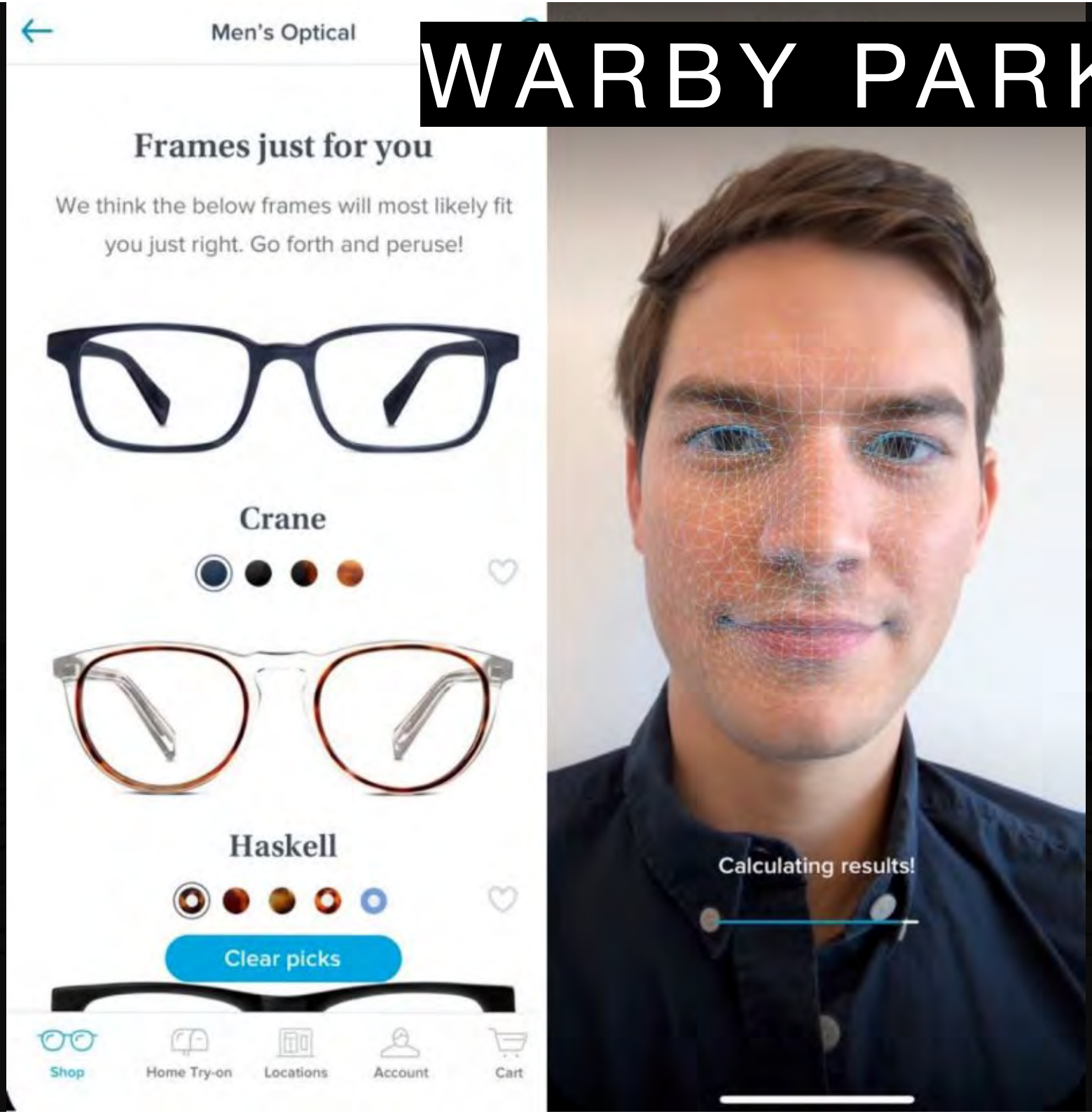


Image: Business Insider

Image: Business Insider

6
W1,170
W2,600
Gold

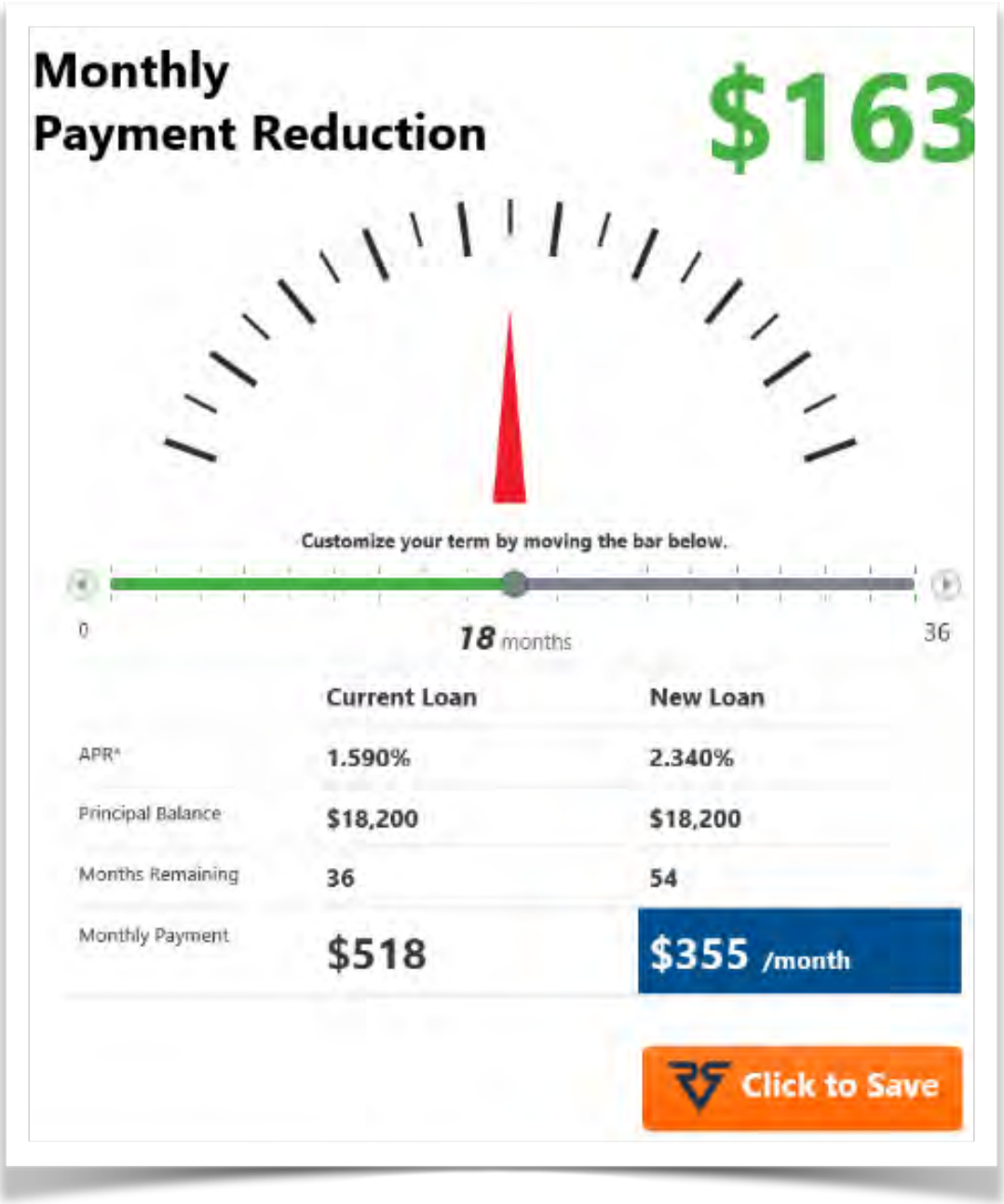
YESTERDAY'S "CONVENIENCE"

HOW MIGHT WE DEPLOY AS MANY BRANCHES, ATMS, TELLERS, AND CALL CENTER WORKERS FOR AS MANY HOURS AS ECONOMICALLY POSSIBLE, SO WE CAN HELP AS MANY MEMBERS AS POSSIBLE (WHEN AND WHERE THEY WANT IT)?

TODAY'S "CONVENIENCE"

HOW MIGHT WE HELP CONSUMERS HELP THEMSELVES TO ELIMINATE THE HASSLE OF HUMAN INTERVENTION, WHILE MAKING HUMAN INTERVENTION ACCESSIBLE IF AND WHEN IT IS NEEDED? HOW MIGHT WE LEVERAGE TECHNOLOGY TO FREE CONSUMERS FROM TRADITIONAL ERRANDS, DELIVERING FASTER AND MORE EFFECTIVE SERVICE?

CU Rate Reset™



EXPECTATION CREATION

AMAZON

See larger image

State Department Federal Credit Union EMV VISA Platinum Credit Card

by State Department Federal Credit Union

(18 customer reviews)

- Get a $50 Amazon gift card* after your first purchase
- Rates as low as 7.24% APR
- Chip enabled technology
- No Balance Transfer Fee
- No Foreign Transaction Fee
- No Annual fee

Show more

Apply now

You will be taken to a credit card application on the financial institution's website.

freecreditreport.com

Get your Free Credit Report. No Credit Card Needed.
Get your full Experian® Credit Report for free, and then search for the card that's right for you in the Amazon.com Credit Card Marketplace presented by freecreditreport.com.

Sign-Up Offer

- Get a $50 Amazon Gift Card* after your first purchase.

Product Description

ROCKET MORTGAGE℠ by Quicken Loans

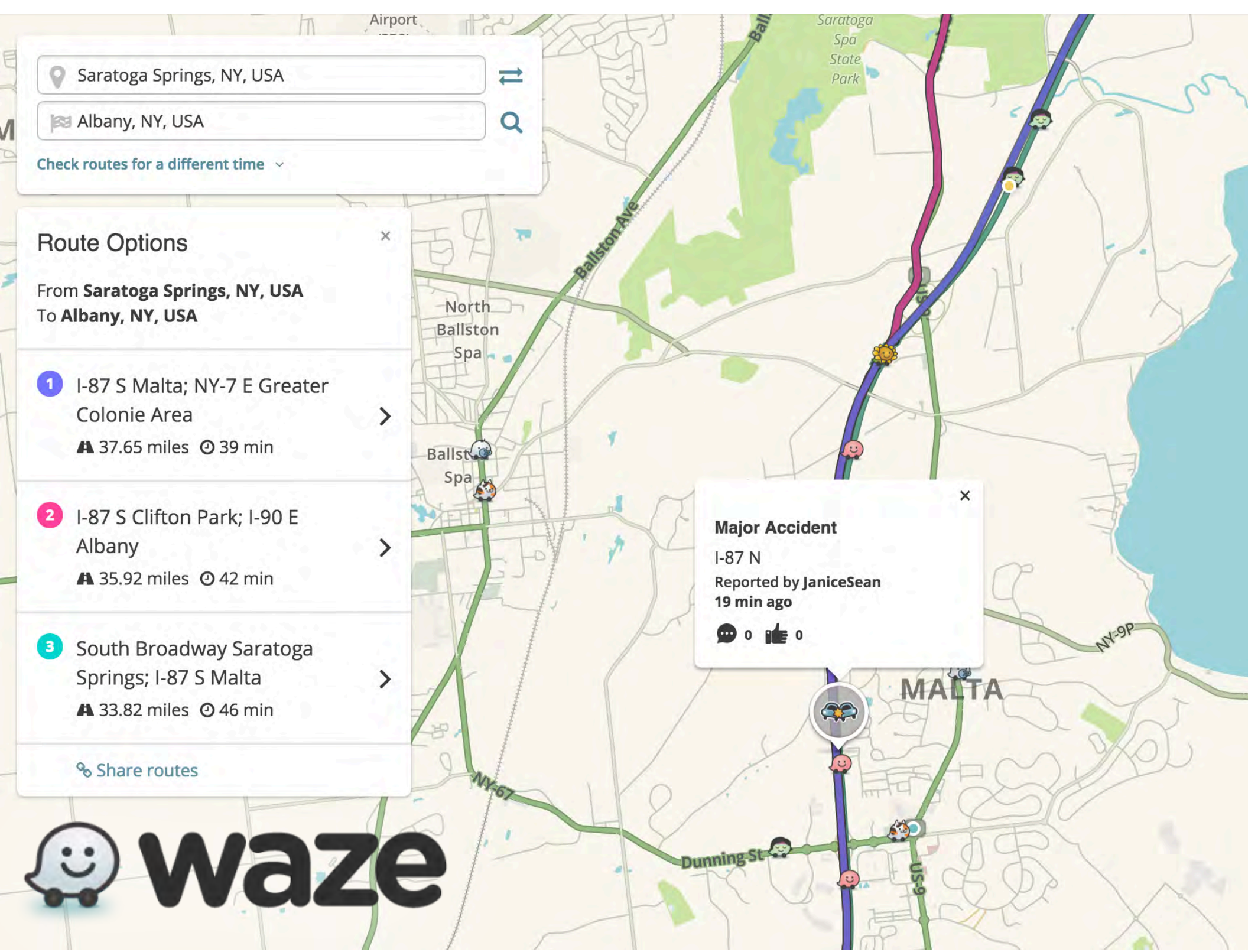
Refinance | Buy a Home | Talk to Us | Sign

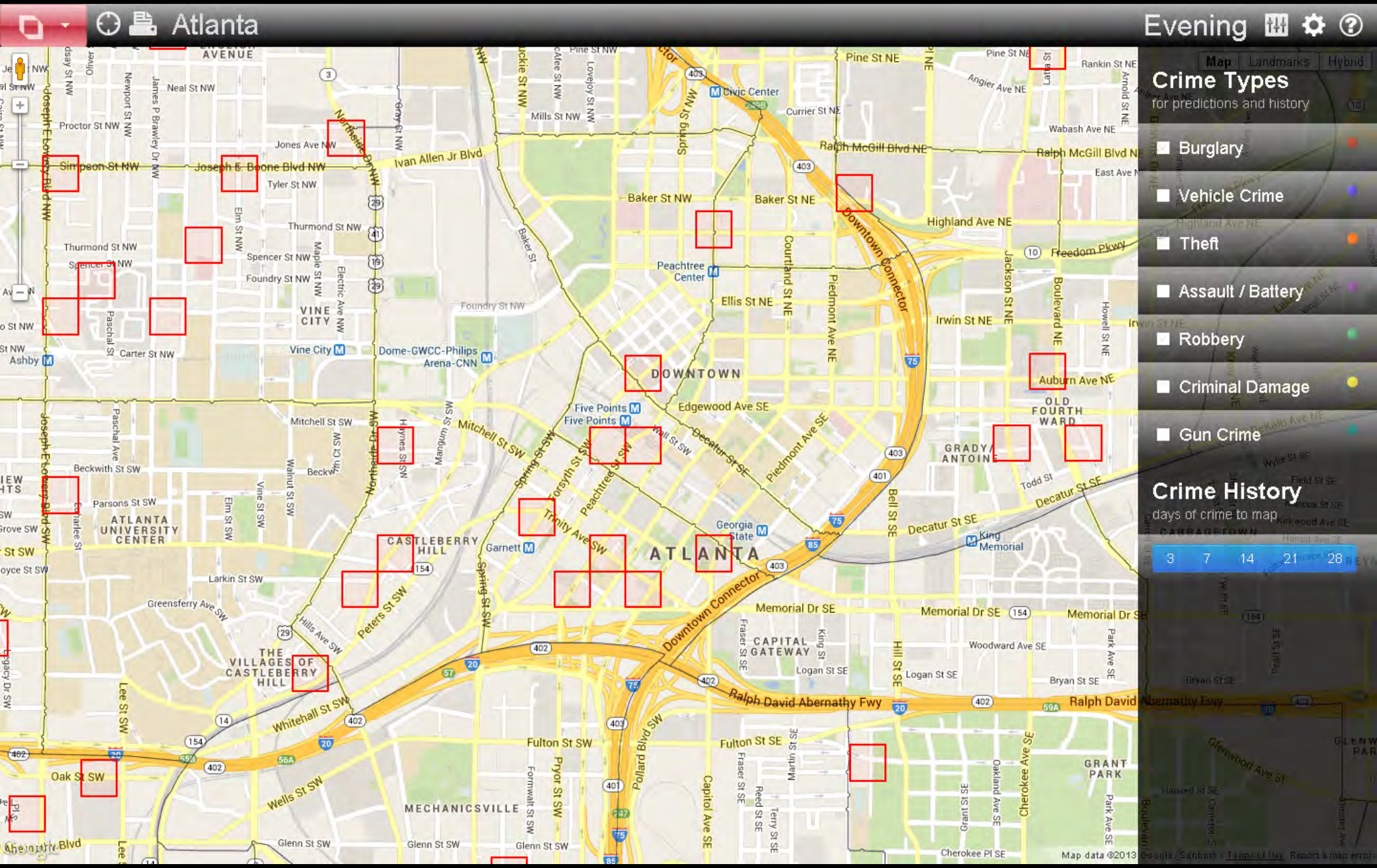
Ready to Begin?

BIG DATA

90%
WORLD'S DATA CREATED IN PAST YEAR

balance
rewards
FOR HEALTHY LIVING
FOR SOCIAL RESPONSIBILITY
CARD
Stop
CVS/pharmacy
Extra Care
PETSMART
PetPerks


Saratoga Springs, NY, USA
Albany, NY, USA
Check routes for a different time
Route Options
From **Saratoga Springs, NY, USA**
To **Albany, NY, USA**
1 I-87 S Malta; NY-7 E Greater Colonie Area
37.65 miles 39 min
2 I-87 S Clifton Park; I-90 E Albany
35.92 miles 42 min
3 South Broadway Saratoga Springs; I-87 S Malta
33.82 miles 46 min
Share routes
Major Accident
I-87 N
Reported by JaniceSean
19 min ago
0 0
Saratoga Spa State Park
Ballston Ave
North Ballston Spa
MALTA
NY-9P
NY-67
Dunning St
US-9
waze


Atlanta
Evening
Map
Landmarks
Hybrid
Crime Types
for predictions and history
Burglary
Vehicle Crime
Theft
Assault / Battery
Robbery
Criminal Damage
Gun Crime
Crime History
days of crime to map
3
7
14
21
28
ATLANTA
DOWNTOWN
MECHANICSVILLE
CASTLEBERRY HILL
ATLANTA UNIVERSITY CENTER
THE VILLAGES OF CASTLEBERRY HILL
VINE CITY
CAPITAL GATEWAY
GRADY/ANTOINE
OLD FOURTH WARD
GRANT PARK
Civic Center
Peachtree Center
Dome-GWCC-Philips Arena-CNN
Five Points
Georgia State
King Memorial
Garnett
Vine City
Ashby
Downtown Connector
Ralph David Abernathy Fwy
Ivan Allen Jr Blvd
Joseph E. Boone Blvd NW
Simpson St NW
Baker St NW
Baker St NE
Ellis St NE
Irwin St NE
Auburn Ave NE
Edgewood Ave SE
Memorial Dr SE
Fulton St SW
Fulton St SE
Mitchell St SW
Decatur St SE
Whitehall St SW
Wells St SW
Oak St SW
Peters St SW
Spring St SW
Piedmont Ave NE
Courtland St NE
Jackson St NE
Boulevard NE
Freedom Pkwy
Ralph McGill Blvd NE
Pine St NE
Highland Ave NE
Foundry St NW
Thurmond St NW
Proctor St NW
Neal St NW
Jones Ave NW
Tyler St NW
Spencer St NW
Maple St NW
Paschal St
Carter St NW
Beckwith St SW
Parsons St SW
Larkin St SW
Greensferry Ave SW
Hills Ave SW
Lee St SW
Glenn St SW
Cherokee Pl SE
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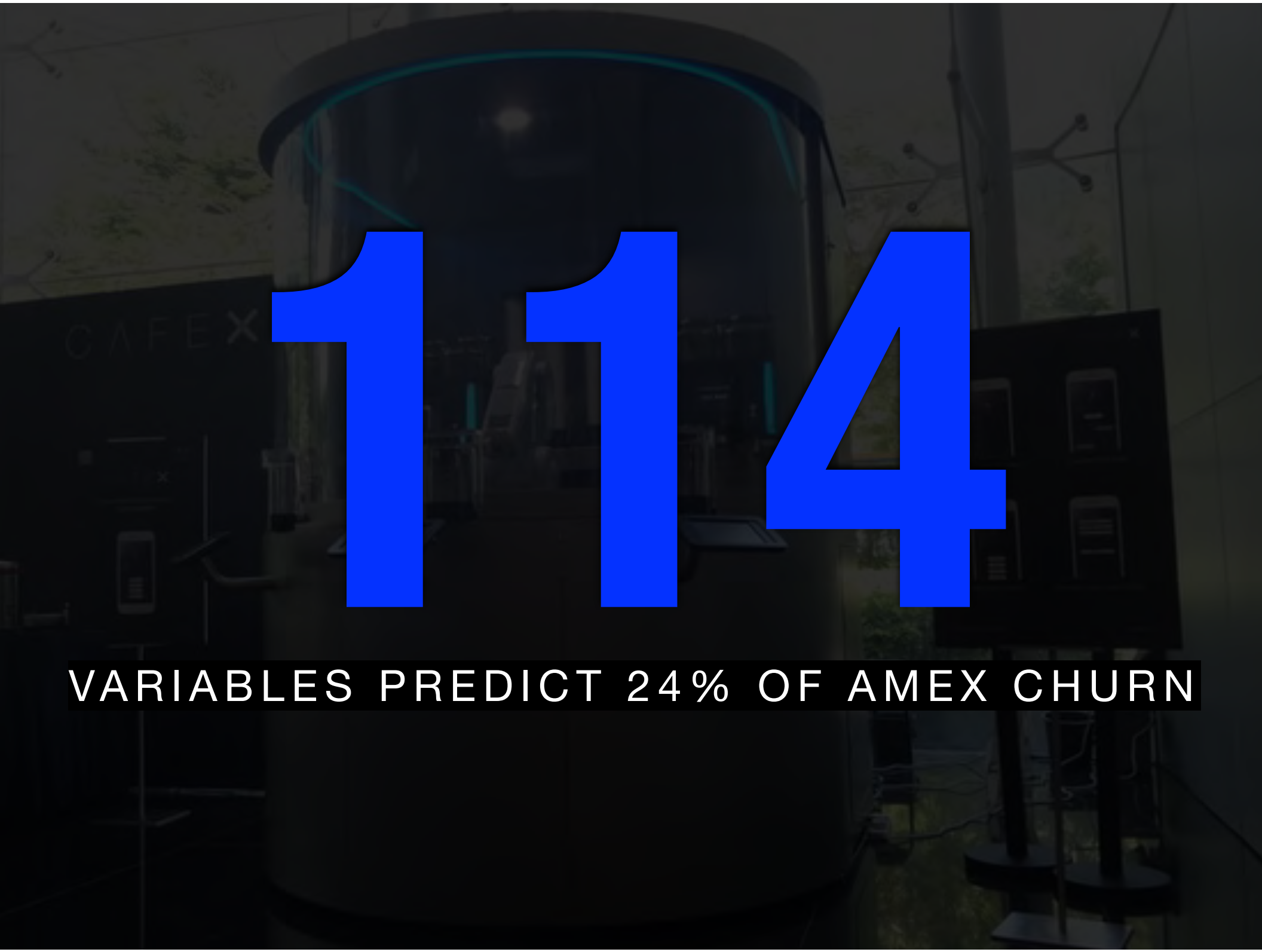
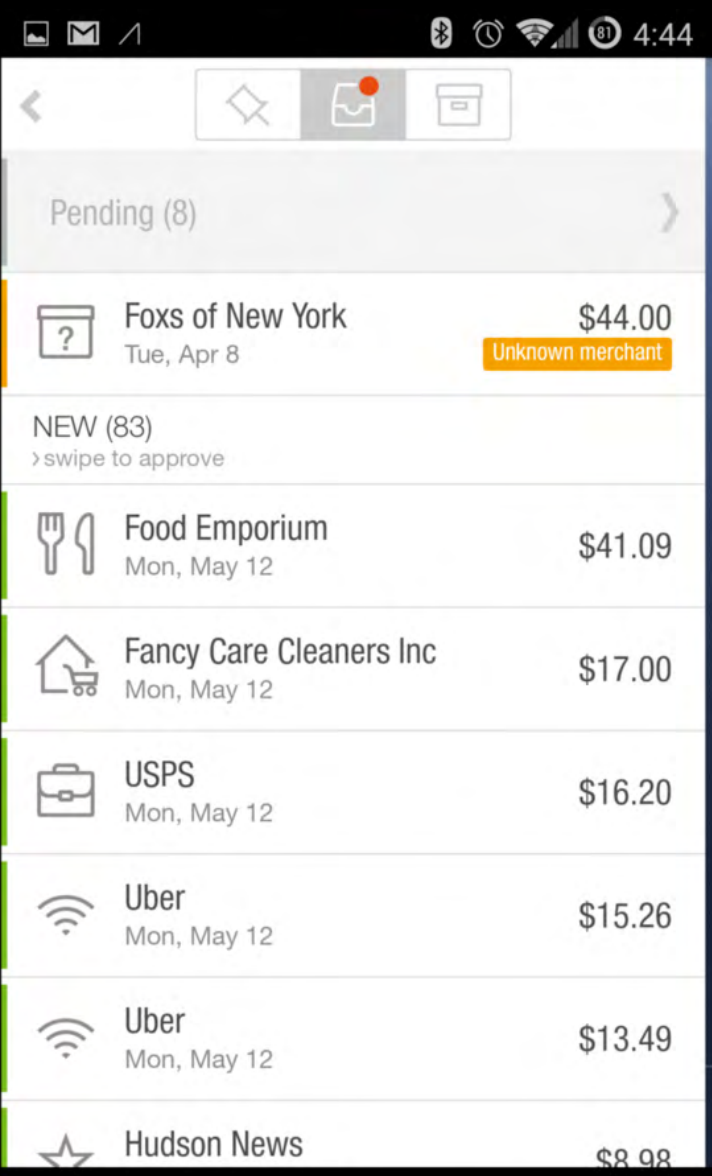
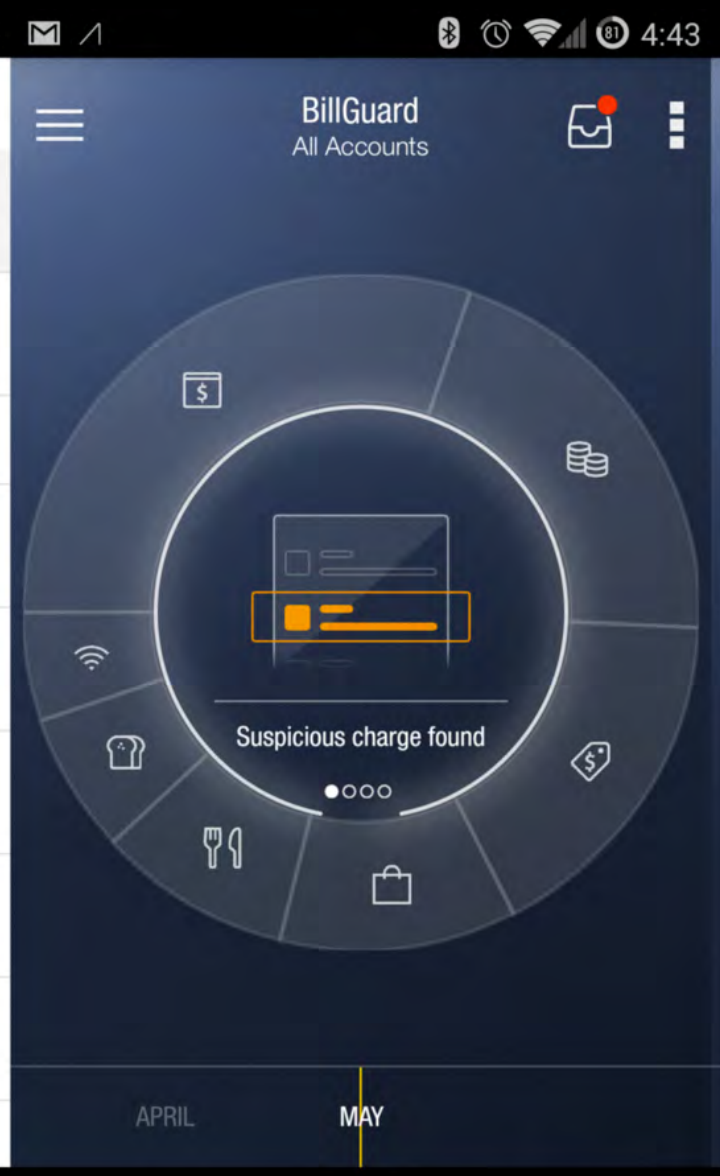
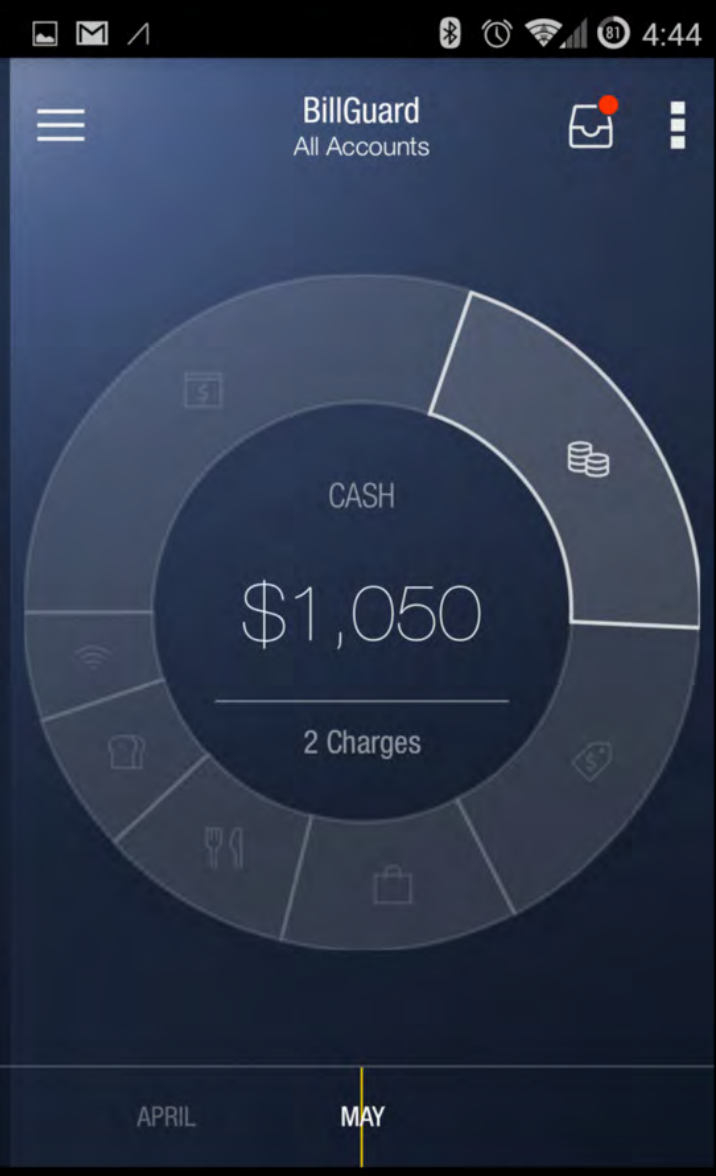
Atlanta
Evening
Crime Types
for predictions and history
Burglary
Vehicle Crime
Theft
Assault / Battery
Robbery
Criminal Damage
Gun Crime
33%
REDUCTION IN BURGLARIES

Atlanta
Evening
Crime Types
for predictions and history
Burglary
Vehicle Crime
Theft
Assault / Battery
Robbery
Criminal Damage
Gun Crime
21%
REDUCTION IN VIOLENT CRIME

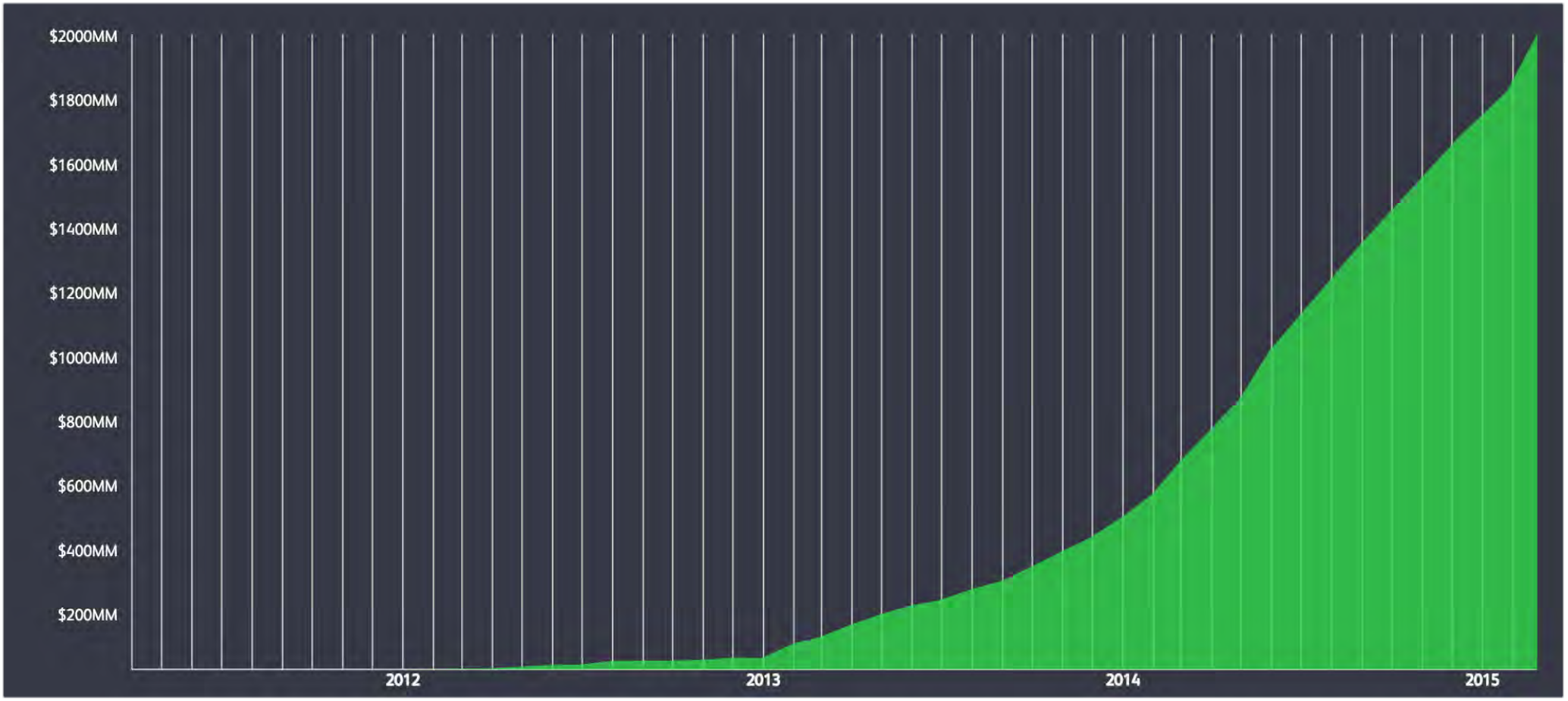

114
VARIABLES PREDICT 24% OF AMEX CHURN


4:44
Pending (8)
Foxs of New York
Tue, Apr 8
$44.00
Unknown merchant
NEW (83)
›swipe to approve
Food Emporium
Mon, May 12
$41.09
Fancy Care Cleaners Inc
Mon, May 12
$17.00
USPS
Mon, May 12
$16.20
Uber
Mon, May 12
$15.26
Uber
Mon, May 12
$13.49
Hudson News
$8.98


4:43
BillGuard
All Accounts
Suspicious charge found
APRIL
MAY


4:44
BillGuard
All Accounts
CASH
$1,050
2 Charges
APRIL
MAY

WEALTHFRONT



CHARGE ANNUAL FEES THAT EXCEED 1% OF ASSETS].

losses for your account in 2014.

This could save you as much as $352 on your taxes (based on the top 39.6% federal tax rate, 12.8% in state taxes, and full deductibility

$20K
$0
6/10/14

Diversified Portfolio Asset Allocation

ASSET CLASS PERCENTAGE ETF

FEEDBACK LOOPS

Mainframe Computing	Mini Computing	Personal Computing	Internet Computing	Mobile Computing	Wearable/ Everywhere
1960s	1970s	1980s	1990s	2000s	2014+

Others?

KPCB

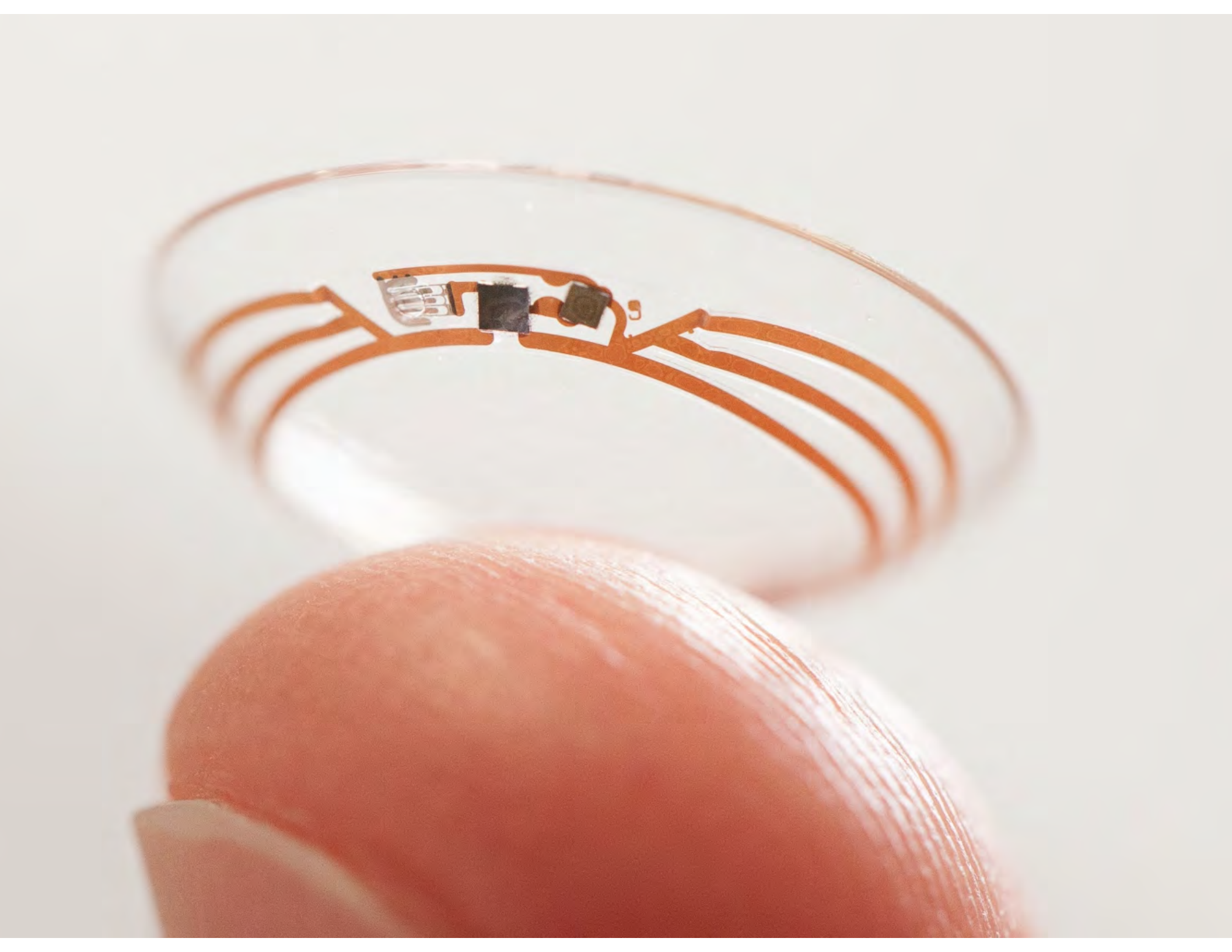
Image Source: Computersciencelab.com, Wikipedia, IBM, Apple, Google, NTT docomo, Google, Jawbone, Pebble.

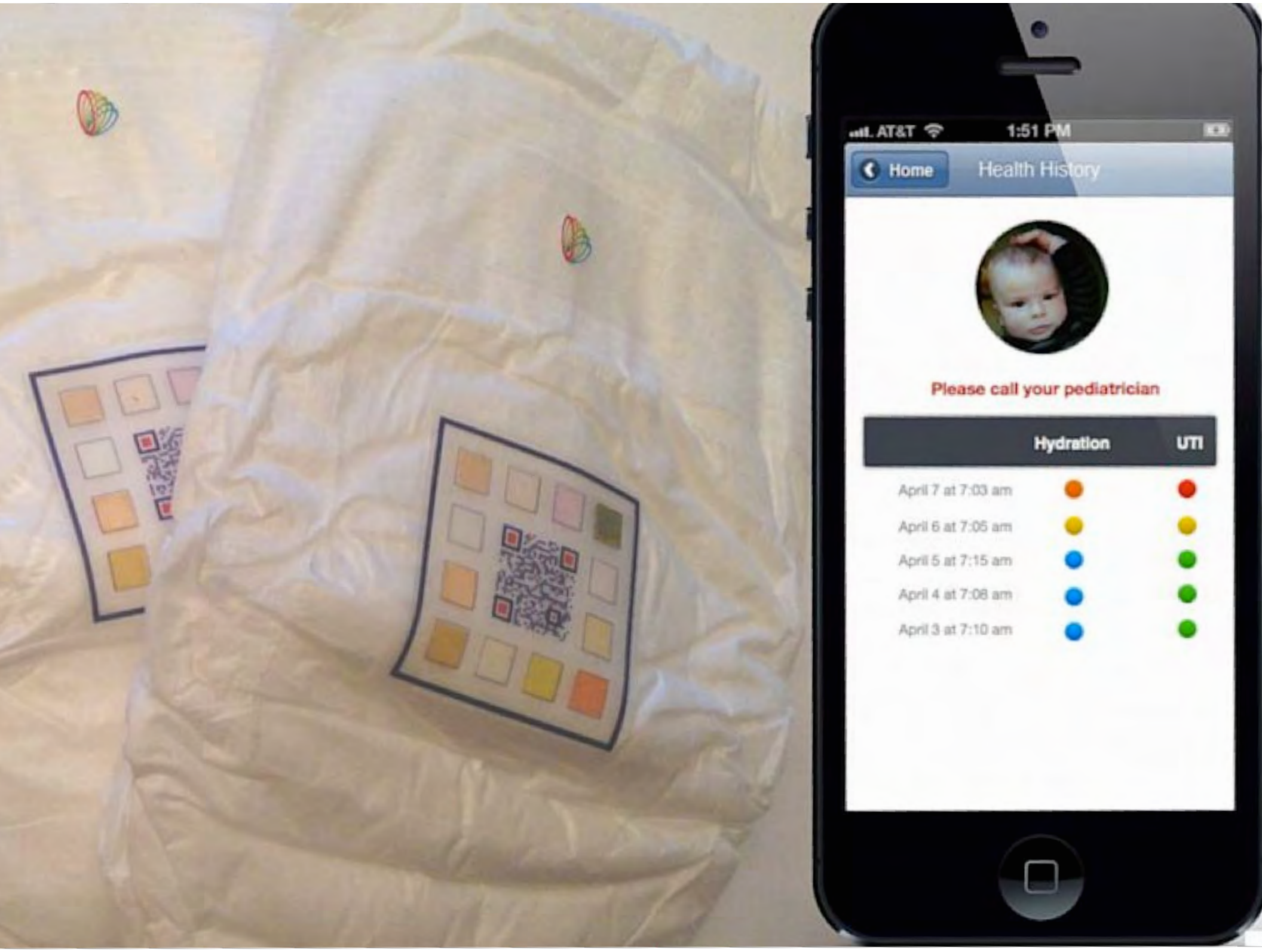
Tue
9

OCTOPUS by JOY

3:21 PM
Back
HAPIfork
My goal
Eat with less than 3 fork servings per min.
7 days
1 month
3 months
6 months
1 year
100
50
0
73
2.8
23%
26
TODAY (last meal)
76 fork servings
3.1 fork servings/min
18 % overspeed
26 min
Dashboard
HAPILABS
The fun and healthy place to be
Community
Store
fabrice@hapilabs.com
HAPILABS » Timeline
My Stat
January 15, 2013
59
Fork Servings
12sec
Average Interval
77%
Success Rate
Location
Les Halles, Paris
Meal started
29/06/2012 01:48 pm
Meal ended
29/06/2012 02:14 pm
Healthy meal score
Tags:
pasta, carbs, fine dining
Description:
Had a heavy pasta dinner at Les HAlles. I think I ate too much, and too quickly. Next time I'll pace my self and try eat more slowly.
Edit details
View meal
Interval Alert
10 seconds
Last 7 days
24:15
Duration
62
Fork Servings
13sec
Average Interval
74%
Success Rate

LUMO

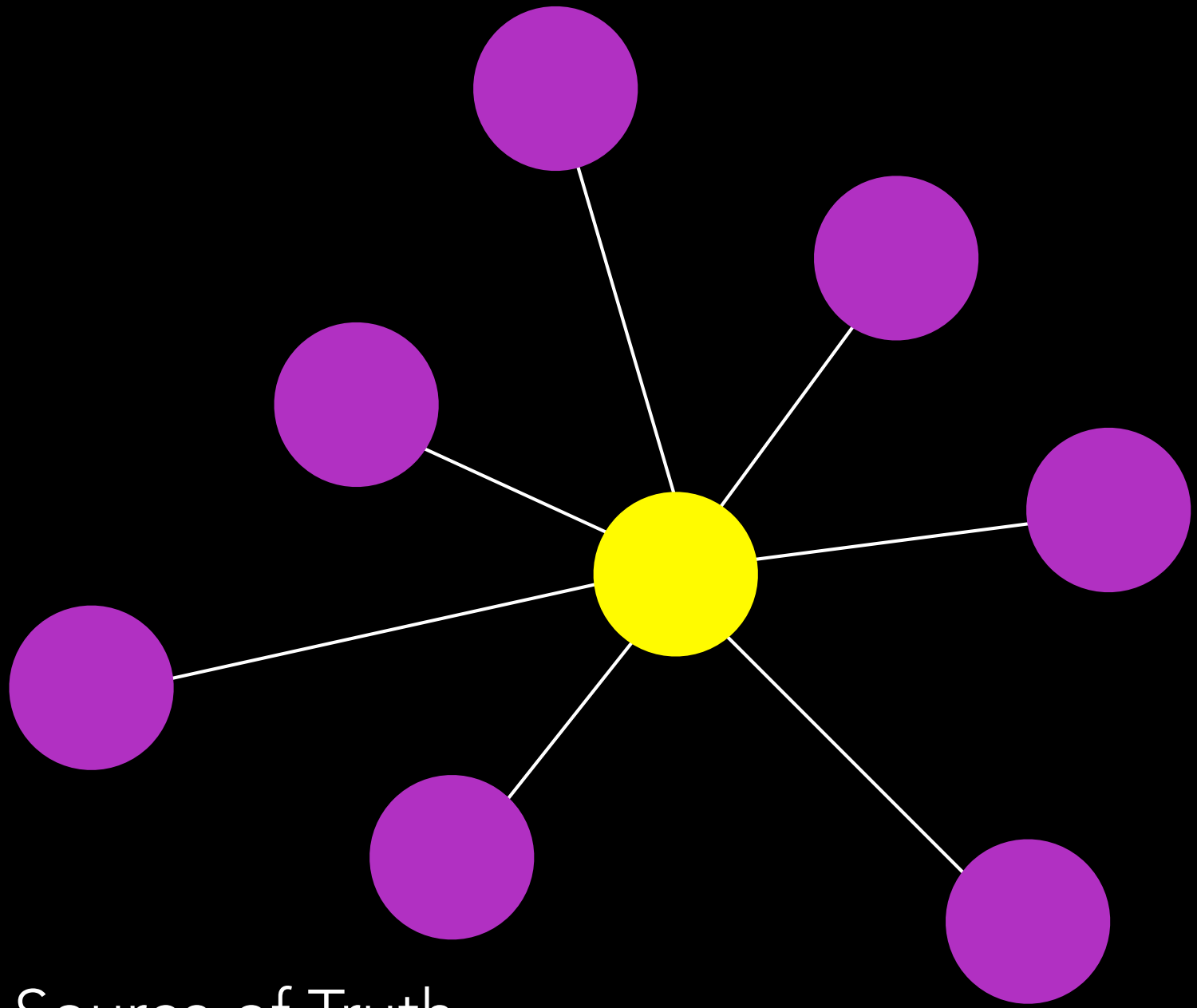



AT&T
1:51 PM
Home
Health History
Please call your pediatrician
Hydration
UTI
April 7 at 7:03 am
April 6 at 7:05 am
April 5 at 7:15 am
April 4 at 7:08 am
April 3 at 7:10 am

BLOCKCHAIN

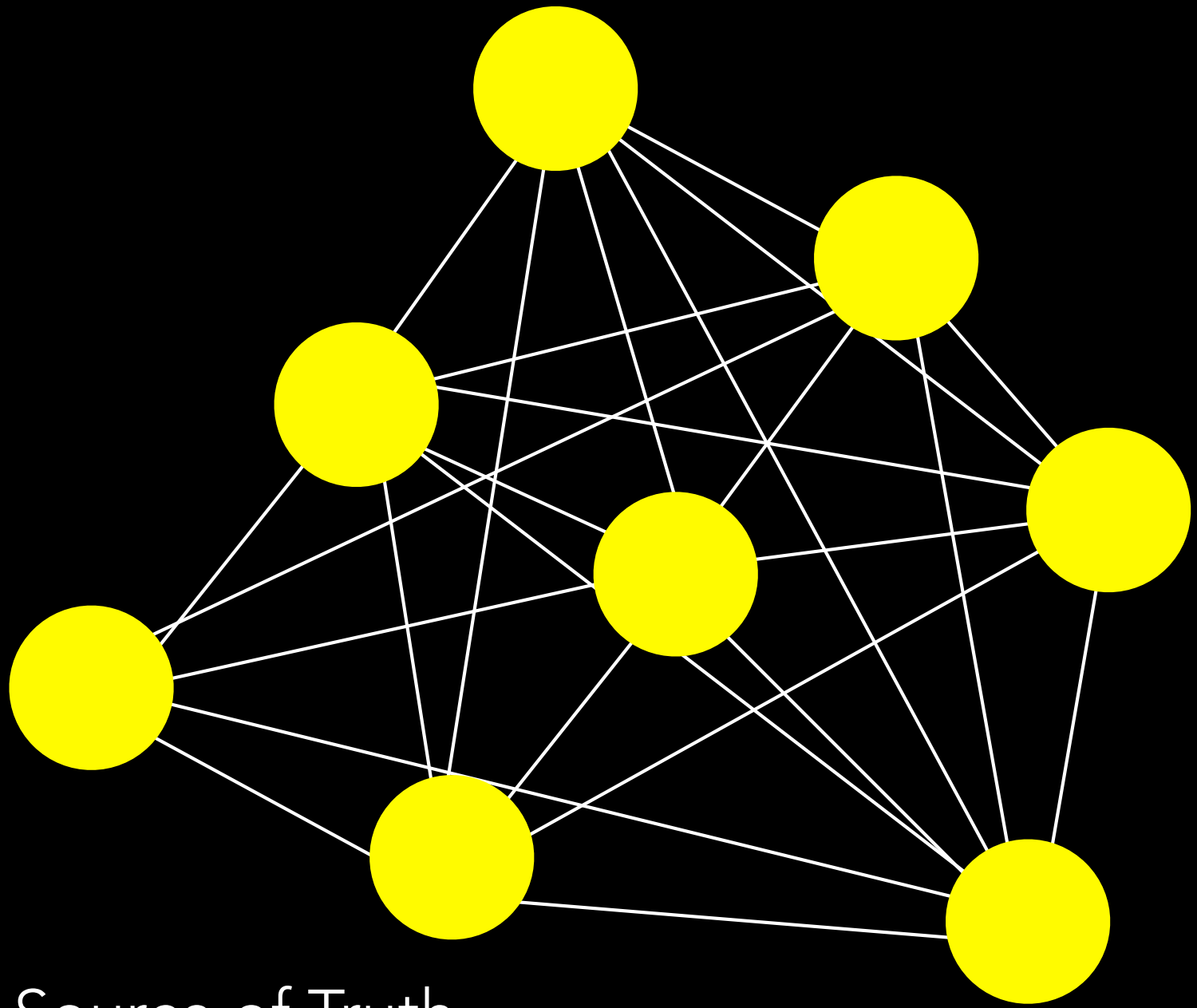
BUY | SELL
BITCOIN
BITCOIN KIOSK
BitcoinNW
BUY & SEL
BitcoinNW.com

CENTRALIZED LEDGER

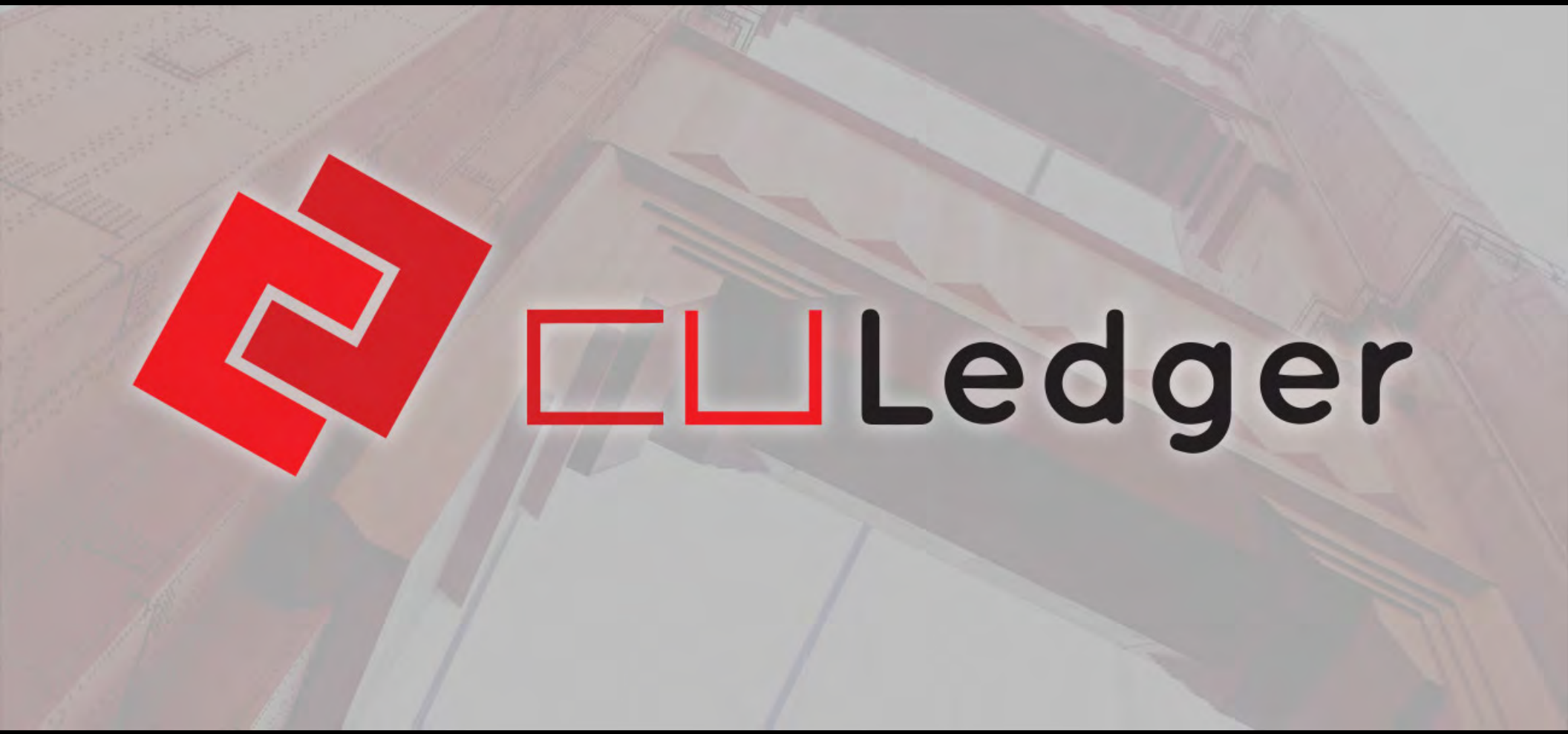


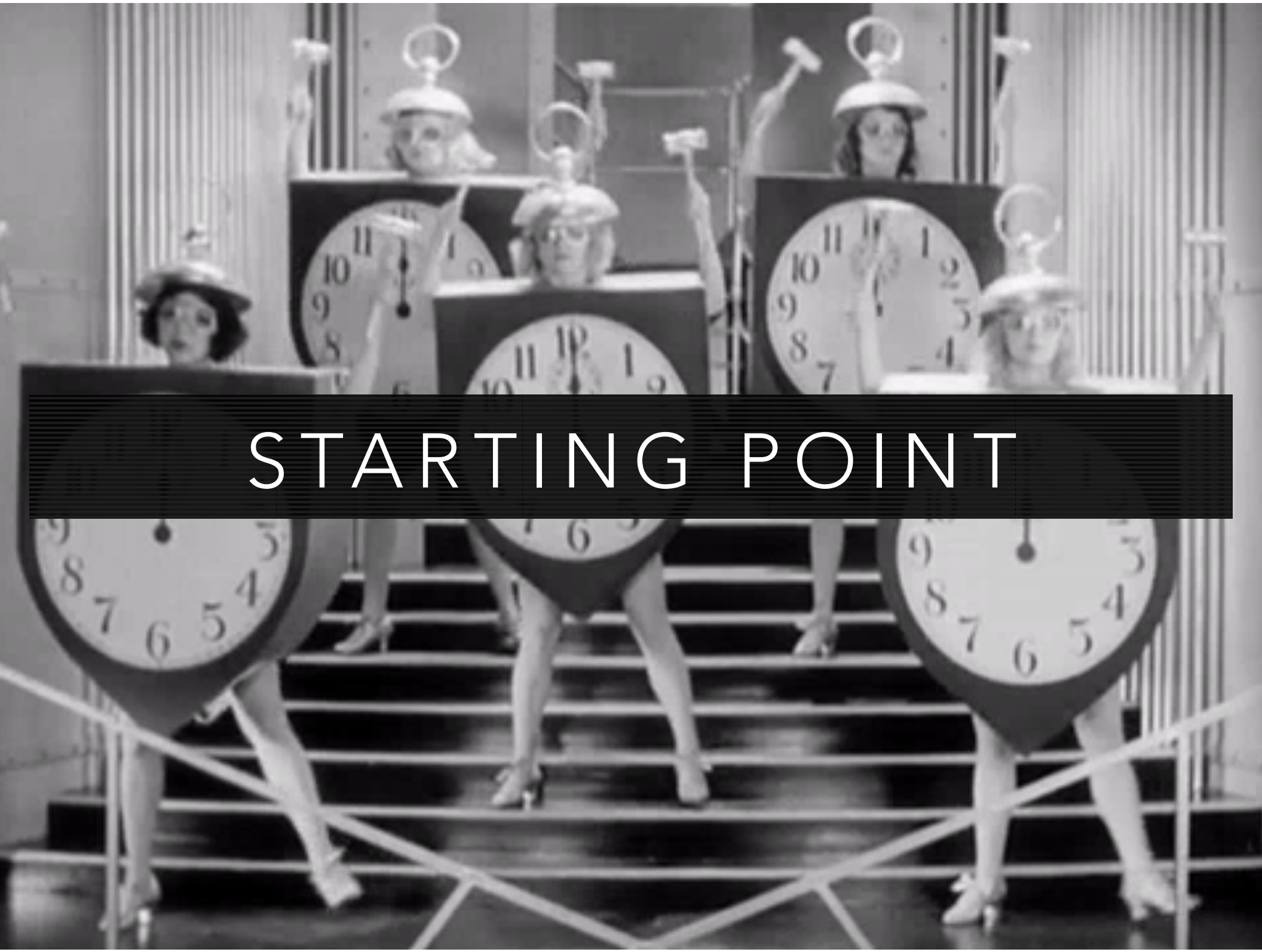
Source of Truth

DISTRIBUTED LEDGER

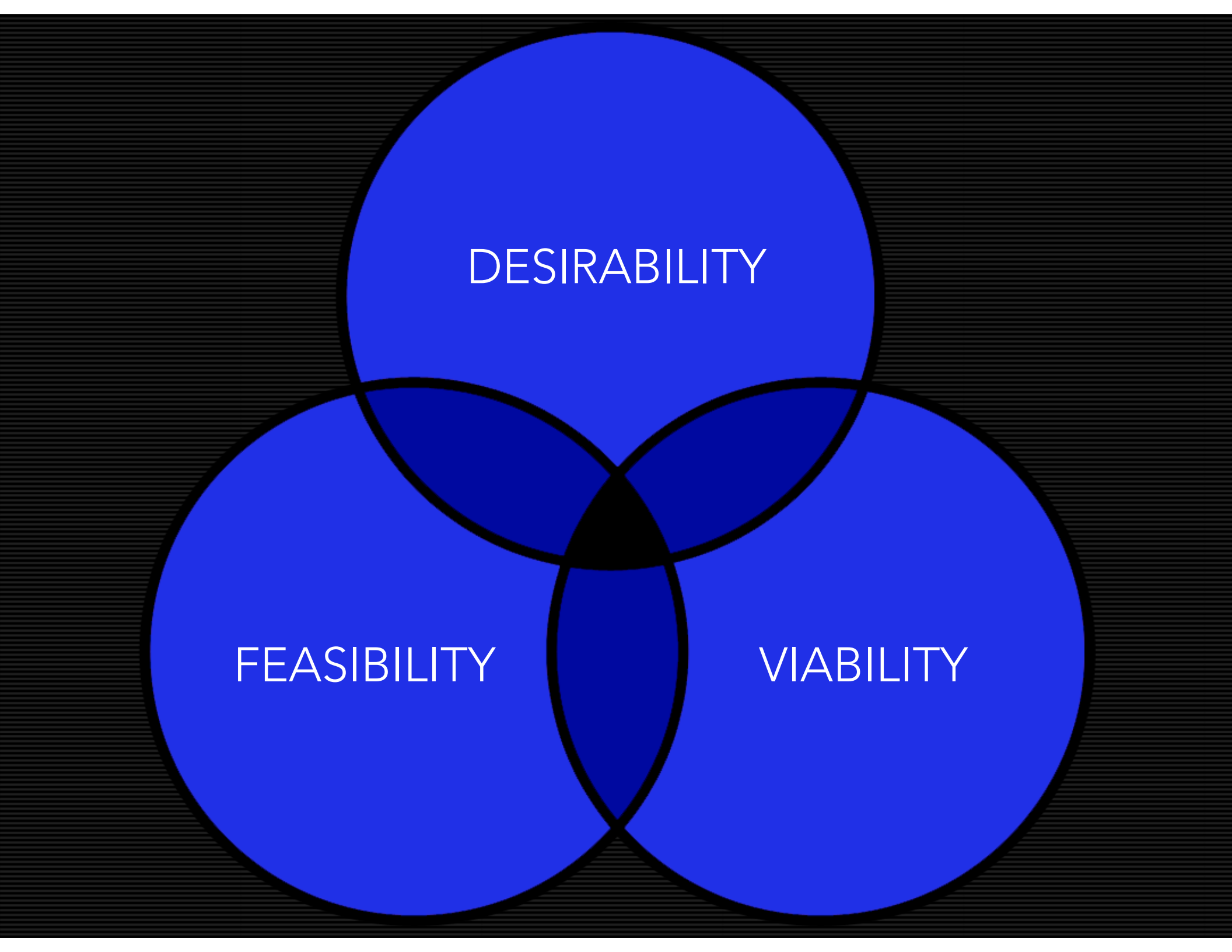


Source of Truth


CU Ledger


STARTING POINT

14 Percent of Americans Are Food Insecure
New York Fed says nearly half of college grads are underemployed
September 5, 2014, 3:17 PM ET
The Percentage Of Americans Who Can't Afford Food Hasn't Budged Since The Recession Peaked
Job Force Participation Rate At 36-Year Low; Experts Say It'll Probably Get Worse
54 million Americans categorized as "credit invisibles"
Long-term unemployed still at record levels
Starved of Financing, New Businesses Are in Decline
U.S. Homeless Population Reaches 610,042


DESIRABILITY
FEASIBILITY
VIABILITY

Check Card
MINNESOTA DRIVER'S LICENSE

Bank of America Stadium
322
323

Break

Credit Union Industry & Credit Trends

Sue Schroeder
Senior Director, Credit Union Vertical Markets

 © Experian Public | 2018 Credit Union Advisory Council

U.S. Macroeconomic Trends:

Still a Good Time for Growth

Consumer Confidence Continues to Rise:
+11% YoY; Approaching 2000 peak levels

Investor Confidence Remains High:
Dow Sep 5, 2018: 25,975 Up 16% YoY

Real GDP Remains Strong
Real GDP % Change from Prior Period 4.3%(Q1)

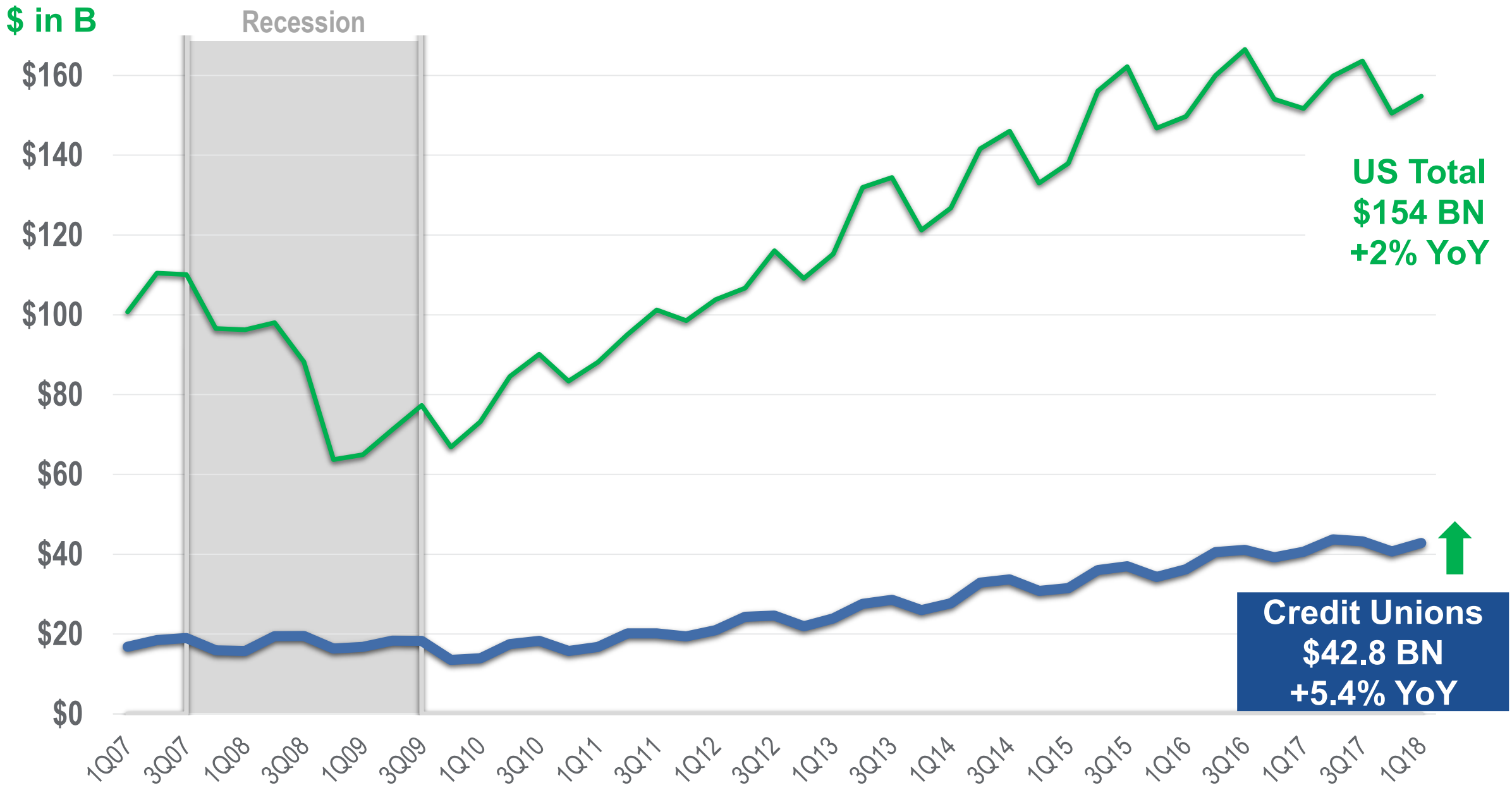
Unemployment Remains Low:
Forecasting to be low and stable through 2020

Home Prices Up; West is Soaring
$264,800, +4.6% YoY; West = $393,000

Auto Trends

Auto Originations Growing; CUs Gaining Share

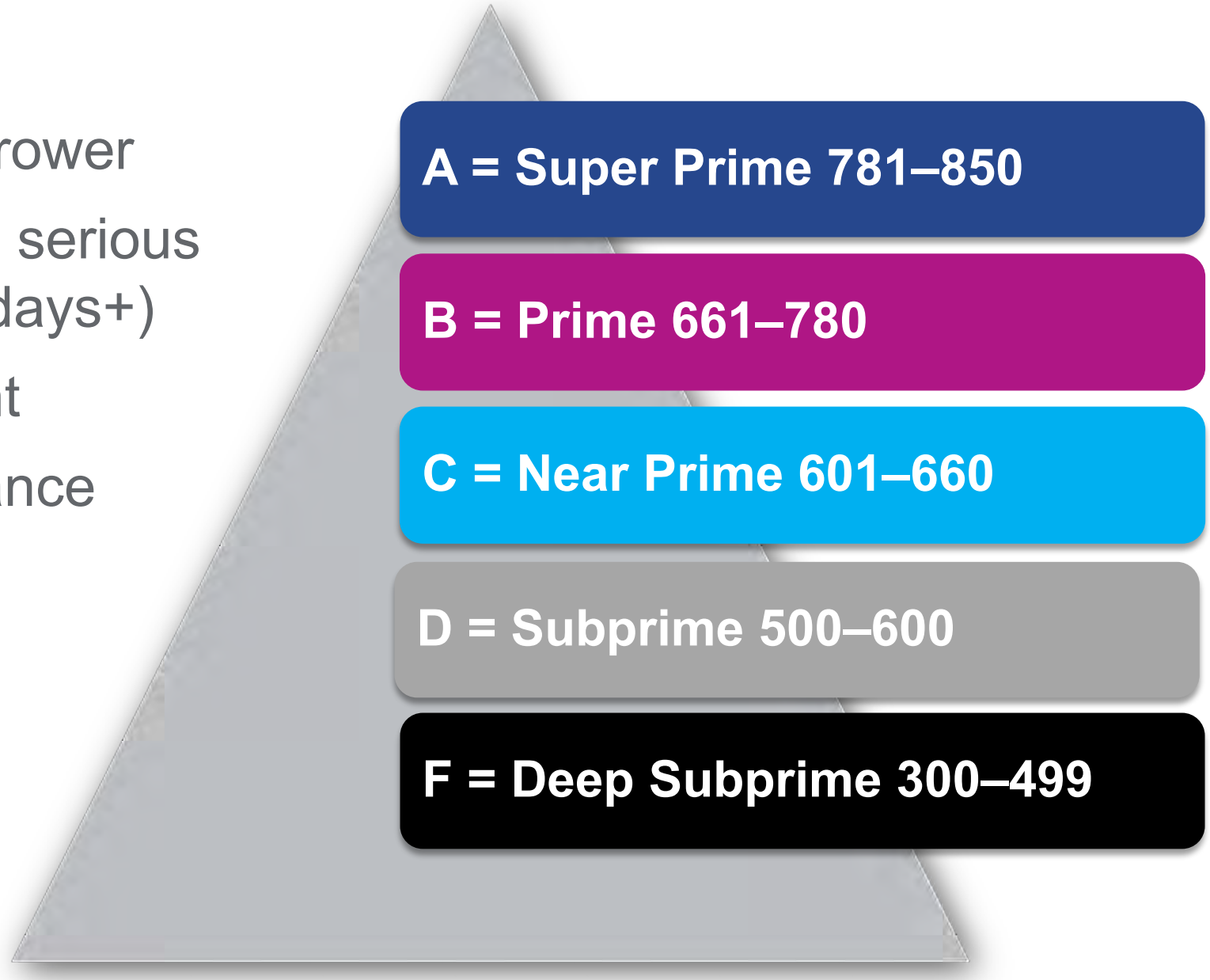
Credit Unions Growing Faster Than US; Total 27% of All Originations



US & Credit Union Dollars of Lines Originated (Billions)
Source: Experian IntelliView℠

Defining VantageScore® 3.0
Model Overview

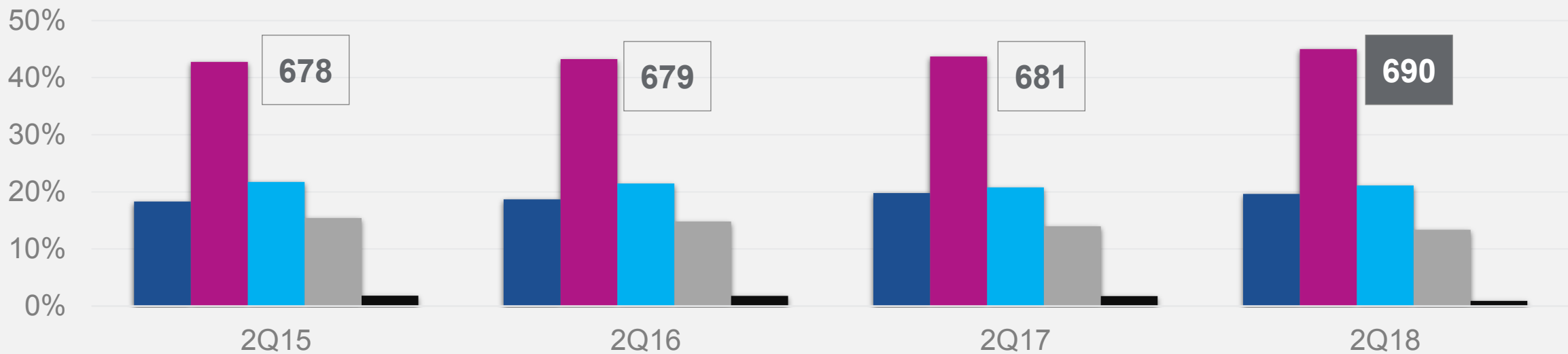
- Predicts risk of borrower
- Likelihood of future serious delinquencies (90 days+)
- Any type of account
- 24-month performance



Auto Loans: Average VantageScore Increasing

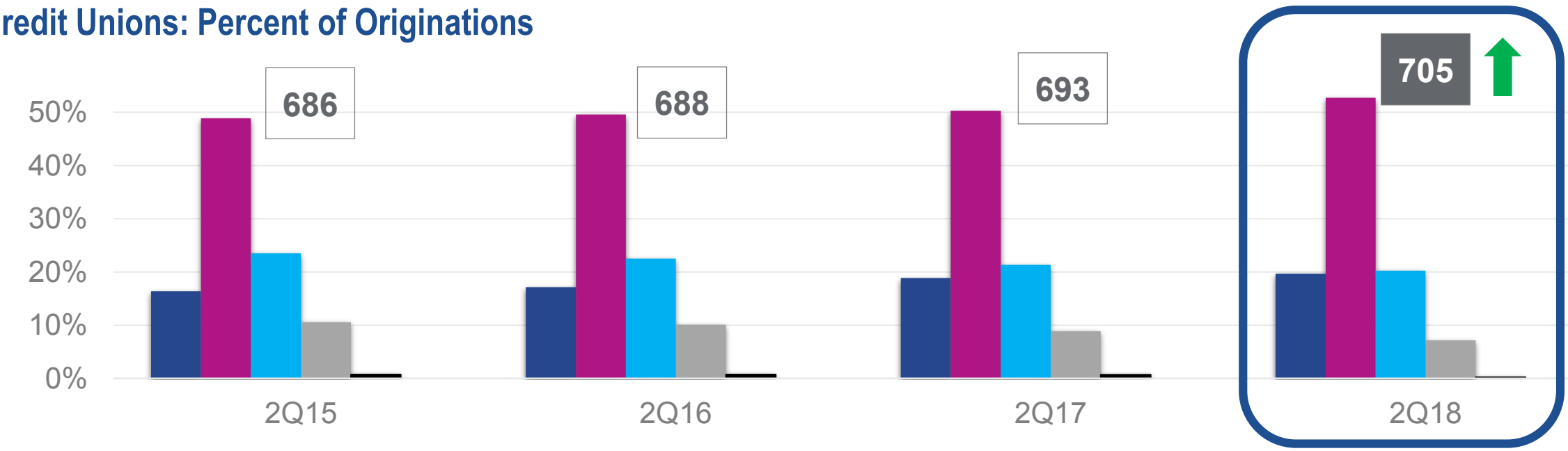
Credit Unions: Quality of Loans are Going Up; 70%+ Prime & Super Prime

US Total: Percent of Originations



Super Prime Prime Near-Prime Subprime Deep Subprime

Credit Unions: Percent of Originations

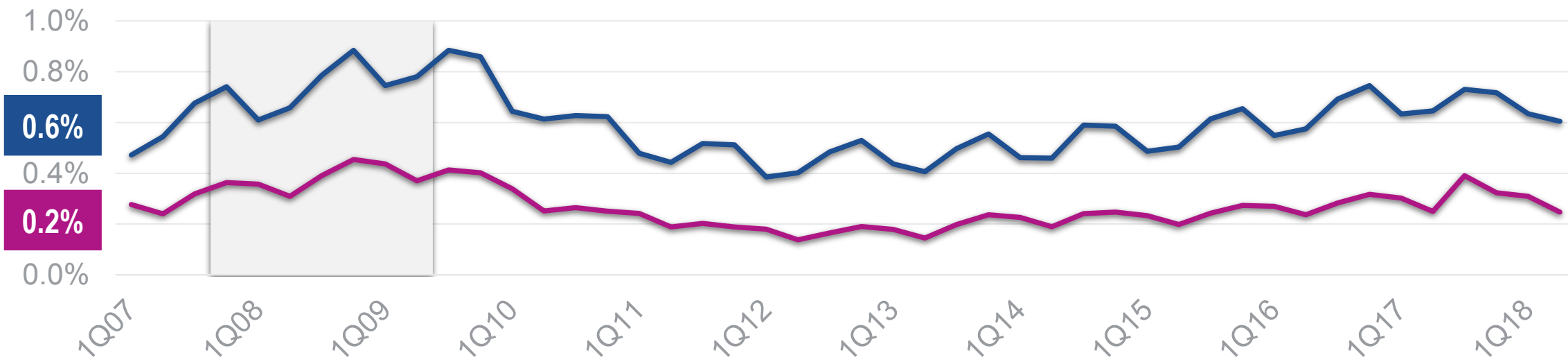


Distribution of Auto Loan Originations by VantageScore®
Source: Experian IntelliView℠

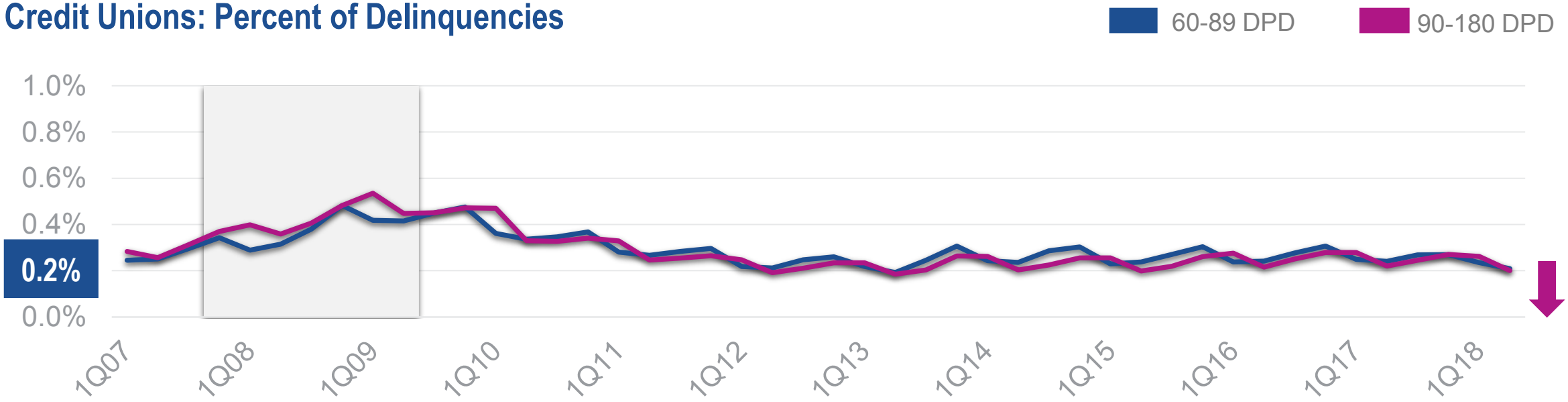
Auto Late-Stage Delinquency Rates Declining

Credit Unions: Taking Little Risk; 0.20% and Declining

US Total: Percent of Delinquencies



Credit Unions: Percent of Delinquencies

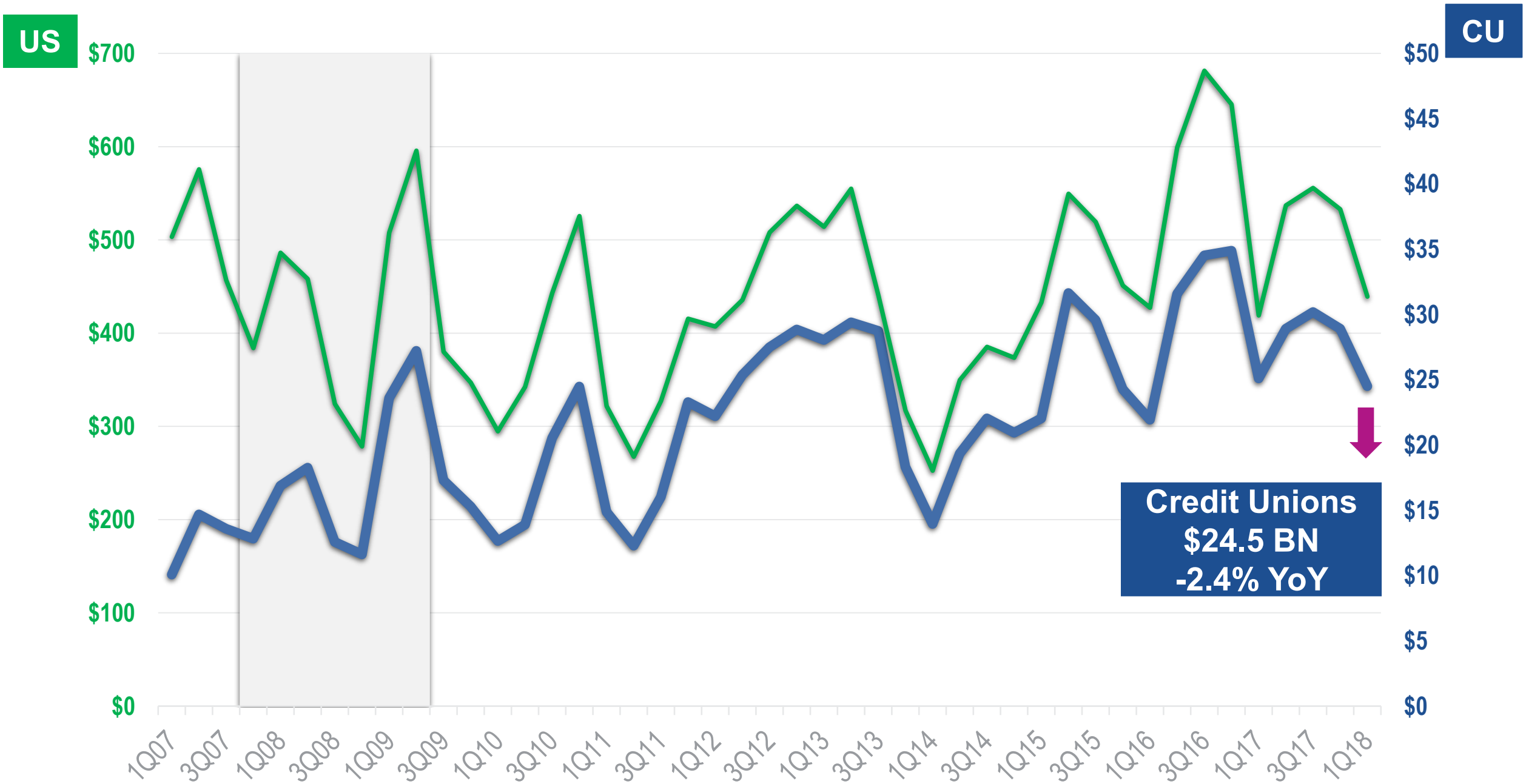


Shaded Area = Recession
Source: Experian IntelliView[SM]

Mortgage Trends

US Mortgage Originations $439B, +5% YoY

Credit Unions Declined by 2.4%; Total 5.5% of Originations at $24.5B

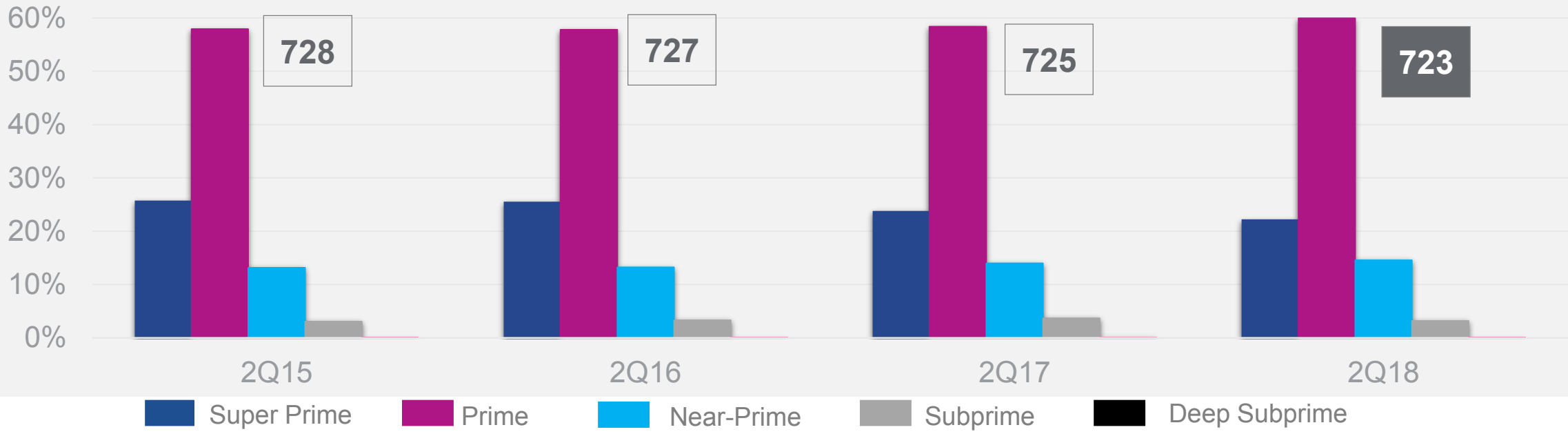


US & Credit Union Dollars of Lines Originated (Billions); Shaded Area = Recession
Source: Experian IntelliView℠

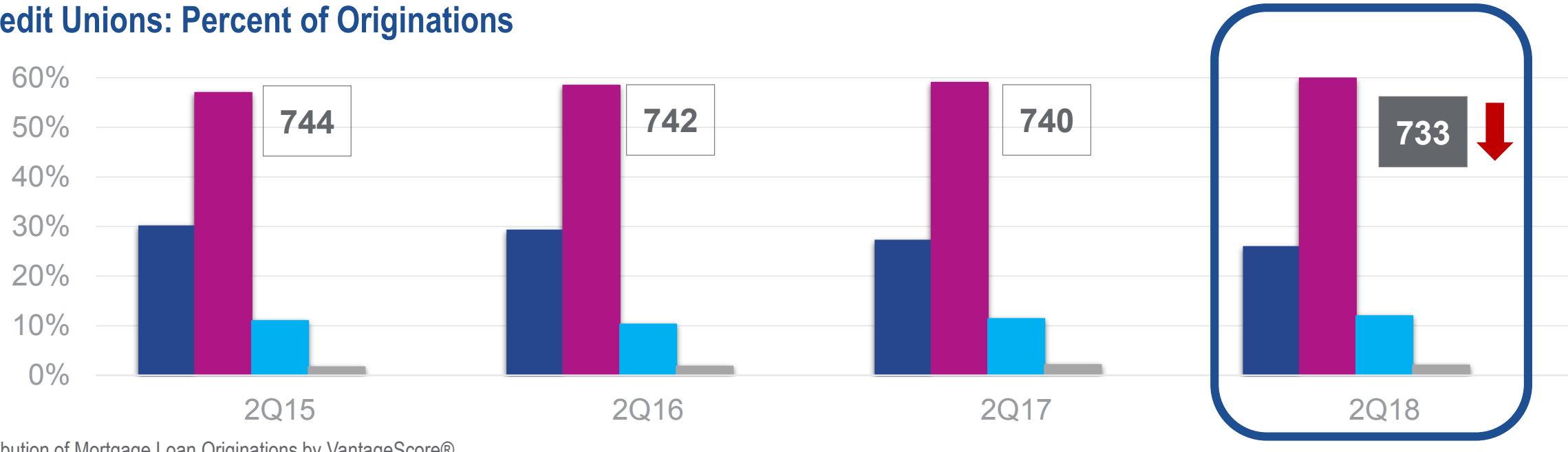
Mortgage Loans: Vantage Scores Higher Than Auto

Credit Unions: Over 75% Borrowers are Prime or Super Prime

US Total: Percent of Originations



Credit Unions: Percent of Originations

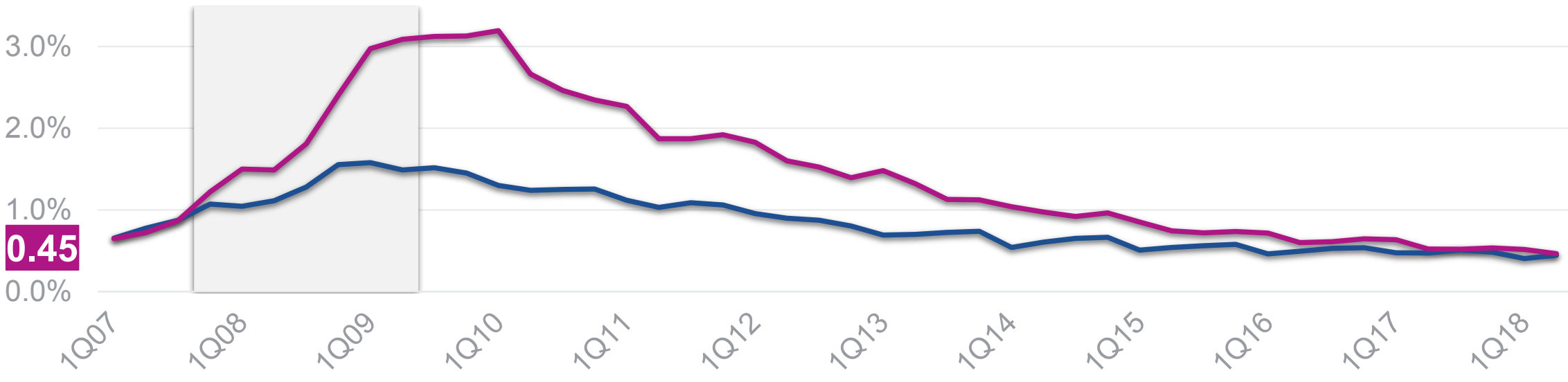


Distribution of Mortgage Loan Originations by VantageScore®
Source: Experian IntelliView℠

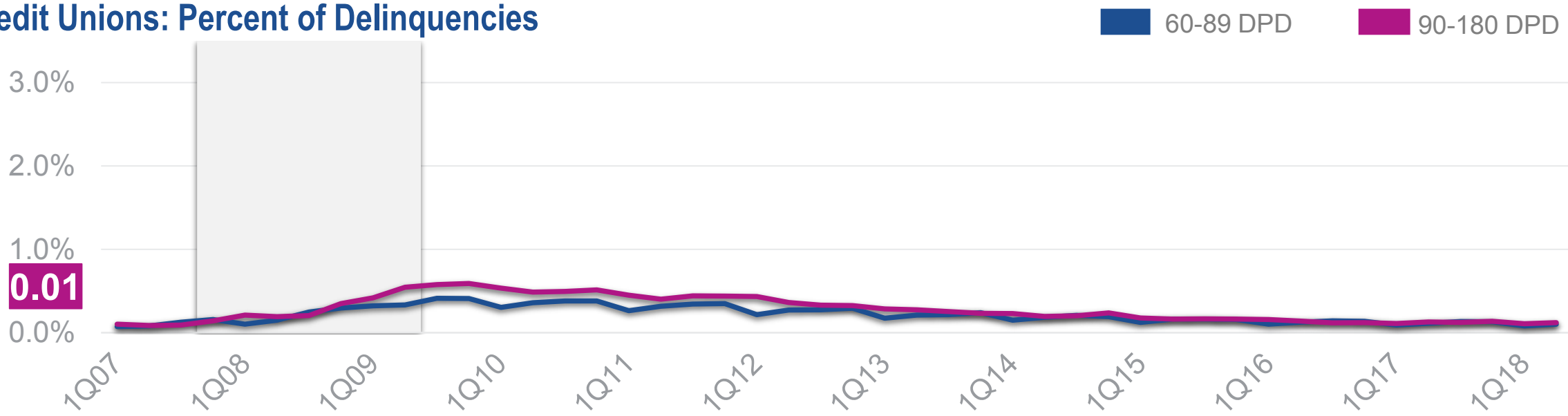
Mortgage Late-Stage Delinquency Rates Declining

Credit Unions: <0.15% Delinquencies; 60-89 Rates Decreased by 10% YoY

US Total: Percent of Delinquencies



Credit Unions: Percent of Delinquencies

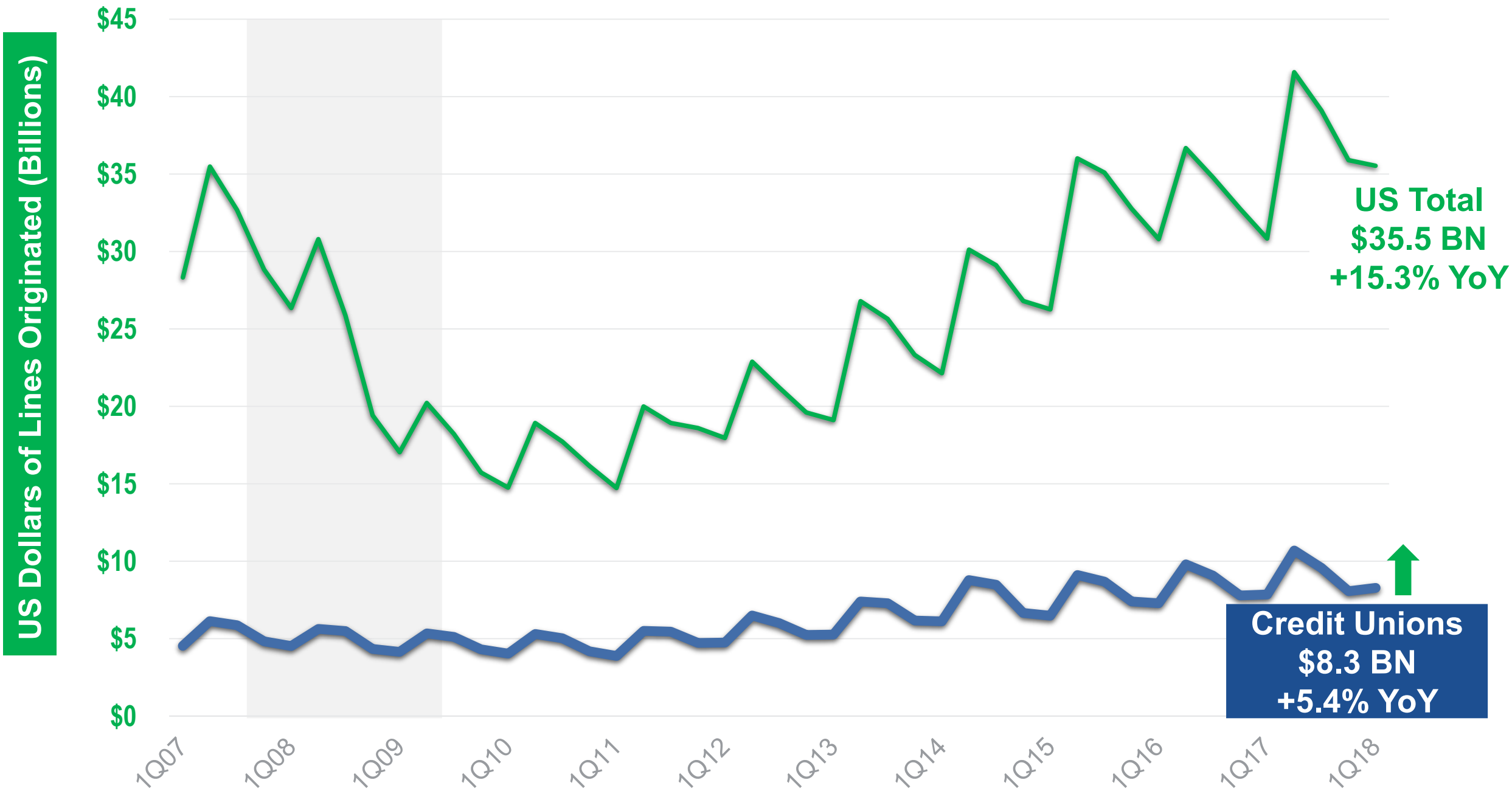


Shaded Area = Recession
Source: Experian IntelliView℠

Personal Loan Trends

Personal Loan Originations Total $35.5B; Up 15%

Credit Unions: Yield Opportunity. 23% of Originations; Up 5% YoY

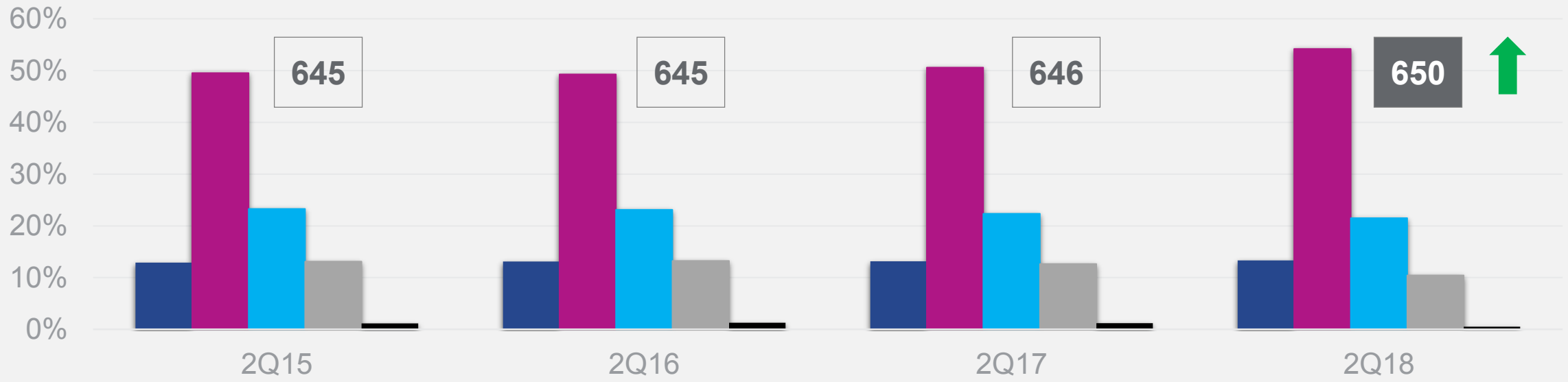


Source: Experian IntelliView℠

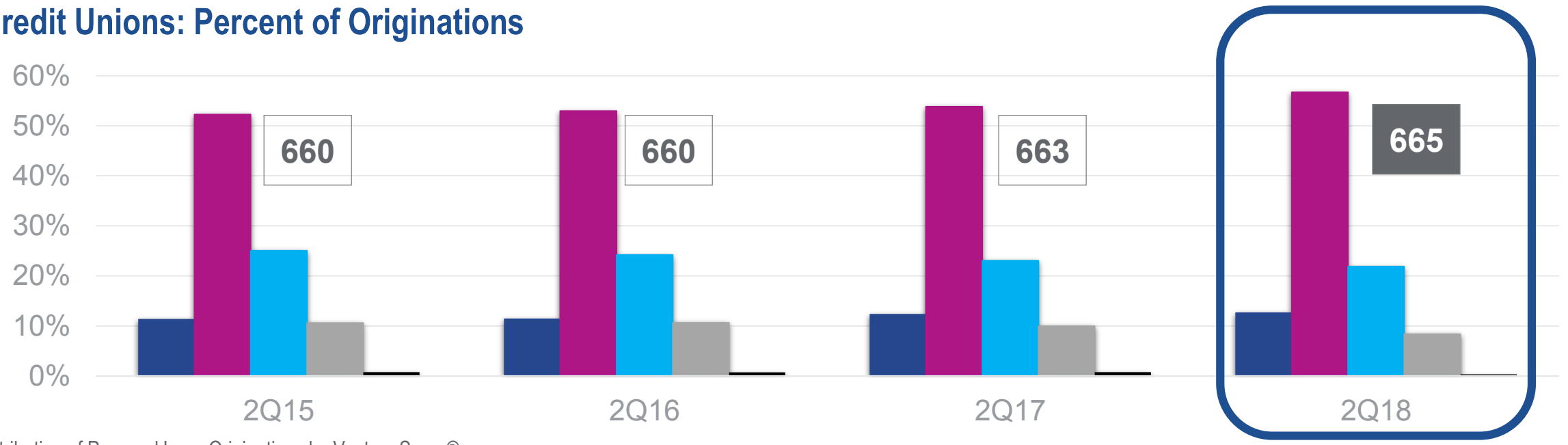
Personal Loans: Average Score Slightly Up

Highest Percentage of Near-Prime & Subprime Borrowers at ~30%

US Total: Percent of Originations



Credit Unions: Percent of Originations

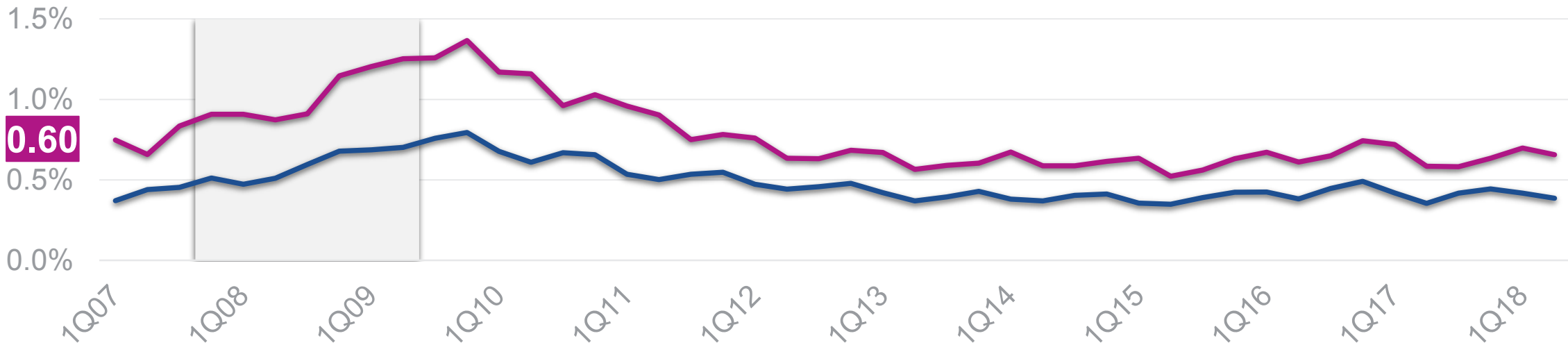


Distribution of Personal Loan Originations by VantageScore®
Source: Experian IntelliView℠

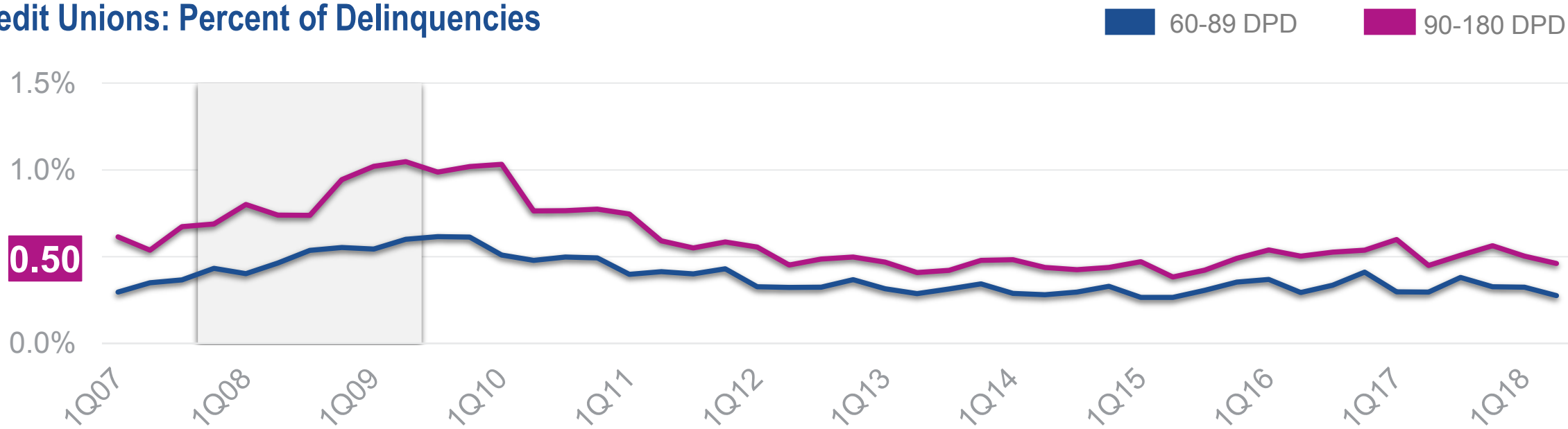
Personal Loan Late-Stage Delinquency Rates

Both 60-89 and 90-180 Days Up Slightly in US

US Total: Percent of Delinquencies



Credit Unions: Percent of Delinquencies

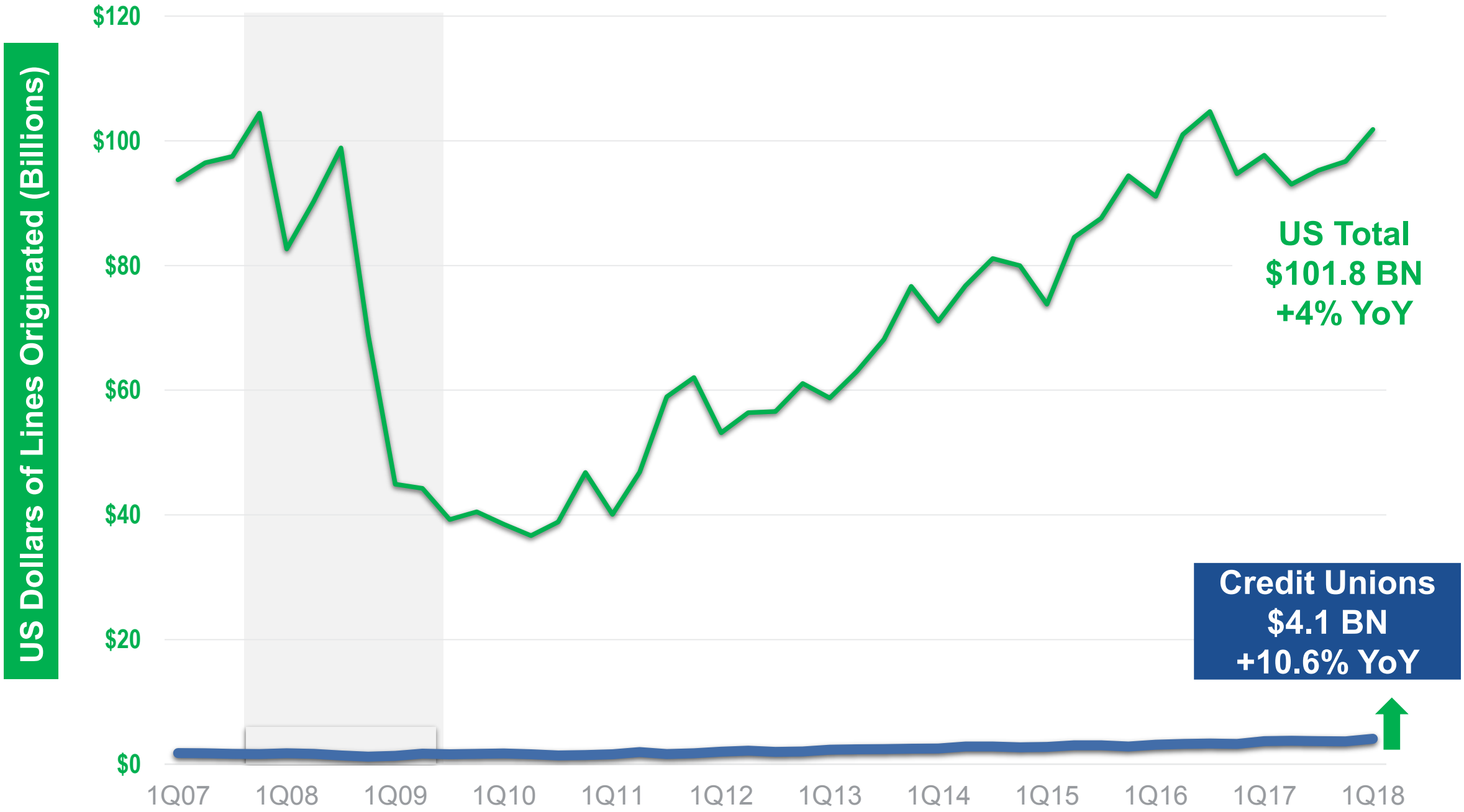


Shaded Area = Recession
Source: Experian IntelliView℠

Card Trends

US Card Originations: $101.8B; +4% YoY

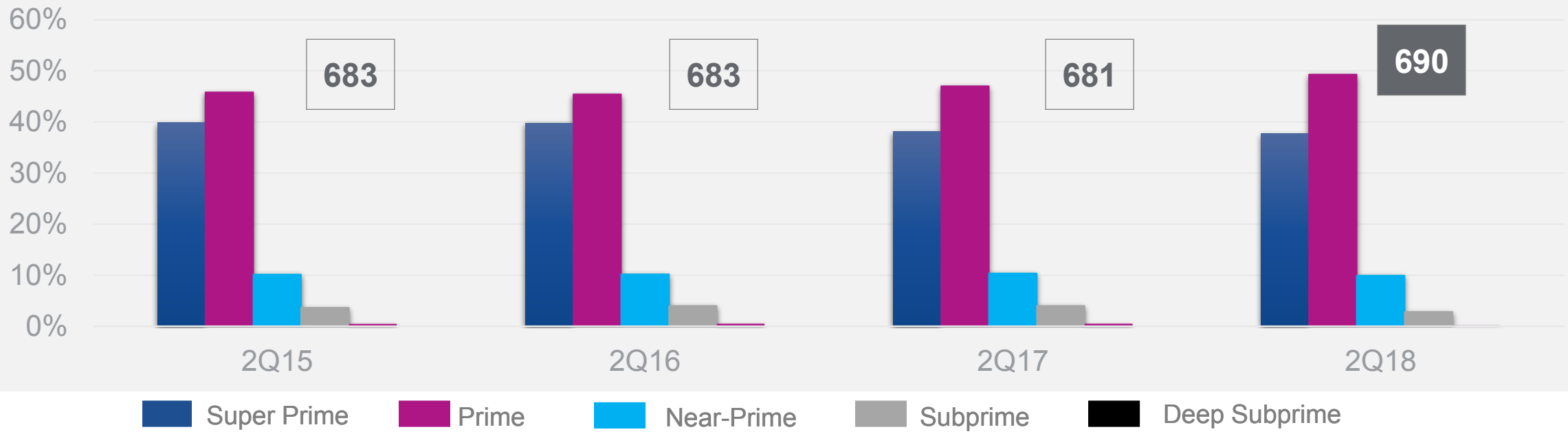
Credit Unions: 4% of Originations; +10.6 YoY



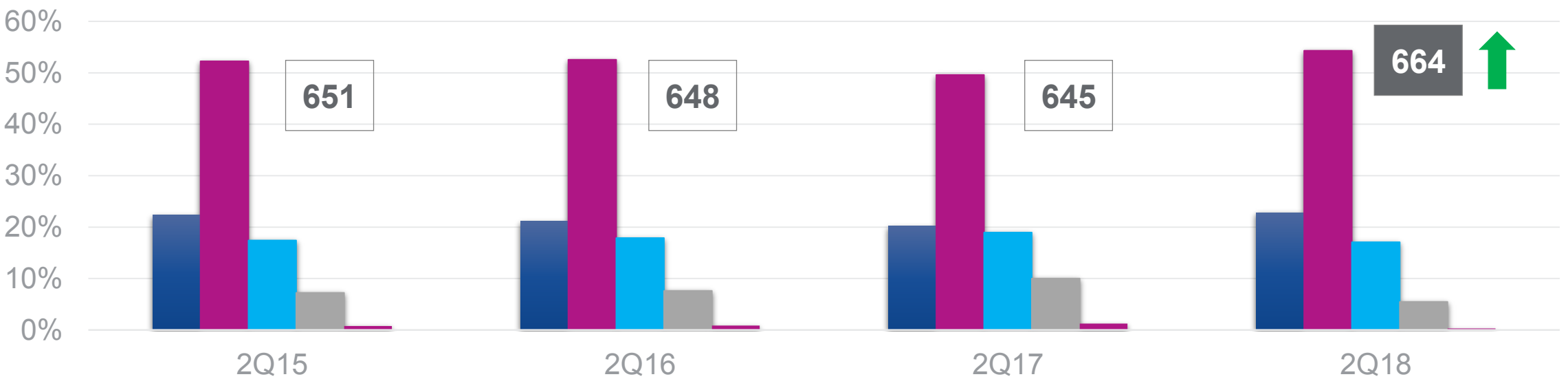
Card: Nearly 38% Originations for Super Prime

Credit Unions: Higher % of Near Prime Originations

US Total: Percent of Originations



Credit Unions: Percent of Originations

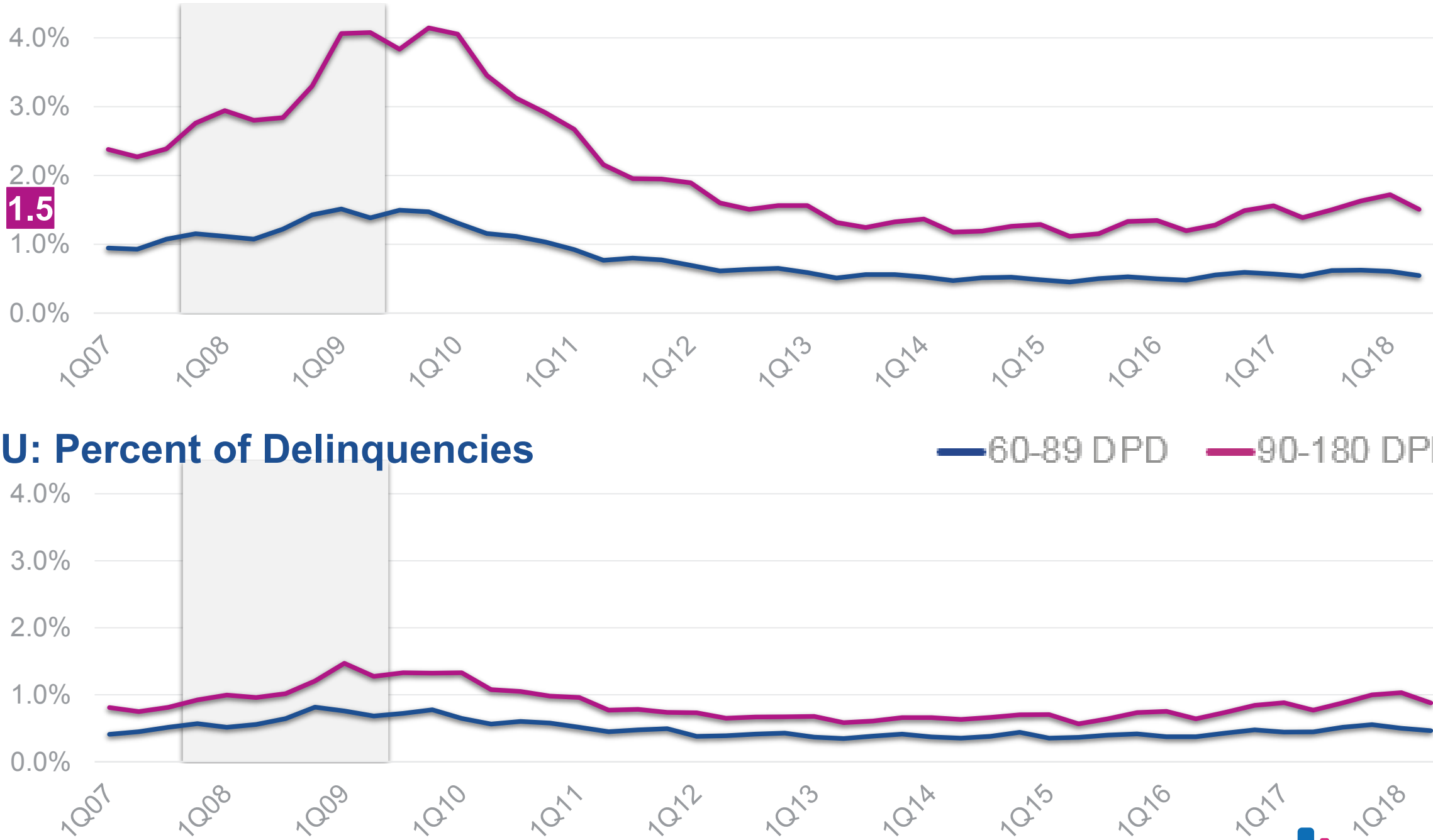


Distribution of Bankcard Originations by VantageScore®
Source: Experian IntelliView℠

Bankcard Late-Stage Delinquency Rates

Percent of balances delinquent still very low

US: Percent of Delinquencies

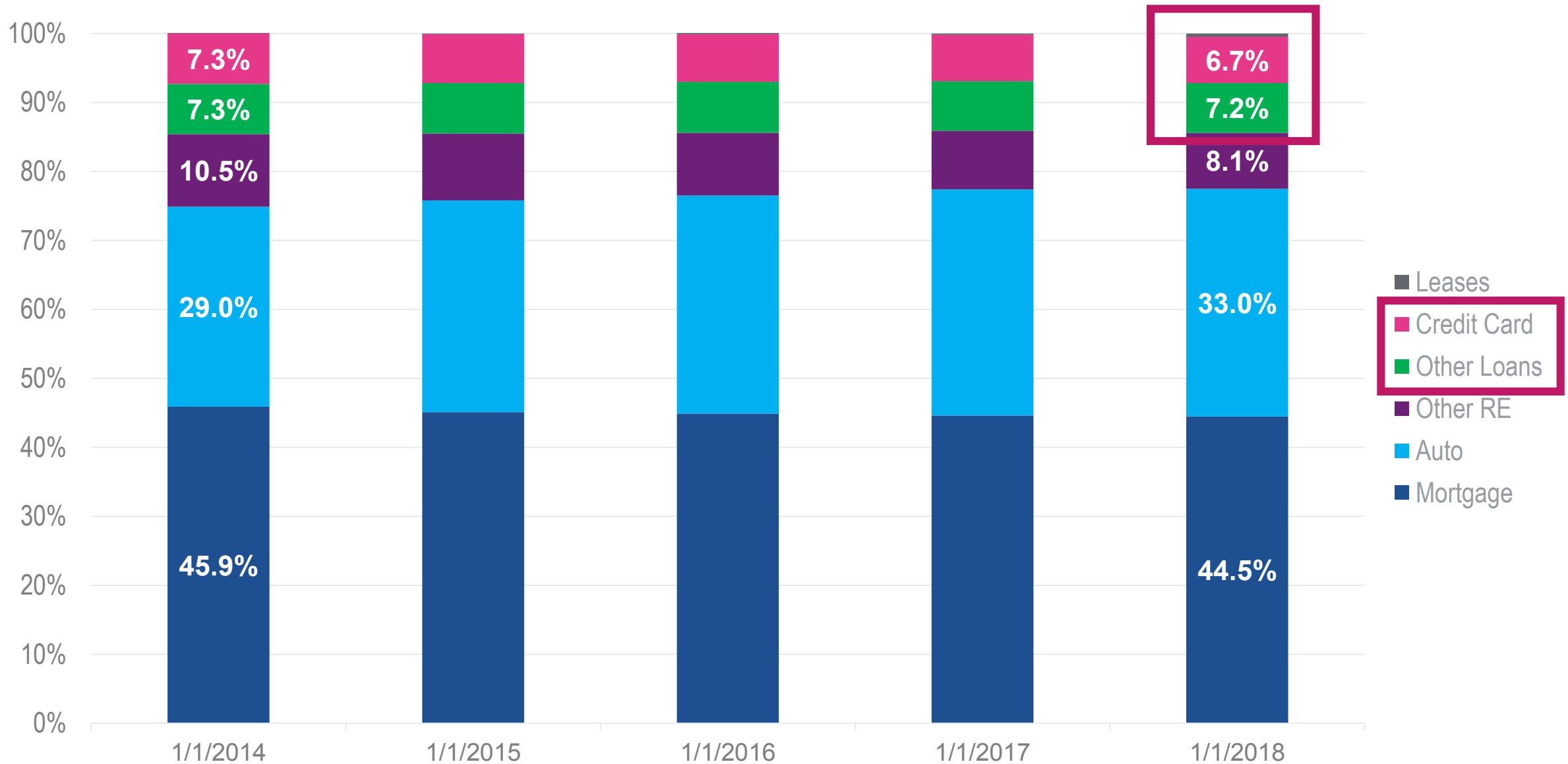


CU: Percent of Delinquencies

CU Performance Trends

CU Loan Mix $1B+: Personal Loans, Bankcard Flat

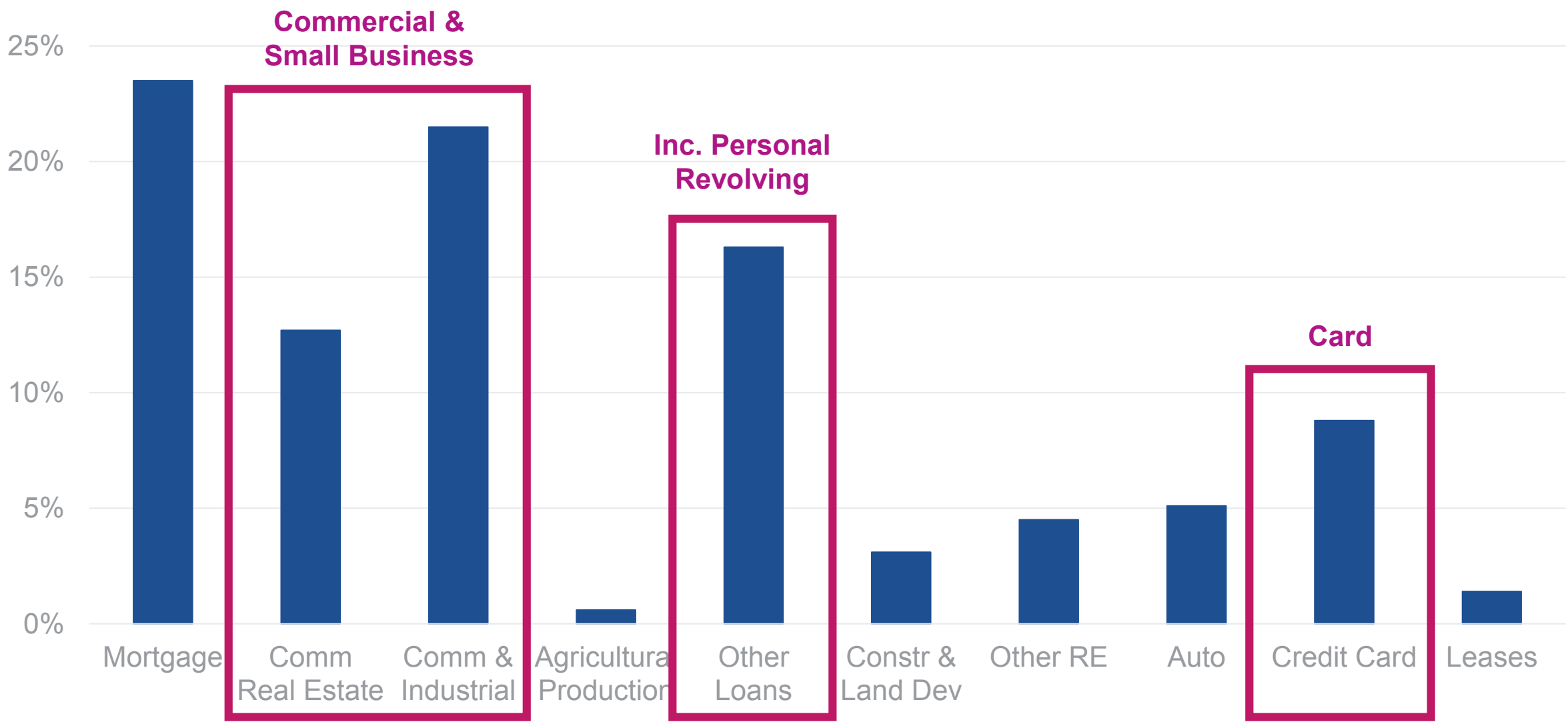
Aggregate Auto % Total Increased



Source: Experian Credit Union Insights
NCUA Call Reports, through March 2018

Bank Loan Mix $1B+: Mortgage, C&I, Other Loans

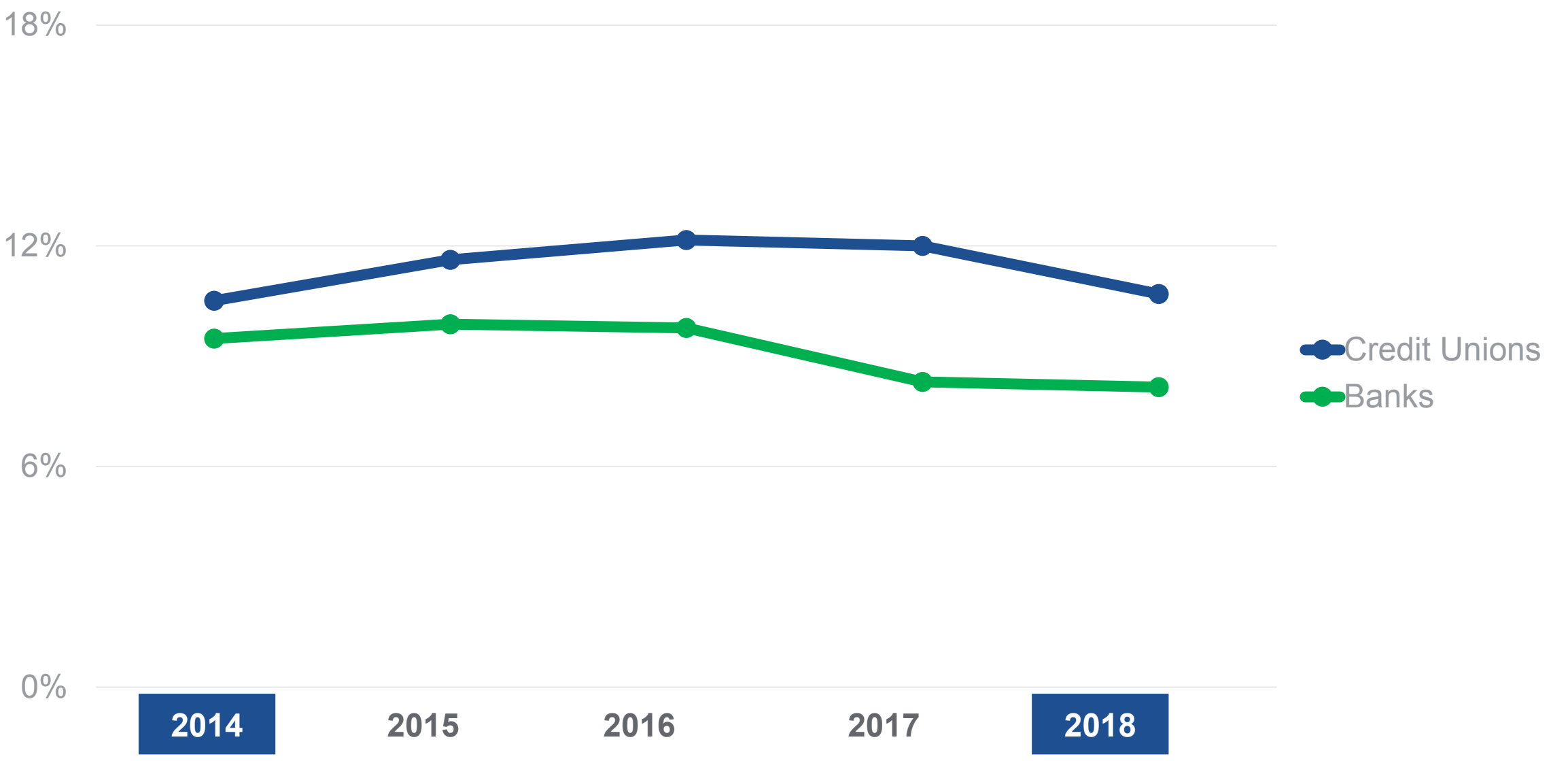
Take Share Potential: Small Business, Personal Loans and Credit Card



Source: Experian Insights
FDIC Data, through March 2018; Aggregate Loan Amounts

Loan Growth: Credit Unions vs. Banks $1B+

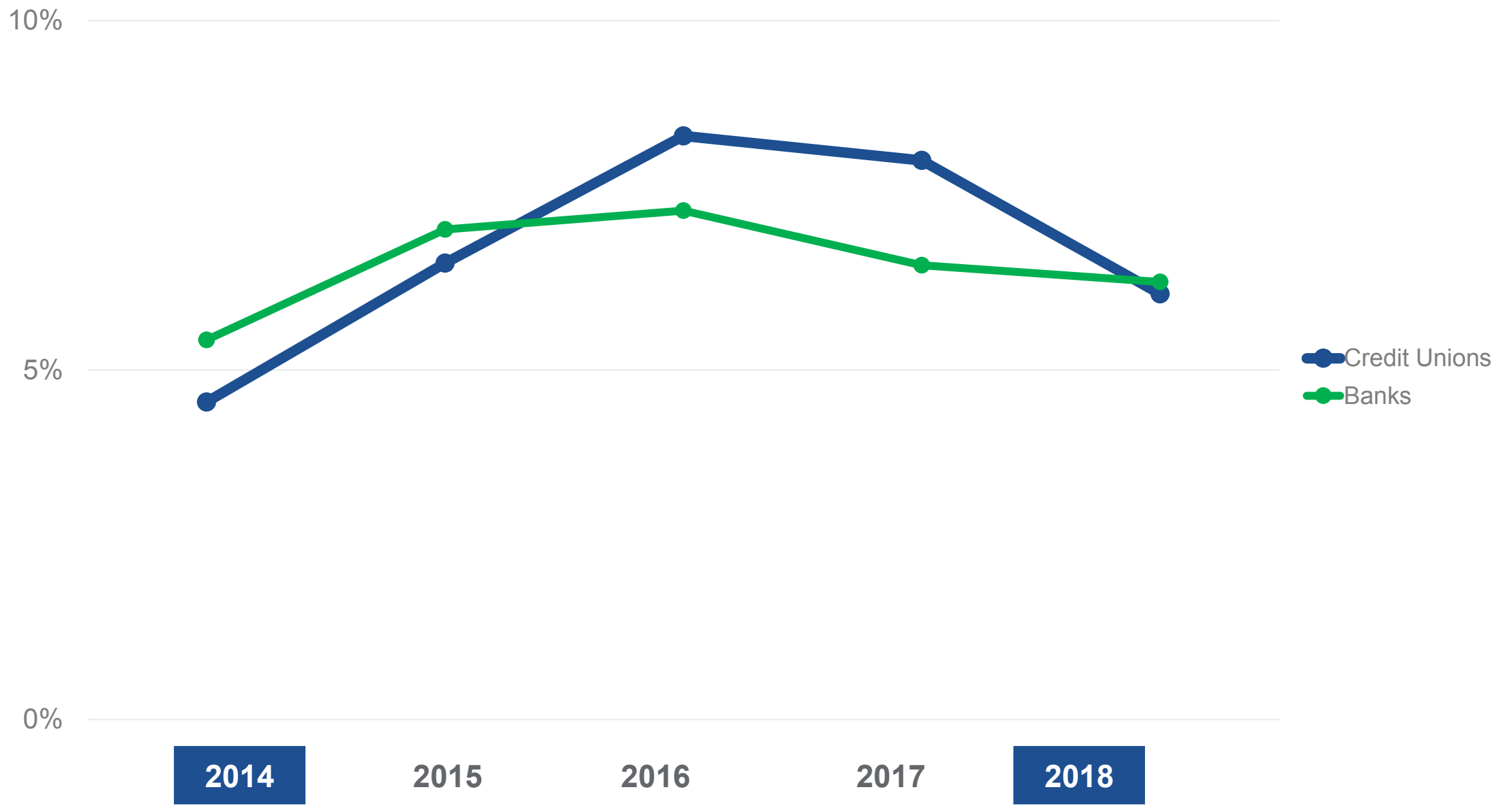
Credit Unions Outpacing Banks



Source: Experian Credit Union Insights
NCUA Call Reports, through March 2018; Median Calculations

Deposit Growth: Credit Unions vs. Banks $1B+

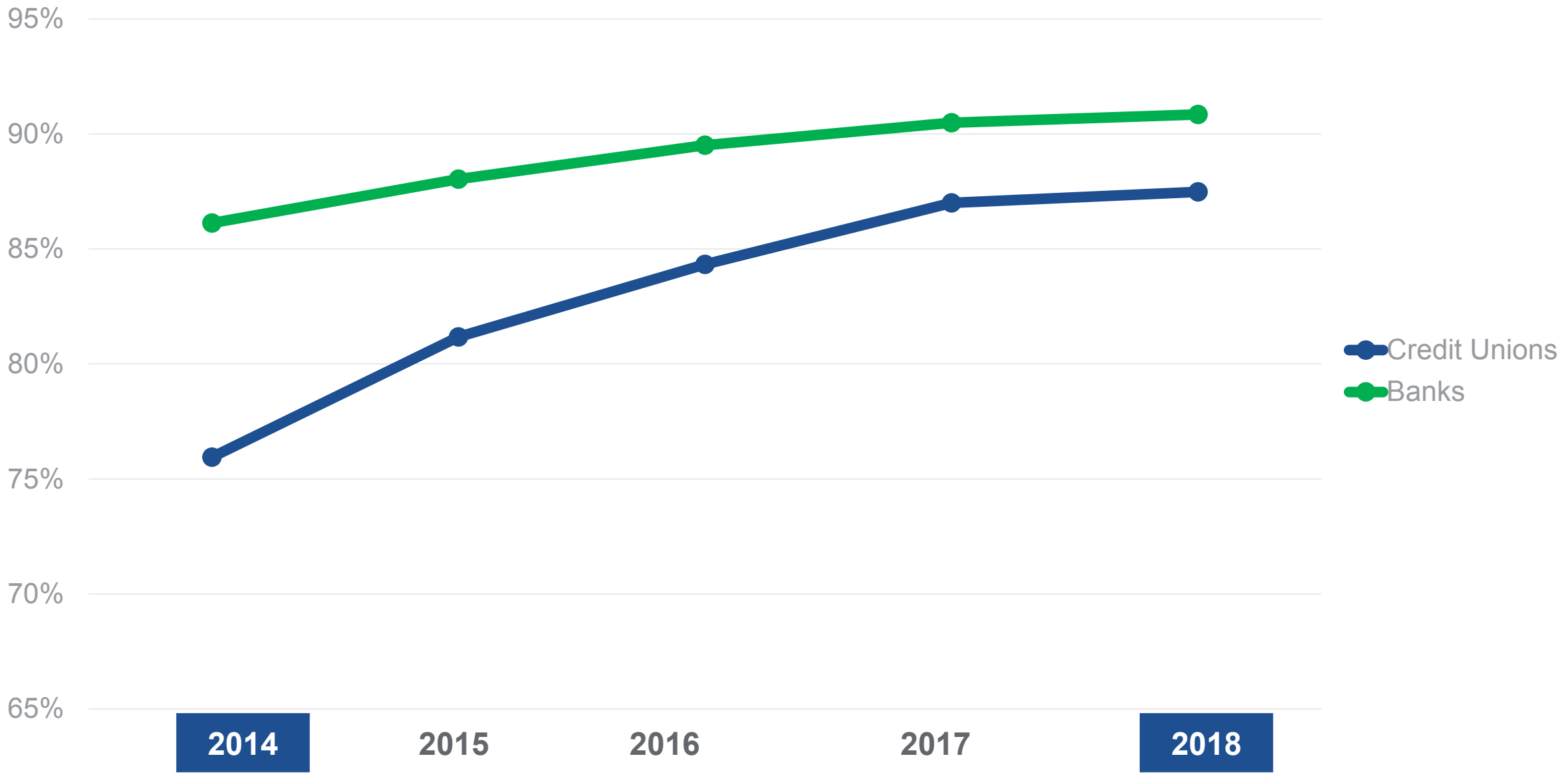
Credit Union Deposits Declining



Source: Experian Credit Union Insights
NCUA Call Reports, through March 2018; Median Calculations

Loans-to-Deposits: Credit Unions vs. Banks $1B+

Credit Union Loan-to-Share Ratio Increasing Sharply



Source: Experian Credit Union Insights
NCUA Call Reports, through March 2018; Median Calculations

Offer for CUAC Members

Custom Peer Analysis

- Key Ratios, Loan Mix, Insights
- 6 to 8 of your peers: Banks, Credit Unions
- Provide to Lisa, John or Pin

Considerations for the CUAC

What Share Can You Steal From Banks?

Do You Plan to Grow Small Business Lending?

How Do You Define Lending Deeper?

Are You Considering Pulling Back on Indirect Lending to Focus on Higher-Yield Loans?

Do You Plan to Focus on Member Card Relationships?

Is Your Growth Strategy Bold Enough?

Insights & Innovation Discussion Group

Credit Union Advisory Council Peer Discussion

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Experian Ascend™

Direct Access to the Credit Universe

Analytics Applied to Your Challenges

Fast, easy access to the highest quality data for analytics and research

- Gain new market insights – Evaluate market trends for product and strategic planning
- Assess and prospect more effectively – Build, test and calibrate your prospecting strategies
- Manage risk – Optimize model performance with multiple years of archive files and analytic tools
- Develop superior account management strategies – Streamline account management by identifying risks AND opportunities
- Quickly handle ad-hoc analytic requests

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What Is the Experian Analytical Sandbox?

What is it?

Big data analytical solution with immediate access to archived credit data in a securely hosted, user-friendly environment:

- Monthly snapshots
- Familiar analytics tools (SAS, R Studio)
- FCRA non-regulated data
- Scalable Hadoop cluster processing
- Additional Capabilities on the near-term roadmap (Python, Hue, Impala, and Spark)

What makes it different?

- True historical 100% national sample
  - Includes opt-outs
  - Includes trade line data
  - Includes access to Experian scores and attributes
- 15 years of monthly history
- Client customer and trade keys for sample
- Anonymization service for linking data
- Low entry price and scalable for growth

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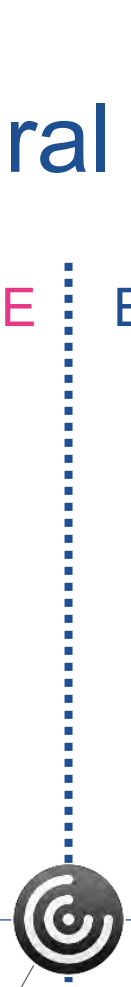
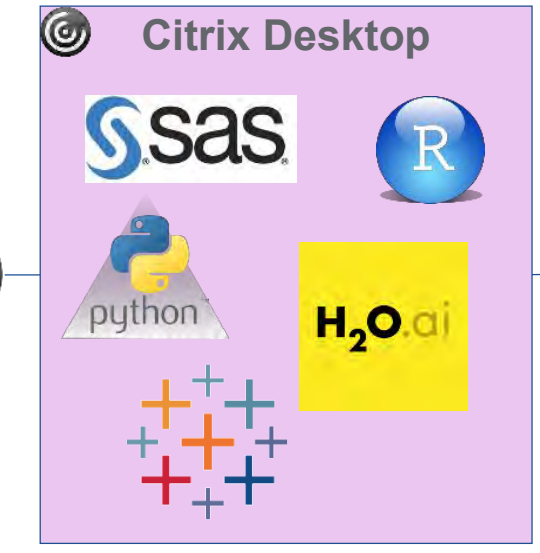
Architectural Overview

CLIENT SIDE

EXPERIAN ENVIRONMENT



Citrix Gateway
(www.easandbox.com)



Trade Data
Inquiry Data
Collections Data
Public Records
Scores
Experian Attributes

Loaded Client Data

 © Experian Public | 2018 Credit Union Advisory Council

Analytical Sandbox Demo

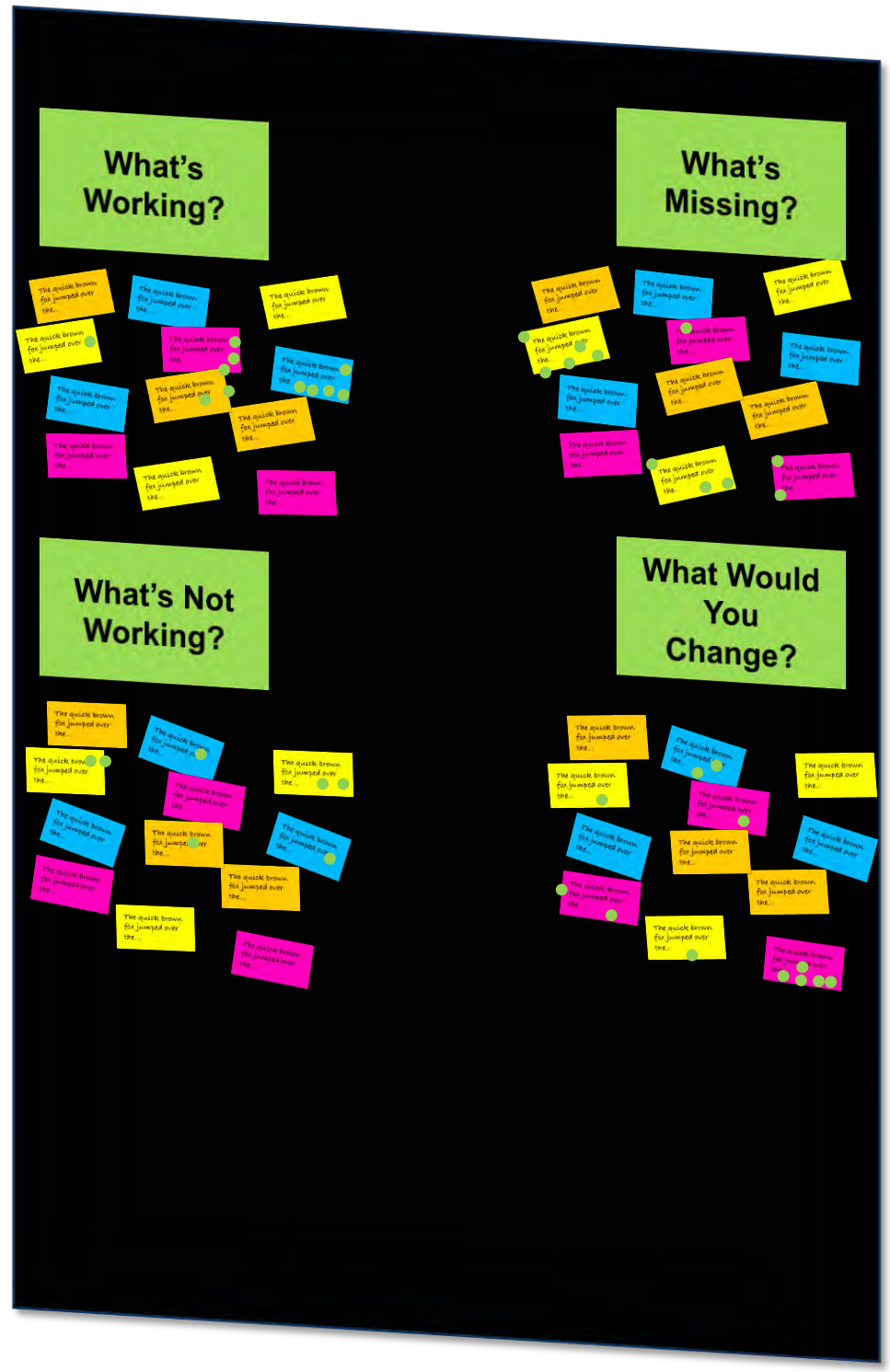
Activity: 1 Hour

Instructions:

- Divide into 2 groups
- Discussion - 35 minutes
- Vote - 10 Minutes
- Readout - 15 minutes

Tips:

- Go for quantity, don't critique even the most CRAZY ideas
- Write BIG so others can see it
- One thought per post it note
- Use dots to vote at the end



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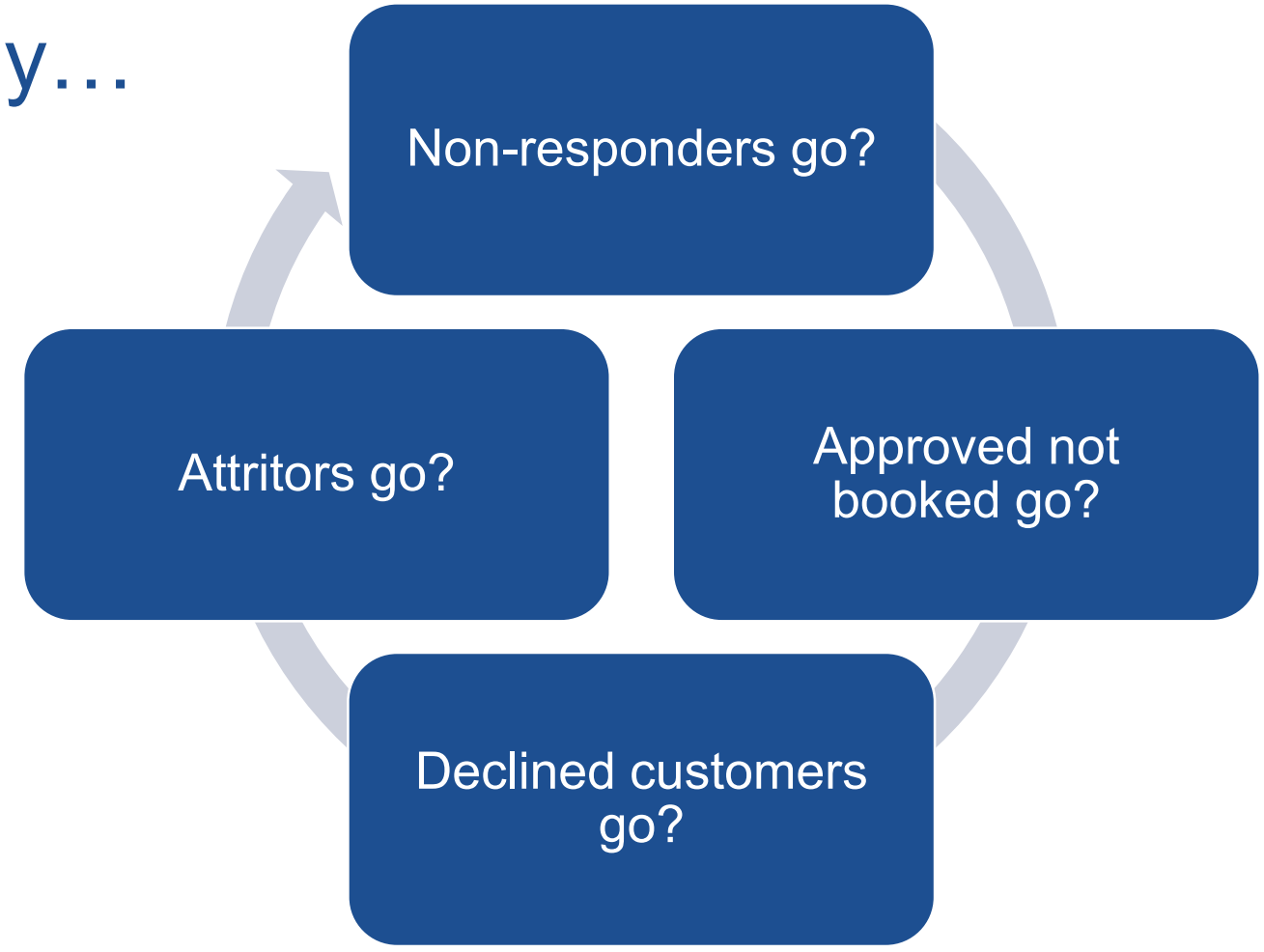
Appendix

Bureau-Based Inferencing

Data Availability – Cross Lifecycle Use Cases

Where did my…



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Process

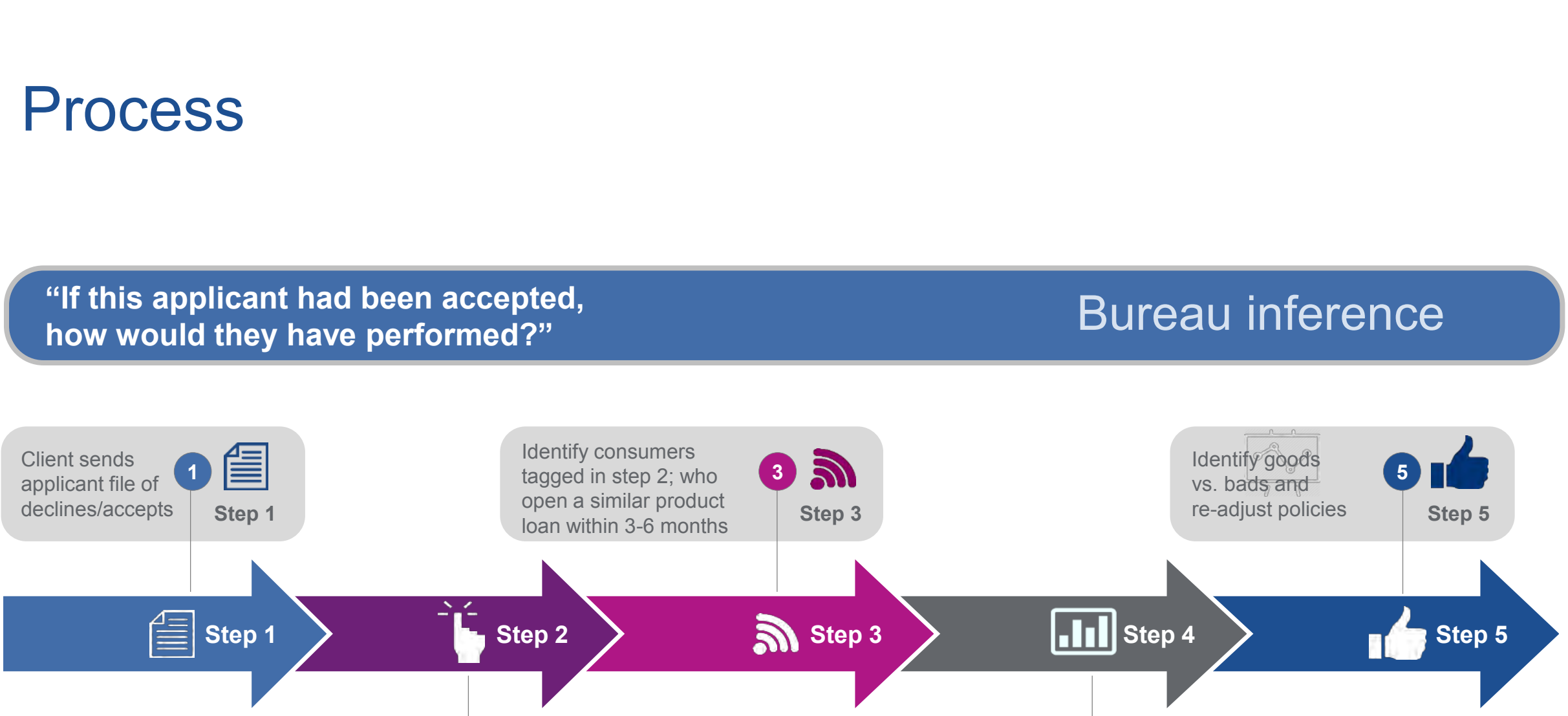
“If this applicant had been accepted, how would they have performed?”

Bureau inference

Client sends applicant file of declines/accepts — 1 — **Step 1**

Identify consumers tagged in step 2; who open a similar product loan within 3-6 months — 3 — **Step 3**

Identify goods vs. bads and re-adjust policies — 5 — **Step 5**



Step 2 Experian tags those applicants in the sandbox — 2

Step 4 Track loan performance of the new loan — 4

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Application Reject Inferencing

Scenario

Client wants to understand what's happening in their applications process to see if there are opportunities to change their underwriting criteria to capture additional originations for lower-scored consumers

They also want to understand what's happening with customers they are approving that are choosing not to originate with them

Client would normally provide reject file with consumers flagged as rejects or opt-outs

***Data in this example is synthesized with very simple criteria (hard 600 Vantage cutoff) based off auto inquiries from Q1 2016 with a performance observation date of June 2017**
**** While data in this example is for Auto, the same exercise is valid for any product.**

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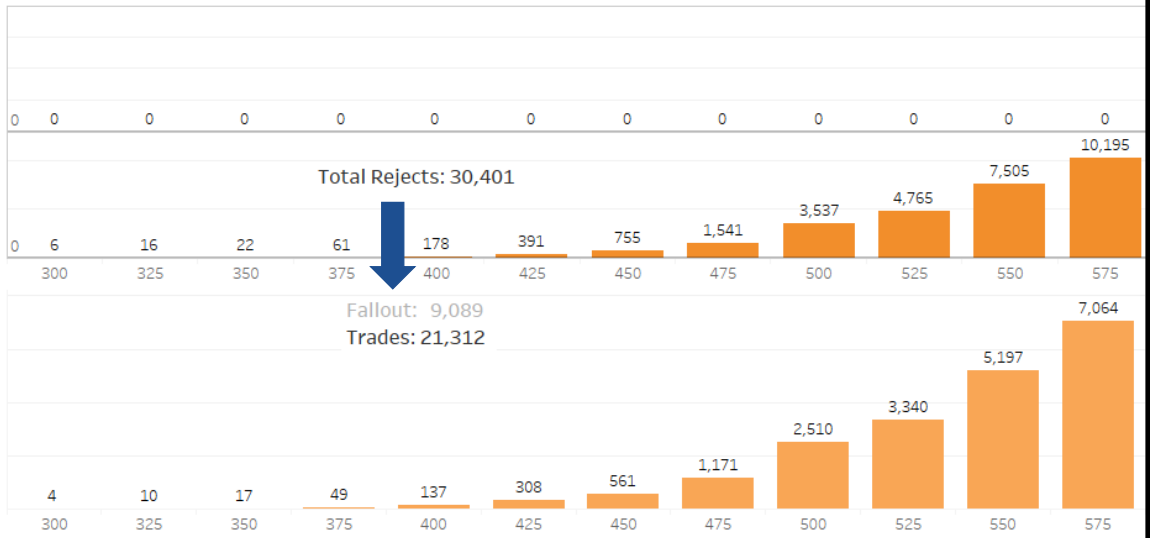
Auto Reject Inferencing

Rejects

Population Vantage Bins



Delinquency

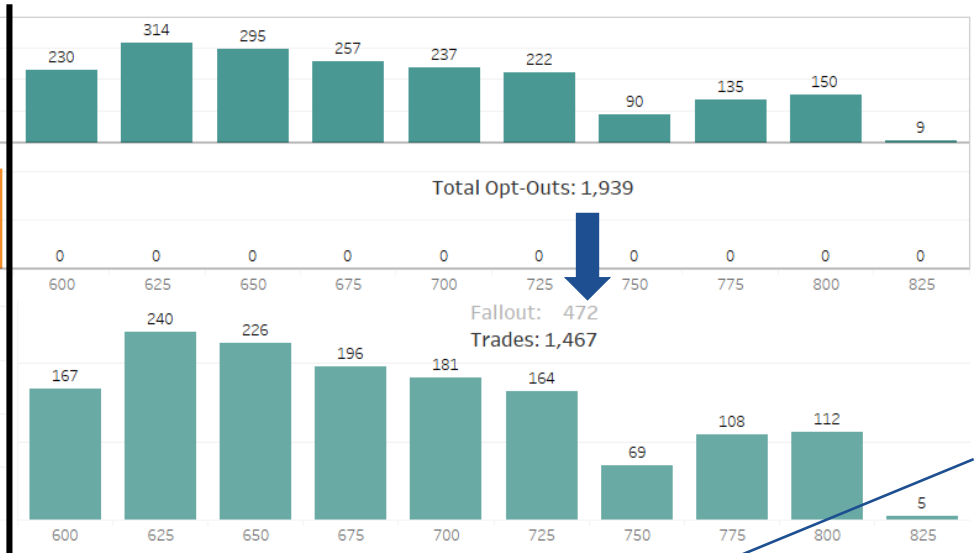
Never Delinquent	82.8%
30-60	8.6%
60-90	2.5%
90+	1.3%
Derogatory	4.8%

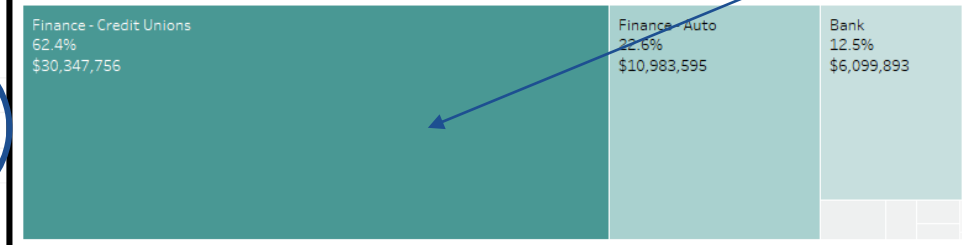
Potential Score Expansion Opportunity

	300	325	350	375	400	425	450	475	500	525	550	575
Trade Count	4	10	17	49	137	308	561	1,171	2,510	3,340	5,197	7,064
Avg Orig Loan	$17,684	$12,423	$12,969	$16,713	$15,550	$16,520	$14,956	$16,708	$16,957	$19,258	$20,330	$22,157
Avg Term	63	60	58	59	61	61	60	61	62	64	64	66
Avg Payment	$197	$305	$253	$348	$328	$335	$297	$326	$315	$334	$337	$348
Avg First Delinquency (mo)	12	12	8	7	10	11	10	9	10	10	10	9
DTI Ratio	6.2%	5.9%	5.8%	10.8%	14.1%	13.5%	13.1%	16.7%	16.5%	18.0%	18.5%	20.3%

What is the size of the opportunity?

Opt-Outs





	600	625	650	675	700	725	750	775	800	825
Trade Count	167	240	226	196	181	164	69	108	112	5
Avg Orig Loan	$25,445	$23,272	$24,316	$24,769	$25,301	$26,162	$23,903	$24,927	$23,290	$23,273
Avg Term	67	67	69	66	68	67	67	64	64	5
Avg Payment	$368	$343	$345	$349	$357	$326	$338	$345	$341	$397
Avg First Delinquency (mo)	11	9	11	11	12	0		12		
DTI Ratio	21.6%	21.9%	21.6%	25.1%	19.3%	19.0%	18.6%	14.0%	13.8%	9.4%

Where are our potential customers going for credit?

What terms are they looking for?

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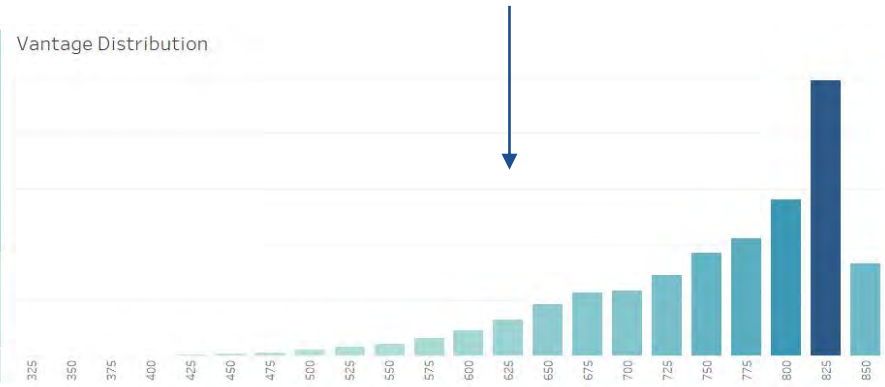
Card Benchmarking

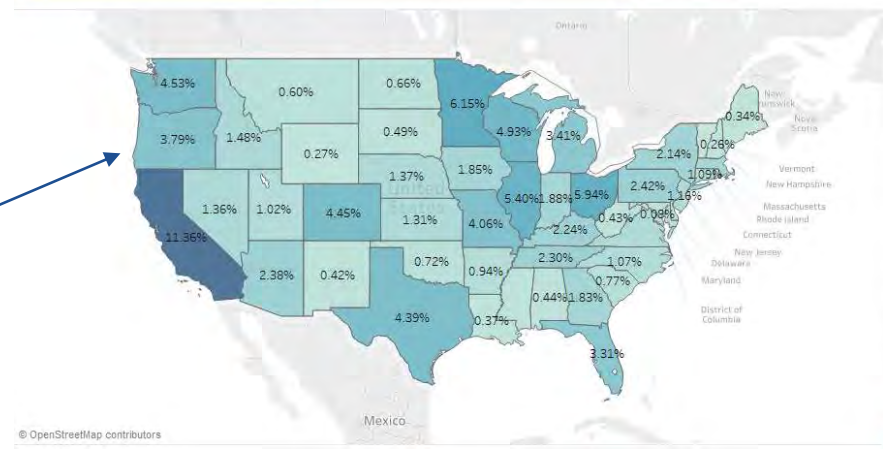
Portfolio Snapshot

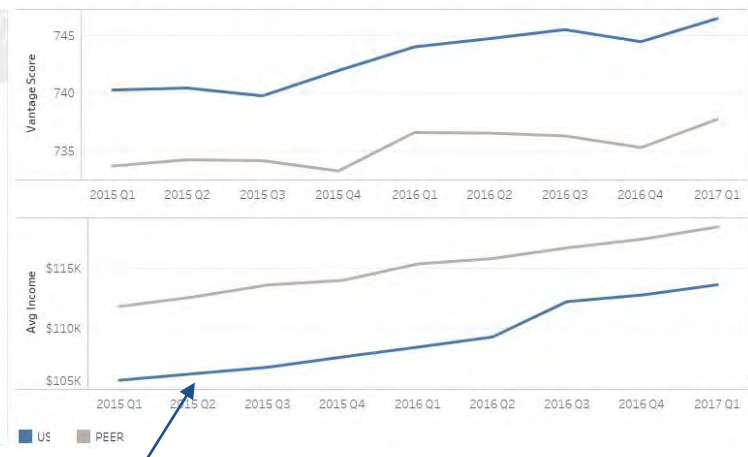
Generational Make-up
- See what generational age groups comprise the largest part of your portfolio

Score Distribution
- Assess the credit quality of your portfolio



Geographical Make-up
- Where are your customers located?





Attribute Benchmarking
- How do your customers compare to your industry peers?
- How are they trending comparatively?

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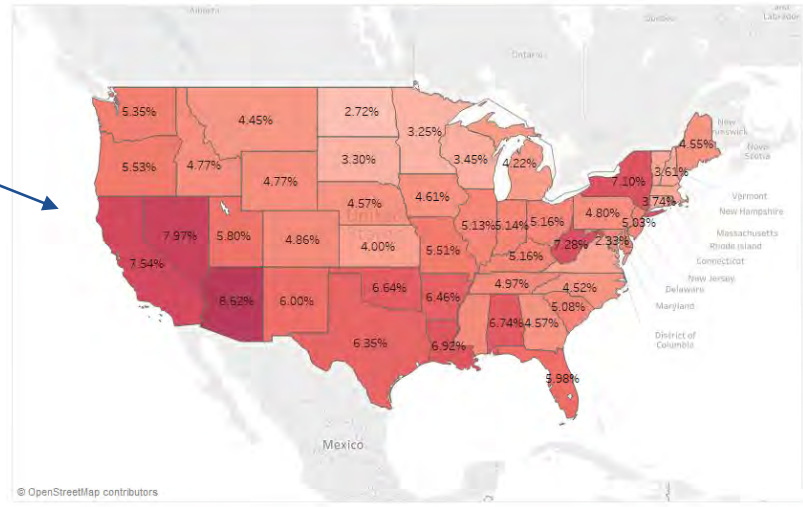
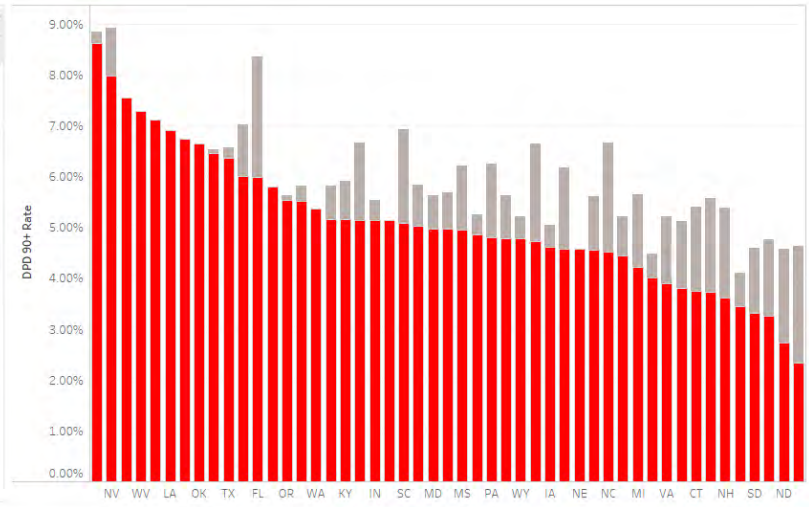
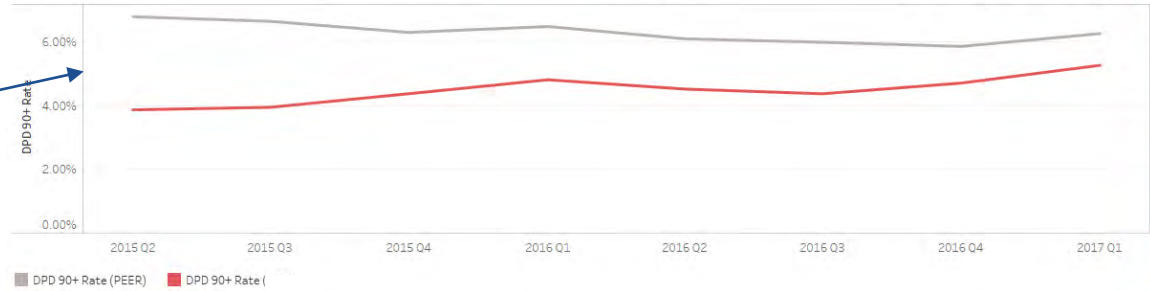
Delinquency Snapshot

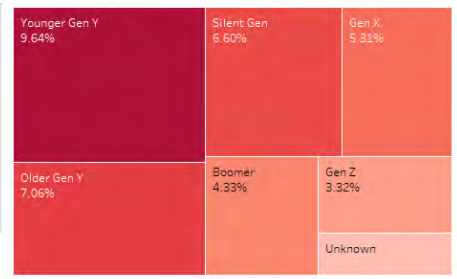
Geographical
- Where are your biggest issues?





Trended View
- Is it getting better or worse?





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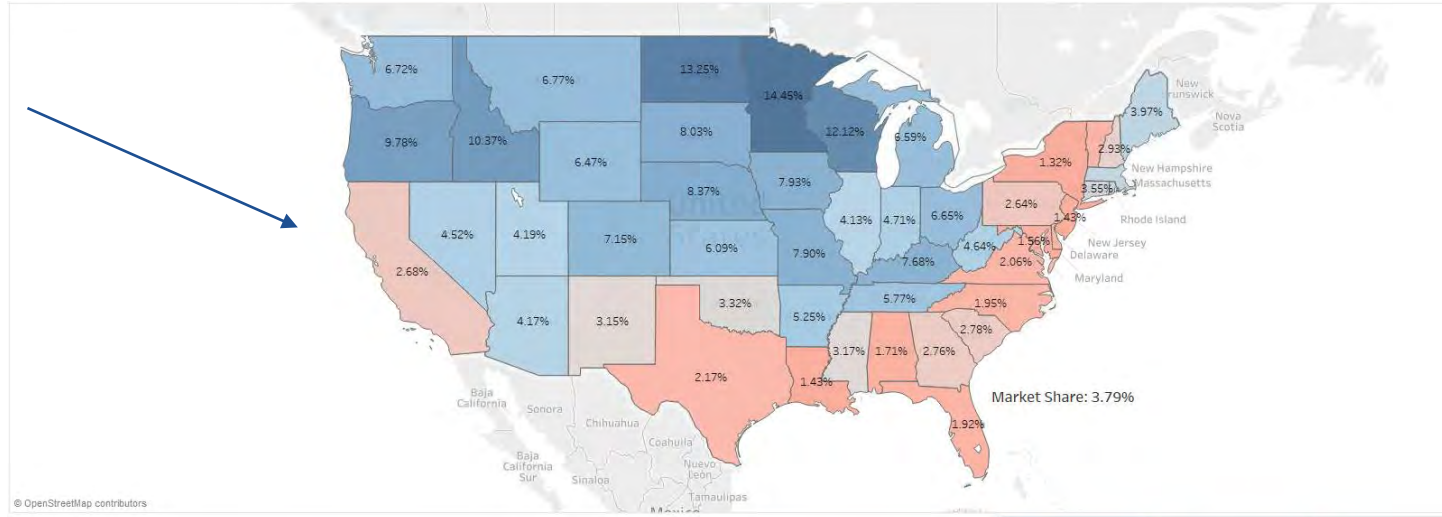
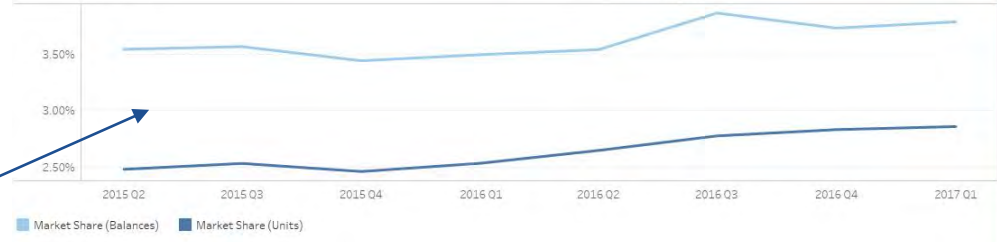
Market Share

Geographic Market Share

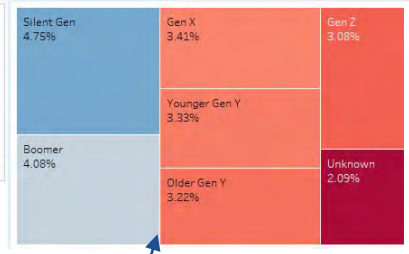
- Understand which states are above your national average and which areas are below
- Potential regional marketing opportunities





Market Share Trend

- Are you growing Accounts? Balances? Both?



Generational Market Share

- Many clients see Millennials as an emerging market – understand your generational positioning today and track marketing efforts

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Personal Loan Market Entry/Expansion

Scenario

Client is interested in entering into market/expanding their Personal Loan footprint and want to understand the existing landscape – which regions and segmentations do they want to concentrate on, which to avoid, etc.

This data can be used as a high-level starting point to identify opportunities for more in-depth analysis and model building

- The interactive dashboard allows for very quick drill-down to help zero-in exploratory analysis before larger efforts are put to more targeted analysis.

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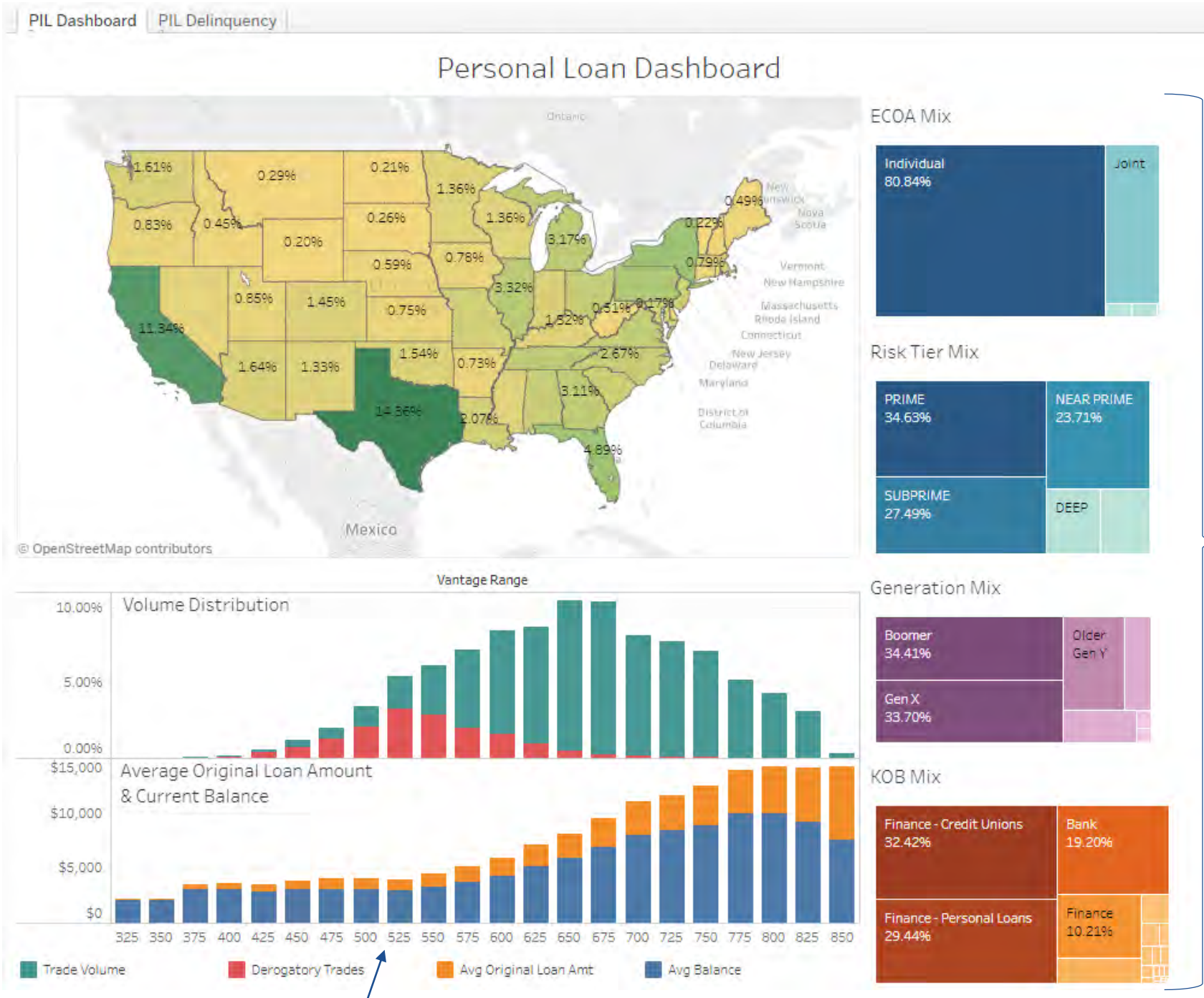

Volume Mixes

- Drill-down capability for targeted analysis

Volume Distribution

- Understand volume, bad rates, originations and payoff rates by Vantage score range

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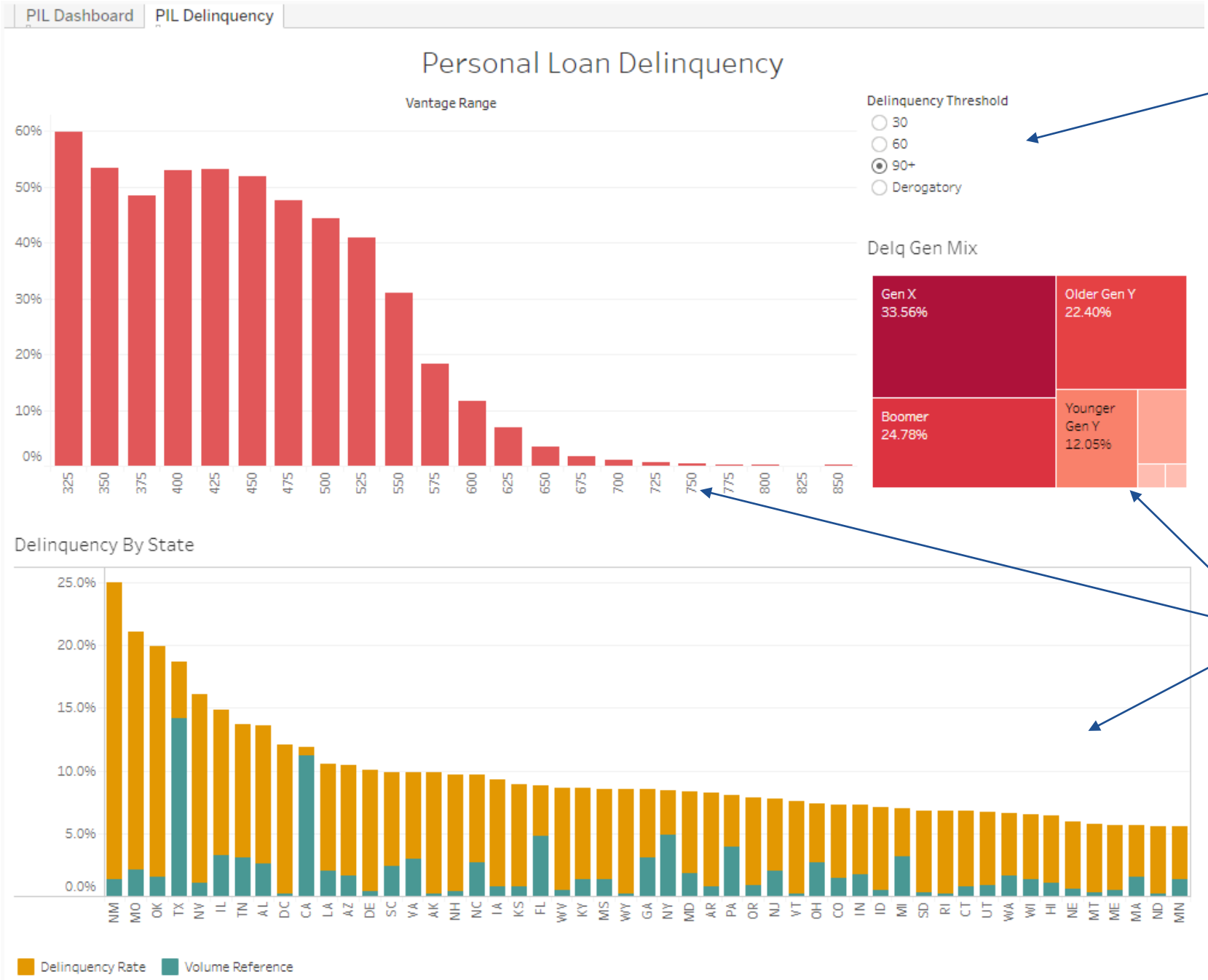

Delinquency Threshold

- Toggle between 30, 60, and 90+ rates for Collections analysis

Delinquency by Segments

- Generation
- Vantage Range
- State

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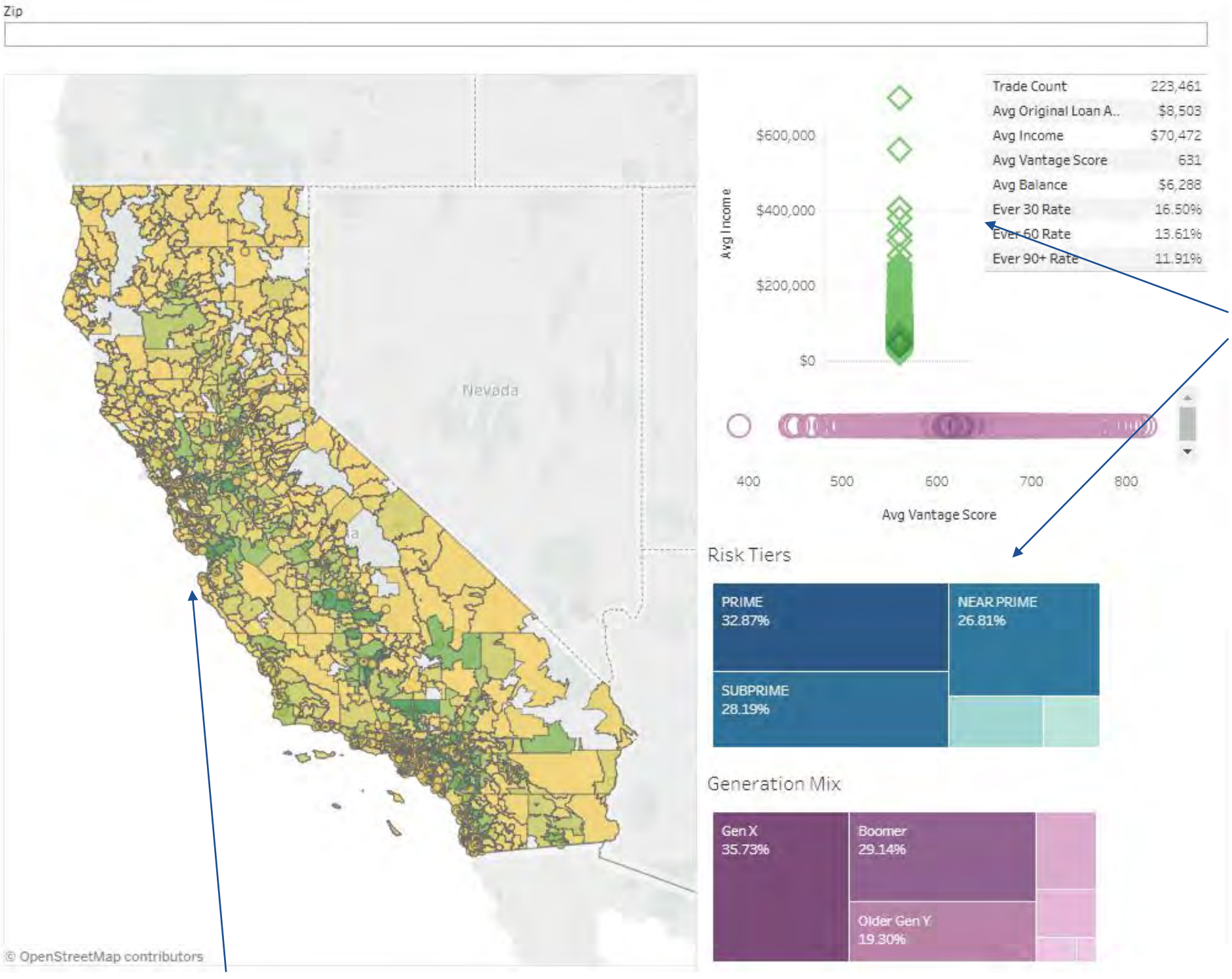

Zip-Code Comparison

- Compare target areas to the state or US as a whole

Zip-Code Granularity

- Drill down to specific zip codes to understand where the greatest opportunities might be

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Lunch

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Diving for Data

How Alternative Credit Data Can Help You Lend Deeper for Growth

Paul DeSaulniers
Senior Director, Risk Scoring, Trended Data Solutions & Collections

Scott Butterfield
Principal, Your Credit Union Partner

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Our Conversation Today

- Opportunity for Credit Unions
- Alternative Credit Data Overview
- Data Performance
- Use Cases
- Q&A

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Introductions

Scott Butterfield

CUDE, CCUE, CUCE

Principal, Your Credit Union Partner

Experience: 30+ years in Credit Unions

Background:

- 25 years experience in credit unions, including at the executive level
- Trusted strategic advisor to CUs across the country (all asset sizes)
- #1 most read author on CU Insight; 2012 & 2014 Article of the Year
- Frequent presenter at CUNA & NCUA conferences as well State Leagues

Paul DeSaulniers

Sr. Director, Product Management

Experian

Experience: 20 yrs. in Banking and FinTech

Responsibility:

- Head of product for Scoring, Alternative Data & Collections at Experian.
- Quoted in industry-leading publications such as PYMNTS and Time.
- Frequent presenter at industry events such as CUNA, Experian's Credit Union Advisory Council, LendIt and Money 20/20.

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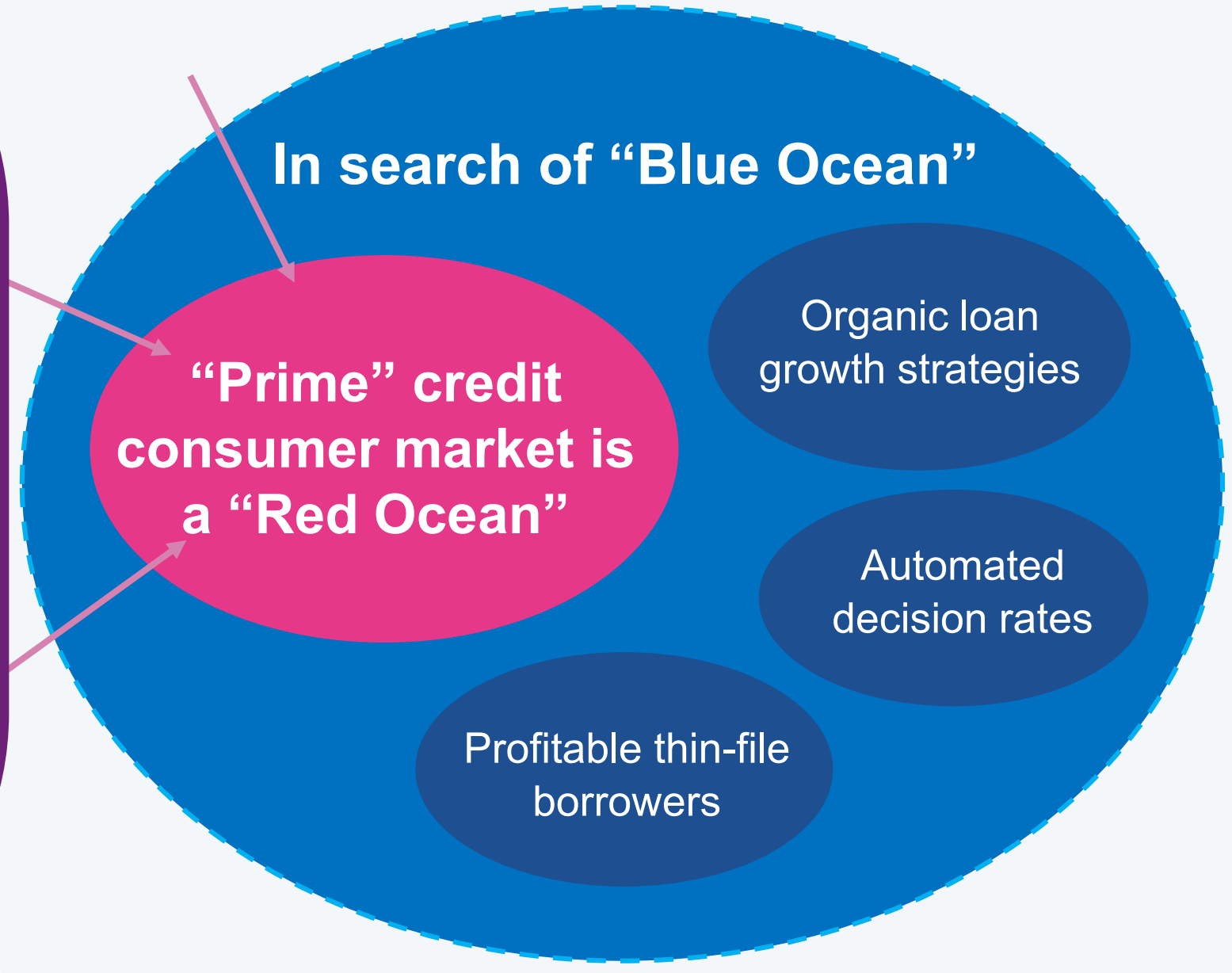
Opportunity for Credit Unions

Our Perspective

Alternative Credit Data opens up more opportunity



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Why Alternative Credit Data

Serving our community/ members is in credit union **DNA**

One third of FI's plan to use alt credit data in the future

Majority lenders believe alt credit data **will help customers** who've been denied

Risk and yield improvement

Triple bottom-line

*A CFPB released study reported that 26 million Americans are **"credit invisible"** defined as consumers without traditional credit bureau credit records*

12 million are millennials

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Alternative Credit Data Overview

The Riddle of Alternative Credit Data

321 Million
U.S. Population

77% over 18 years

- **59%** Thick — 5 or more trades
- **25%** Thin — 1-4 trades
- **7%** No Hit — Data other than trades
- **9%** Invisible — No record of credit

23% under 18 years

Deeper View of Your Member

Primary Credit Report Data Sources

- Tradelines
- Inquires

} Mainstream Finance

Public Records > Bankruptcy

How do we effectively score **100%** of members?

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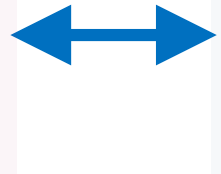
What is Alternative Credit Data?

Traditional Credit Data

- Tradelines
  - Credit card
  - Auto loan
  - Mortgage
- Credit inquiry
- Internal records
  - Bankruptcy



Alternative Credit Data

- Alternative financial service data
- Rental payments
- Asset ownership
- Utility payments
- Full file public records
- Consumer permissioned data

ALL INFORMATION THAT IS FCRA-COMPLIANT

Displayable. Disputable. Correctable.

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What Opportunities Are We Striving to Address with Alternative Credit Data?

Traditional Lenders:

- Strengthen and expand portfolios
- Increase and sustain competitive advantage
- Improve customer experience

Consumers

- Increased access to affordable financing
- Speed / ease / convenience
- Build credit

Adjacent Players:

- Enter markets via new business models (e.g. Fintech)
- Grow in underserved segments (e.g. Alternative Finance)
- Differentiate data assets and engage consumers (e.g. Information Services)

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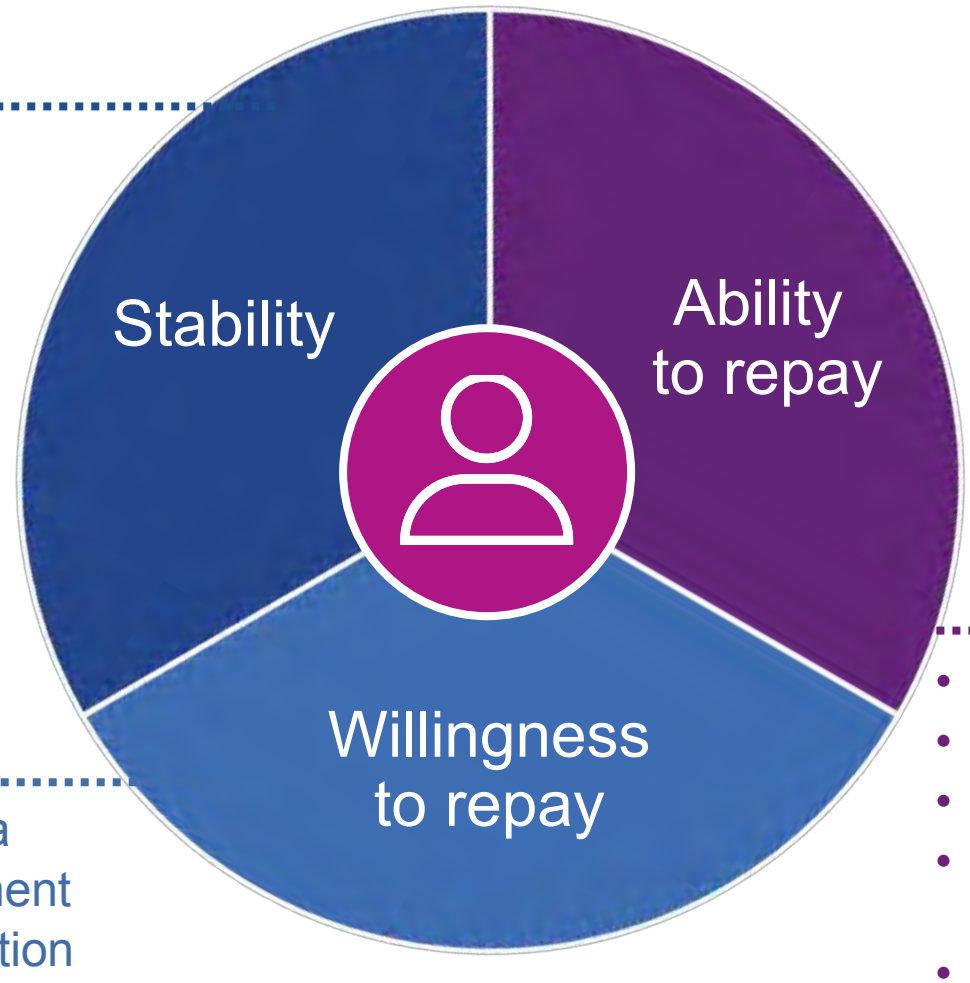
How Alternative Data Sources Relates to Consumer Credit Worthiness

The traditional credit profile data was developed to assess a consumers credit worthiness

- Rental data
- Address history
- Expanded Internal records



- AFS data
- Bill payment
- Subscription data

- Rental data
- AFS data
- Cash flow
- Expanded Internal records
- Education data

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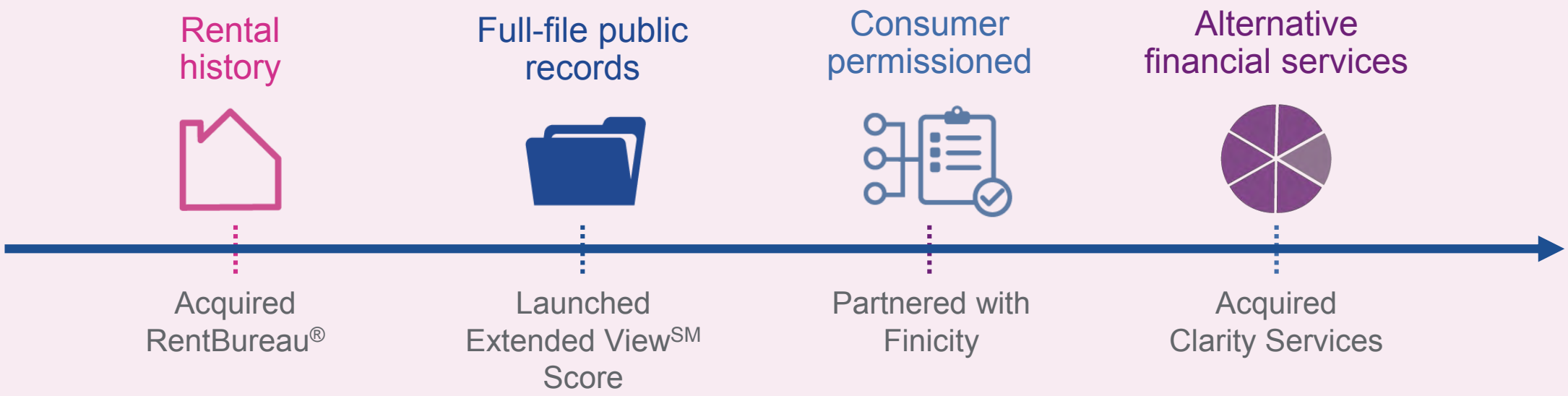
Experian's Alternative Credit Data

Clear Data Platform

- Increases ability to predict consumers' capacity and willingness to repay
- Not historically or consistently reported to national credit bureaus
- Can be effectively and compliantly operationalized and scaled

Key Experian milestones



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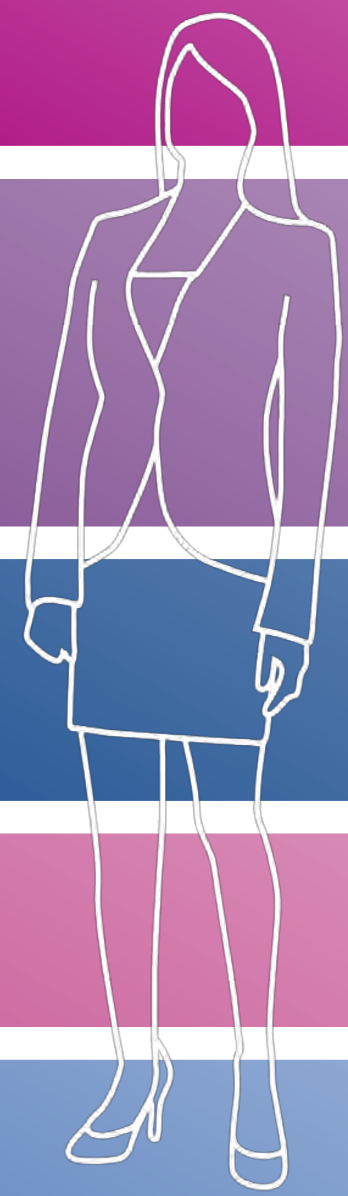
Alternative Data Is Unique and Additive

National Credit Bureau	• 1 open auto loan • 2 credit cards	Thin credit file gives little insight into credit risk
Clarity Specialty Bureau	• 2 open trades • 5 closed trades paid in full • 3 inquiries in 90 days • 2 bank accounts last 12 months • 1 move in last 2 years	Adding Clarity data provides significant positive information on performance on alternative finance trades not available on traditional credit file
Extended View Score	• 750 EVS score • Attended 4 year college • Profession: registered nurse	Extended View Score indicates low risk with supplemental information on education and profession
RentBureau	• 1 open and current rent trade • No derogatory rental history	RentBureau shows one open and current rental trade with no derogatory information
Finicity	• Verified income: $ 5,127 • Verified assets: $16,944	Finicity confirms income and assets with consumer permission



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Dialing into Clarity Services

Largest nationwide, FCRA-regulated credit bureau
that specializes in gathering and providing information about non-prime consumers

Powerful real-time fraud detection
and credit risk management solutions

Rich data on 62 million unique consumers
representing the majority of the U.S. non-prime consumer population
(two times larger than next alternative credit data bureau)

Proprietary, real-time technology, flexible architecture
and continuous innovation to be the leading provider to the most sophisticated, analytical and technology driven online lenders

Founded in 2008
Headquartered in Clearwater, FL

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Use Cases

Three Use Cases for Discussion

Grow

Increase Membership

Protect

Manage Risk

Serve

Expand Universe

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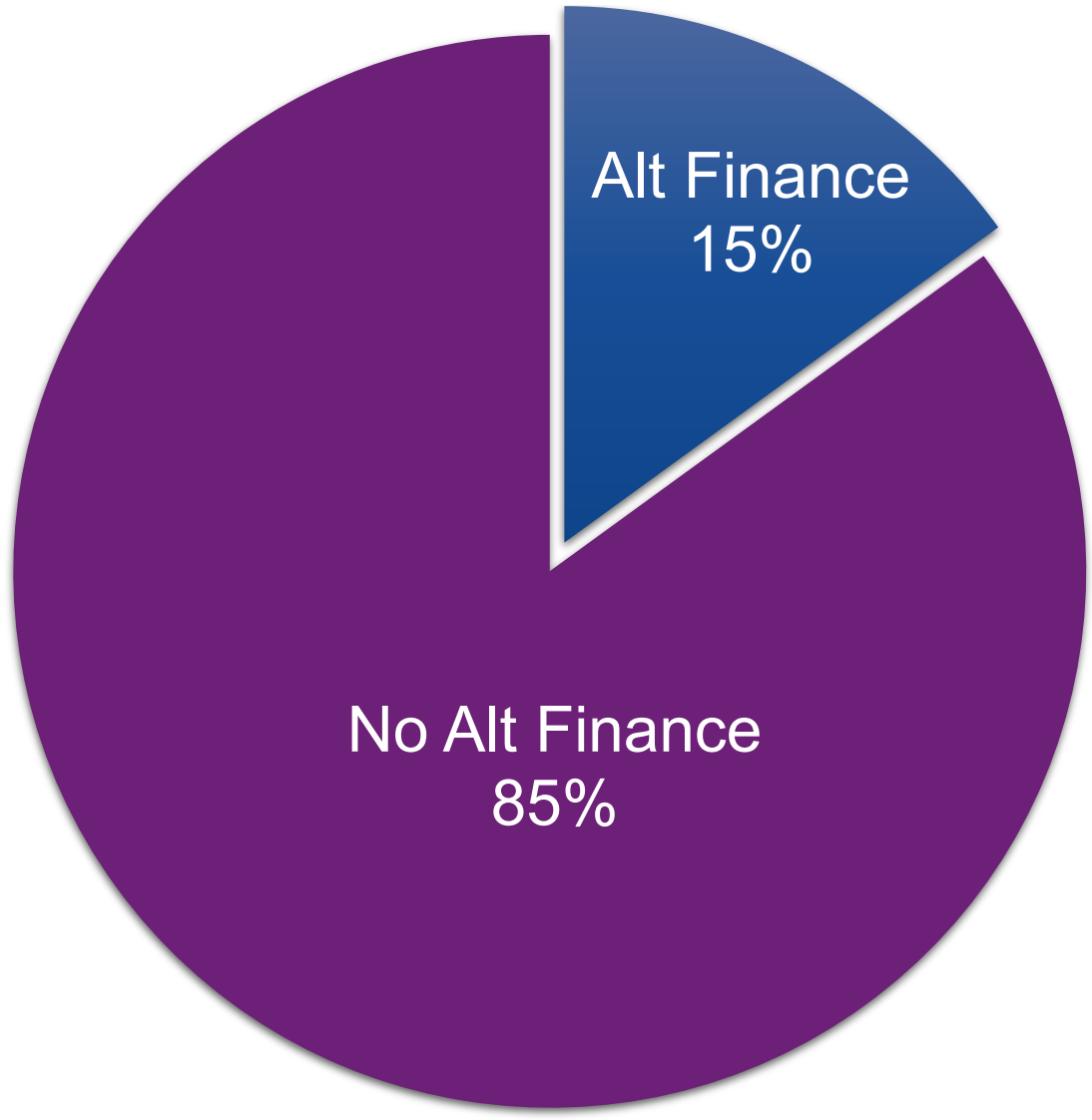
Credit Union Auto AFS Hit Rate Analysis

15%

of consumers with a new credit union auto trade matched to Clarity alternative finance data



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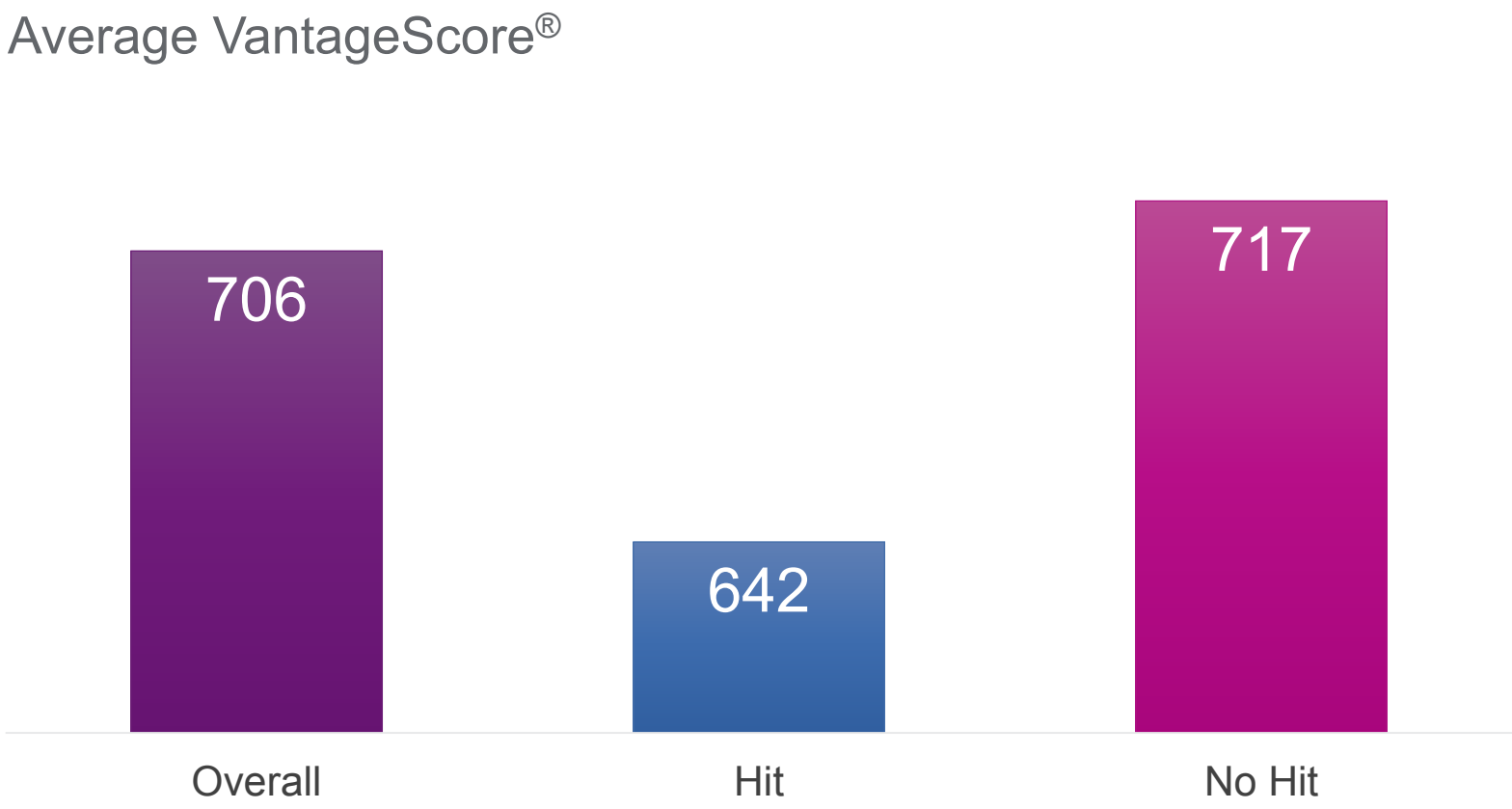
Of Those Hits Rates, How Did They Perform?



VantageScore® Ranges	
Super-prime	781-850
Prime	661-780
Near-prime	601-660
Subprime	500-600
Deep Subprime	300-499

Help Your Credit Union Serve More Members

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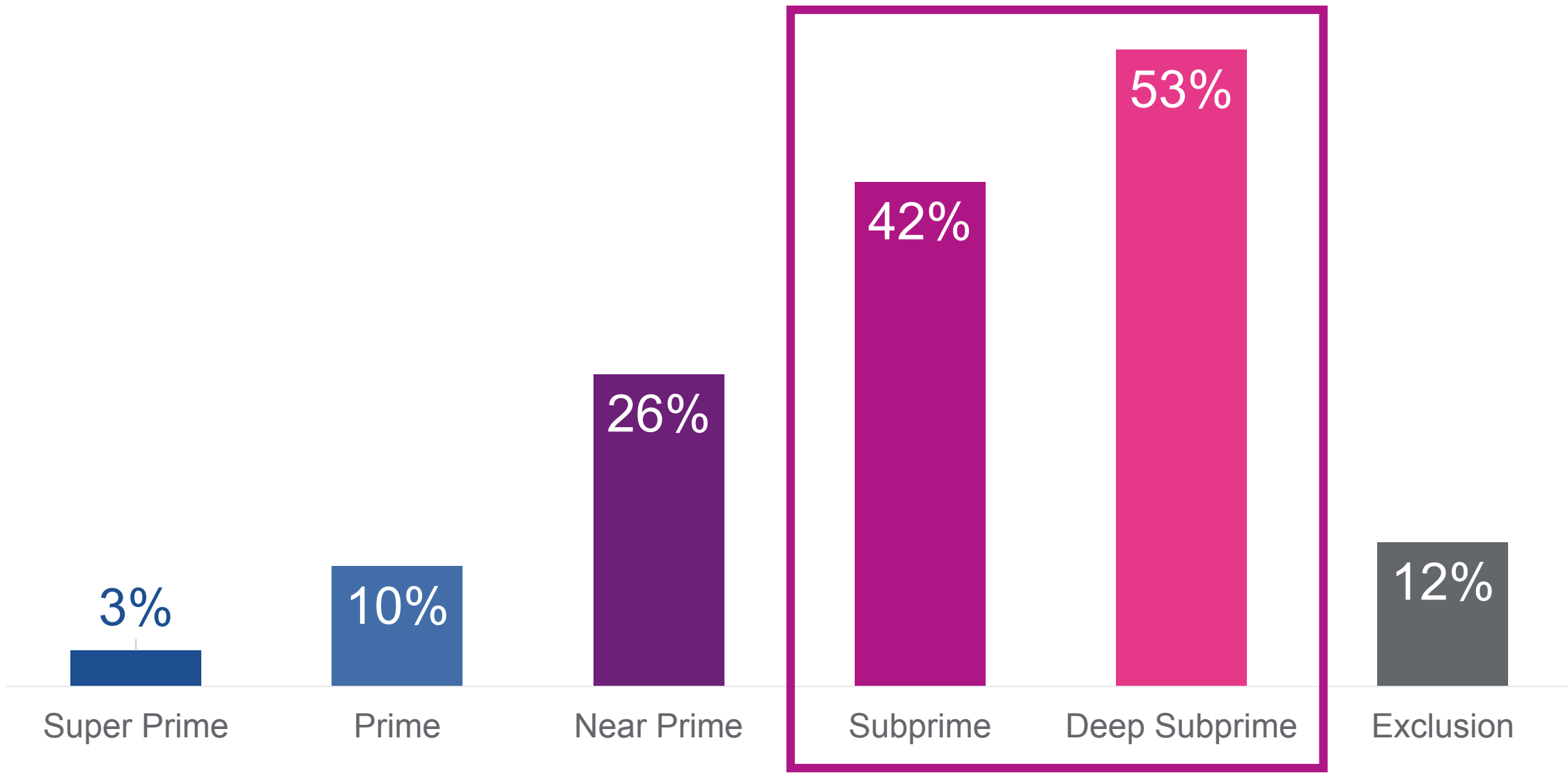
Expand Your Universe

Overall Hit Rates

% of consumers in each score band that have alternative finance data



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There Are Several Ways to Use Alternative Credit Data

Suppression

Criteria

Score

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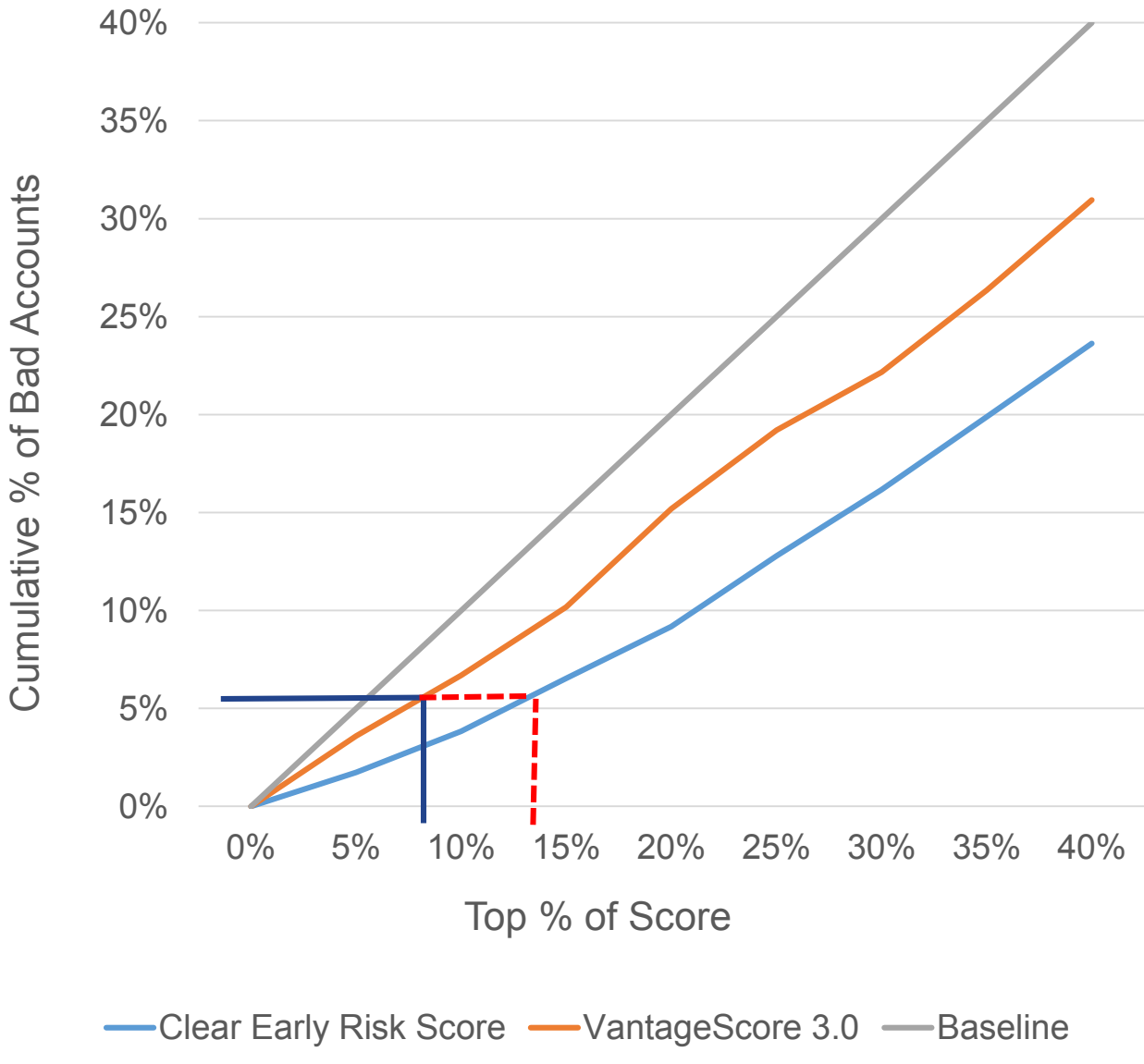
GROW: Increase Members

The Power of Adding Clear Early Risk Score (Near Prime Population)



With a traditional risk score you can approve **10%** of the population inside your risk criteria

By adding **AFS data** you can approve **16%** of the population inside the same risk criteria **60%** lift in members served

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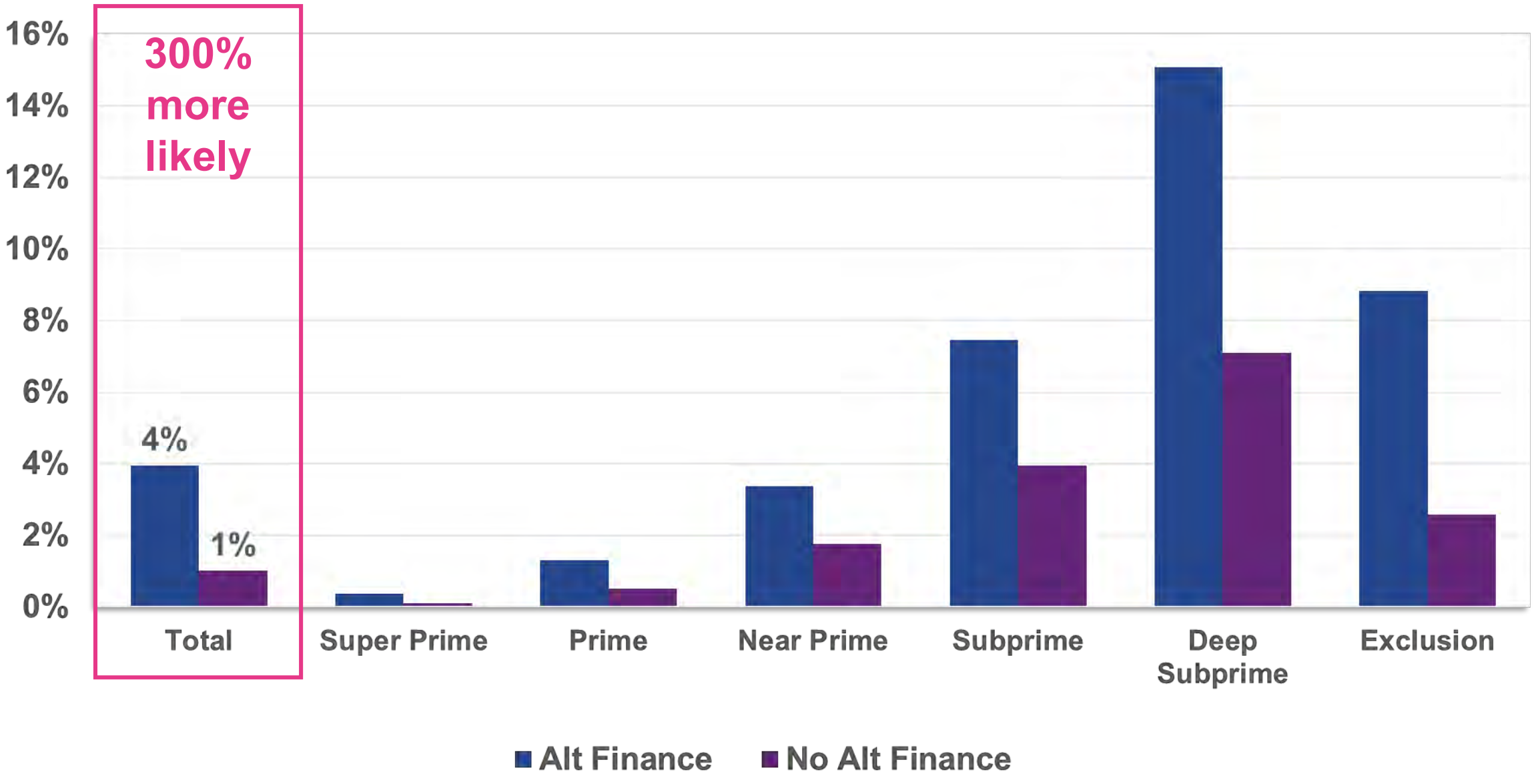
PROTECT: Manage Risk

Credit Union Auto Consumers with Alt Finance Presence Are 300% More Likely to Be 90+ Days Past Due in the First 12 Months



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SERVE: Universe Expansion

Universe Expansion and Risk Mitigation Is Possible with Alternative Data Layered In

Changing your cut off score from 660 to 631 and keep 4.5% bad rate…

	Old way	New way alternative data
Super prime	Keep	Keep
Prime	Keep	Keep
Near prime	Exclude	Decision
Subprime	Exclude	Exclude
Deep subprime	Exclude	Exclude

Near prime	No Alternative Data	Bad rate	Has Alternative Data	Bad rate
651-660	Keep	2.9%	Keep	4.5%
641-650	New	3.6%	Exclude	5.4%
631-640	New	4.3%	Exclude	6.5%
621-630	Exclude	5.3%	Exclude	7.7%

By layering on alternative finance data in this example, you're able to book **5%** more accounts

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Credit Use Cases

Prospecting

Underwriting

Account Review

Collections

Richard Riptide

52, Male
Accountant

Requested Loan

REQUESTED LOAN TYPE	LOAN AMOUNT	PURPOSE OF LOAN
Personal	$10,000	Unknown

Bank Trades

ABC BANK
Open: **07/13/08**
Type: **Credit Card**
Limit: **$7,500**
Balance: **$4,570**
Payment: **1 1 1 1 1**

ALASKA WILD CREDIT
Open: **04/19/12**
Type: **Credit Card**
Limit: **$20,000**
Balance: **$1,867**
Payment: **1 1 1 1 1**

UPSIDE FINANCIAL
Open: **12/15/14**
Type: **Credit Card**
Limit: **$5,000**
Balance: **$1,400**
Payment: **1 1 1 1 1**

XYZ FINANCIAL
Open: **12/15/16**
Type: **Auto Lease**
Limit: **$45,000**
Balance: **$535**
Payment: **1 1 1 1 1**

CDE RETAIL
Open: **12/15/12**
Type: **Credit Card**
Limit: **$2,500**
Balance: **$1,400**
Payment: **1 1 1 1 1**

Add Alternative Credit Data +

Risk Level

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Richard Riptide

52, Male
Accountant

Requested Loan

REQUESTED LOAN TYPE	LOAN AMOUNT	PURPOSE OF LOAN
Personal	$10,000	Unknown

Bank Trades

ABC BANK
Open: **07/13/08**
Type: **Credit Card**
Limit: **$7,500**
Balance: **$4,570**
Payment: **1 1 1 1 1**

ALASKA WILD CREDIT
Open: **04/19/12**
Type: **Credit Card**
Limit: **$20,000**
Balance: **$1,867**
Payment: **1 1 1 1 1**

UPSIDE FINANCIAL
Open: **12/15/14**
Type: **Credit Card**
Limit: **$5,000**
Balance: **$1,400**
Payment: **1 1 1 1 1**

XYZ FINANCIAL
Open: **12/15/16**
Type: **Auto Lease**
Limit: **$45,000**
Balance: **$535**
Payment: **1 1 1 1 1**

Risk Level

CDE RETAIL
Open: **12/15/12**
Type: **Credit Card**
Limit: **$2,500**
Balance: **$1,400**
Payment: **1 1 1 1 1**

KASH KINGS
Open: **03/01/18**
Type: **Personal Loan**
Limit: **$3,000**
Balance: **$1,500**
Payment: **1 1 1 1 1**

TULLY'S CASH NOW
Open: **03/01/18**
Type: **Personal Loan**
Limit: **$2,500**
Balance: **$1,500**
Payment: **1 1 1 1 1**

JIMMY'S CASH
Open: **05/01/18**
Type: **Personal Loan**
Limit: **$500**
Balance: **$570**
Payment: **3 2 1**
Currently Past Due

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Michelle Mambo

39, Female
Barista, Retail Sales Associate

Requested Loan

REQUESTED LOAN TYPE	LOAN AMOUNT	PURPOSE OF LOAN
Credit Card	-	Unknown

Bank Trades

ABC BANK
Open: **02/02/16**
Type: **Credit Card**

Limit: **$7,500**
Balance: **$4,570**
Payment: **1 1 1 1 1**
Historical 60 PDP: 1

RIGHT NOW AUTO
Open: **04/19/17**
Type: **Installment**

Limit: **$13,450**
Balance: **$9,877**
Payment: **1 1 1 1 1**

BIG LAKE BANK
Open: **11/22/16**
Type: **Credit Card**

Limit: **$5,000**
Balance: **$2,300**
Payment: **1 1 1 1 1**

Add Alternative Credit Data

Risk Level

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Michelle Mambo

39, Female
Barista, Retail Sales Associate

Requested Loan

REQUESTED LOAN TYPE	LOAN AMOUNT	PURPOSE OF LOAN
Credit Card	-	Unknown

Bank Trades

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Payment: **1 1 1 1 1**

BIG LAKE BANK
Open: **11/22/16**
Type: **Credit Card**

Limit: **$5,000**
Balance: **$2,300**
Payment: **1 1 1 1 1**

ESCOLATOR LOANS
Open: **11/22/16**
Type: **Personal Loan**

Limit: **$5,000**
Balance: **$2,300**
Payment: **1 1 1 1 1**

XYZ Loan Mart
Open: **11/22/16**
Type: **Personal Loan**

Limit: **$1,200**
Balance: **$0**
Payment: **1 1 1 1 1**

Risk Level

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Takeaways

1. Alternative Credit Data is being used by traditional and alternative lenders
2. Can be used to gain a deeper view of the consumer (current and prospective)
3. Alternative Credit Data is supplemental and essential
4. FCRA-compliant and can be used for adverse action

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Questions?

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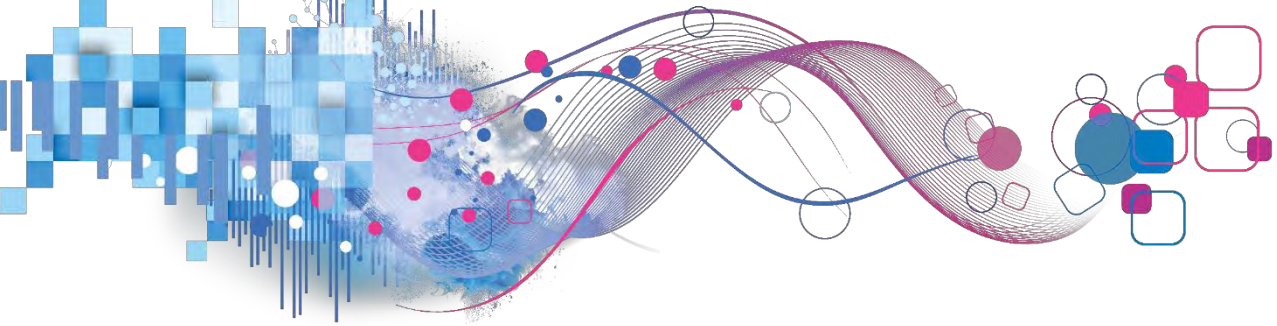

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Break

Futureproofing Your Fraud Strategy

Skipper Mervin
Director, Fraud & Identity Management

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Contents

Market Drivers

Challenges

Synth ID

How To Combat

CrossCore Demo

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Criminals Are Increasingly Creative

An Example of an OTP Interception

Step 1: Access Account
Fraudster accesses user's account using stolen credentials

Step 2: Send a fake SMS
Fraudster contacts the real customer, warning of fraud

Step 3: Customer calls
Customer receives the fake SMS and calls the fraudster

Step 4: Fraudster uses code
Fraudster adds new payee (himself) and initiates a large transaction

Step 5: Bank sends OTP
Bank sends the OTP to their customer

Step 6: Customer shares OTP
Customer discloses the OTP to the fraudster

Step 7: Fraudster uses OTP
Fraudster uses the OTP to authorize their large transaction

Step 8: Bank validates
Bank validates the OTP and allows the transaction

Step 9: Customer loss
Our customer loses a large sum of money

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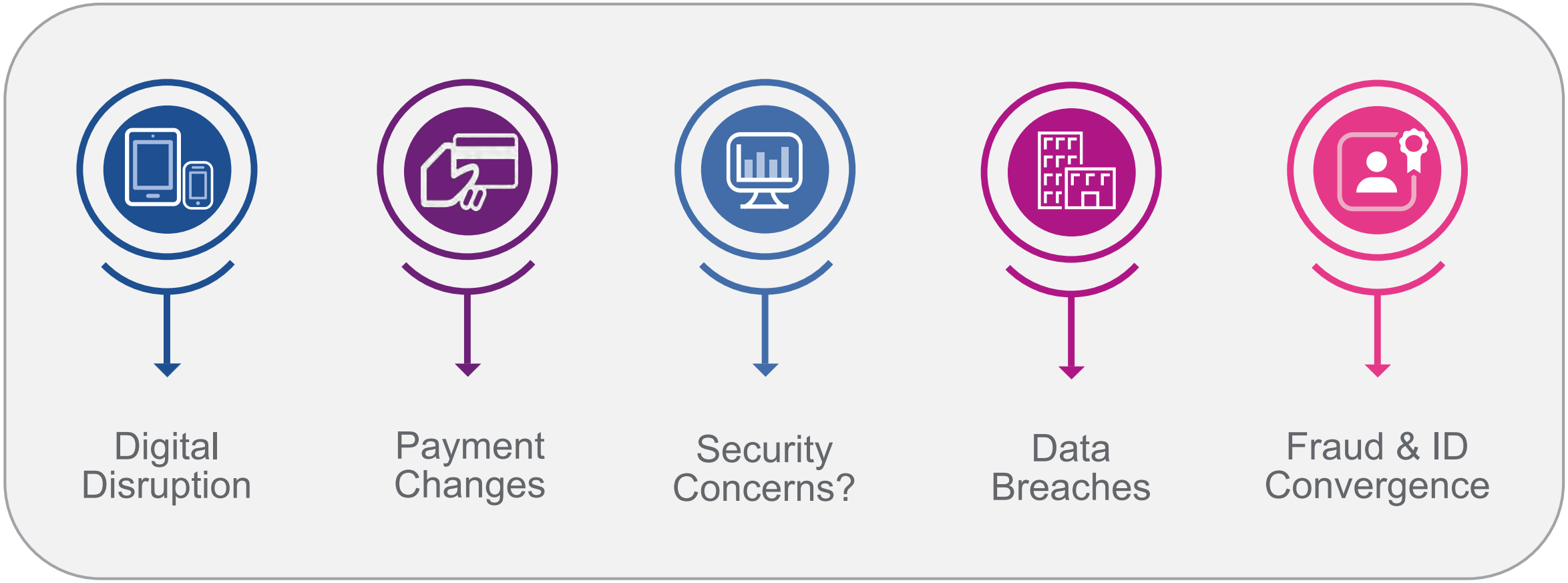
Market Drivers



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The Hyper-Connected Consumer

- 64% of consumers use 4+ devices in a typical day; 26% use more than 6
- 84% of US adults are digital
- Digital touch points are increasing by 20% annually
- 91% of consumers check their email at least once daily on their smartphones
- 84% are on a mobile device while watching TV
- 64% of social media users log on to social sites via computers; 47% on mobile devices

http://www.mckinsey.com/insights/high_tech_telecoms_internet/brand_success_in_an_era_of_digital_darwinism?cid=other-eml-alt-mkq-mck-oth-1502
http://www.experian.com/assets/marketing-services/p/2015-digital-marketer-report.pdf
http://www.cgi.com/sites/default/files/pdf/br_fs_consumersurveyreport_final_july_2014.pdf

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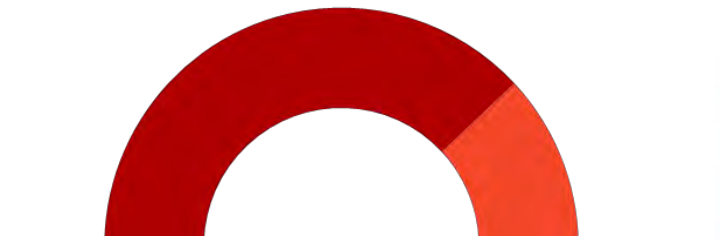
2017 Mobile and Digital Trends

76.6%
of credit unions offer some form of online banking



48.3%
of members use their credit union's transactional website

46%
of consumers use only digital channels for their banking

DID YOU KNOW?

…that's 19 percentage points higher than in 2012!

7%
of users that interact online with their financial institution are predominately using mobile

81%
of consumers own a smartphone

62%
of consumers want a financial institution with local branches

mobile banking is on the rise

to date,
55.5%
of credit unions offer mobile banking in 2017

versus

50.6%
of credit unions offered mobile banking in 2016

MORE CONSUMERS ARE USING BANKING APPS MORE FREQUENTLY

Sources: Callahan & Associates, PWC Financial Services

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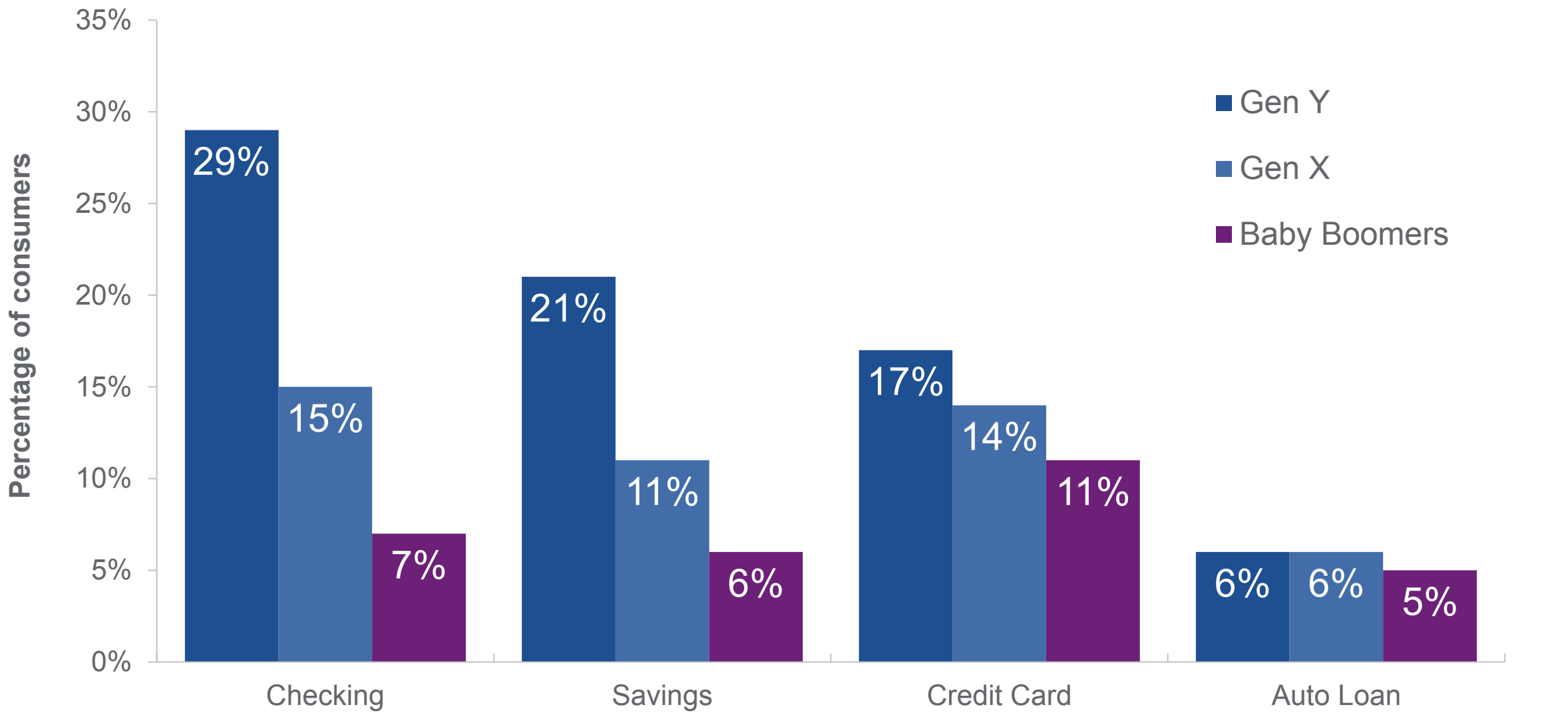
Generational Banking Preferences

Gen Y Consumers are Maturing Financially, Opening the Most New Accounts

Figure 6: Account Opening by Generation, Past 12 Months



Source: Javelin Strategy & Research, 2018

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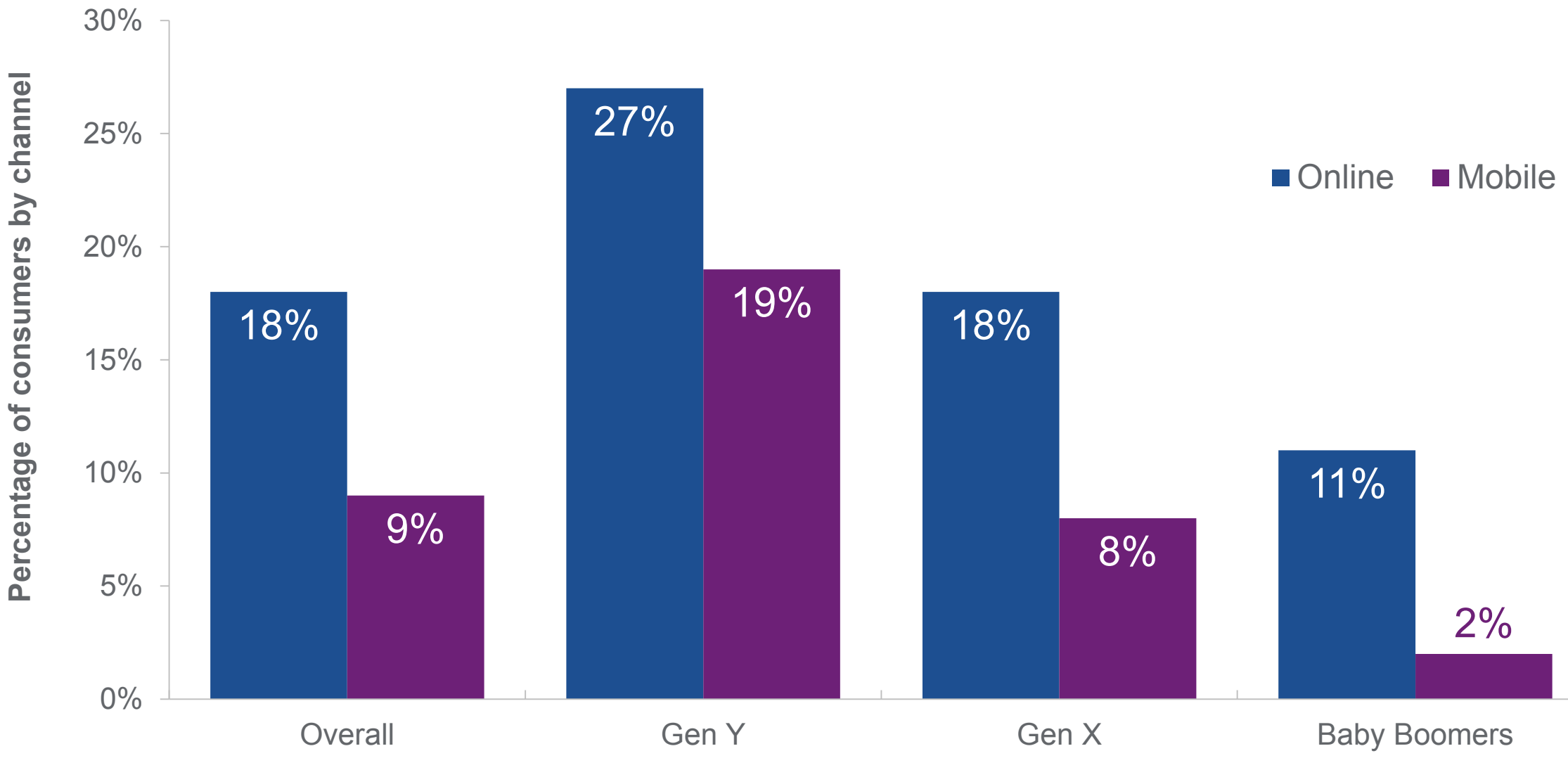
Generational Banking Preferences

Gen Y Takes the Lead in Digital Account Opening

Figure 5: Channel Used for Account Opening in Past 12 Months, by Generation



Source: Javelin Strategy & Research, 2018

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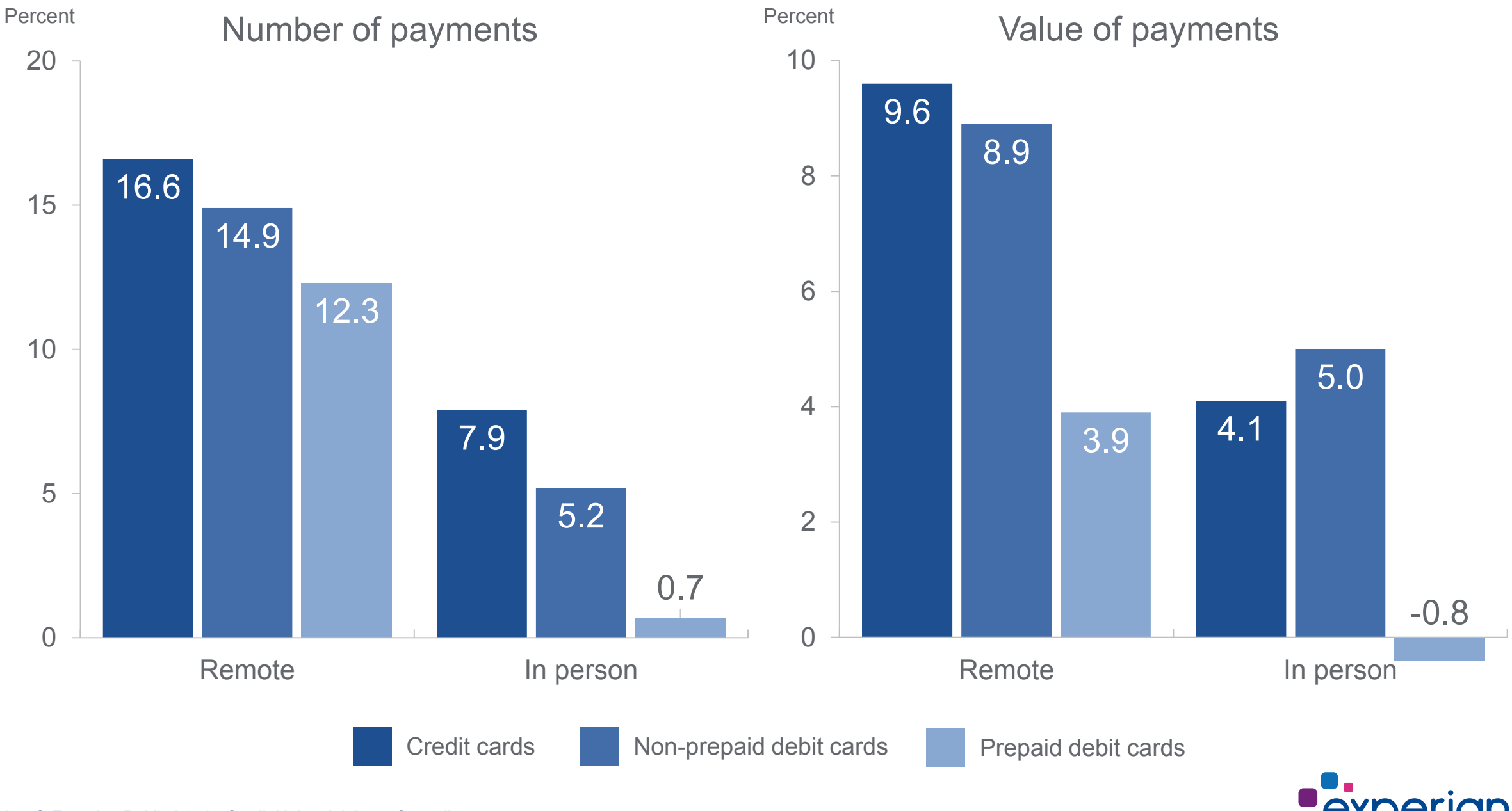
Shifting Payment Preferences

Growth rates of remote and in-person general-purpose card payments, by number and value, 2015–16



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Consumers Complicate Attempts to Protect Their Own Identities

26 online accounts, but **only 5 passwords**

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Data Breaches

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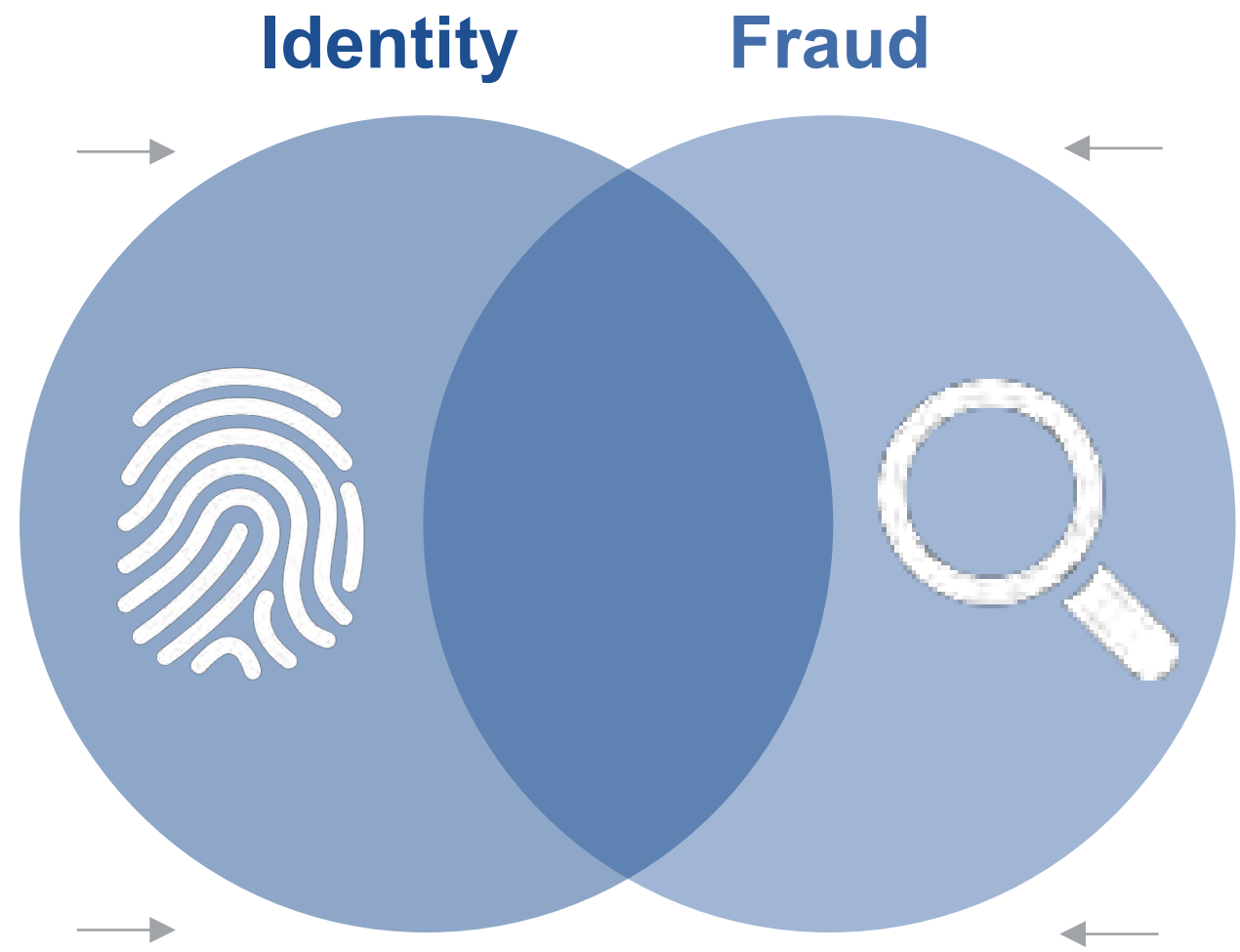
Convergence



61% OF ALL FRAUD ATTEMPTS CAME FROM **MOBILE DEVICES** IN 2016

MOBILE PLATFORMS ARE AS LIKELY TO BE ATTACKED BY FRAUDSTERS **8x**

30 LEGITIMATE CUSTOMERS ARE CHALLENGED OR BLOCKED TO CATCH **1** FRAUDSTER

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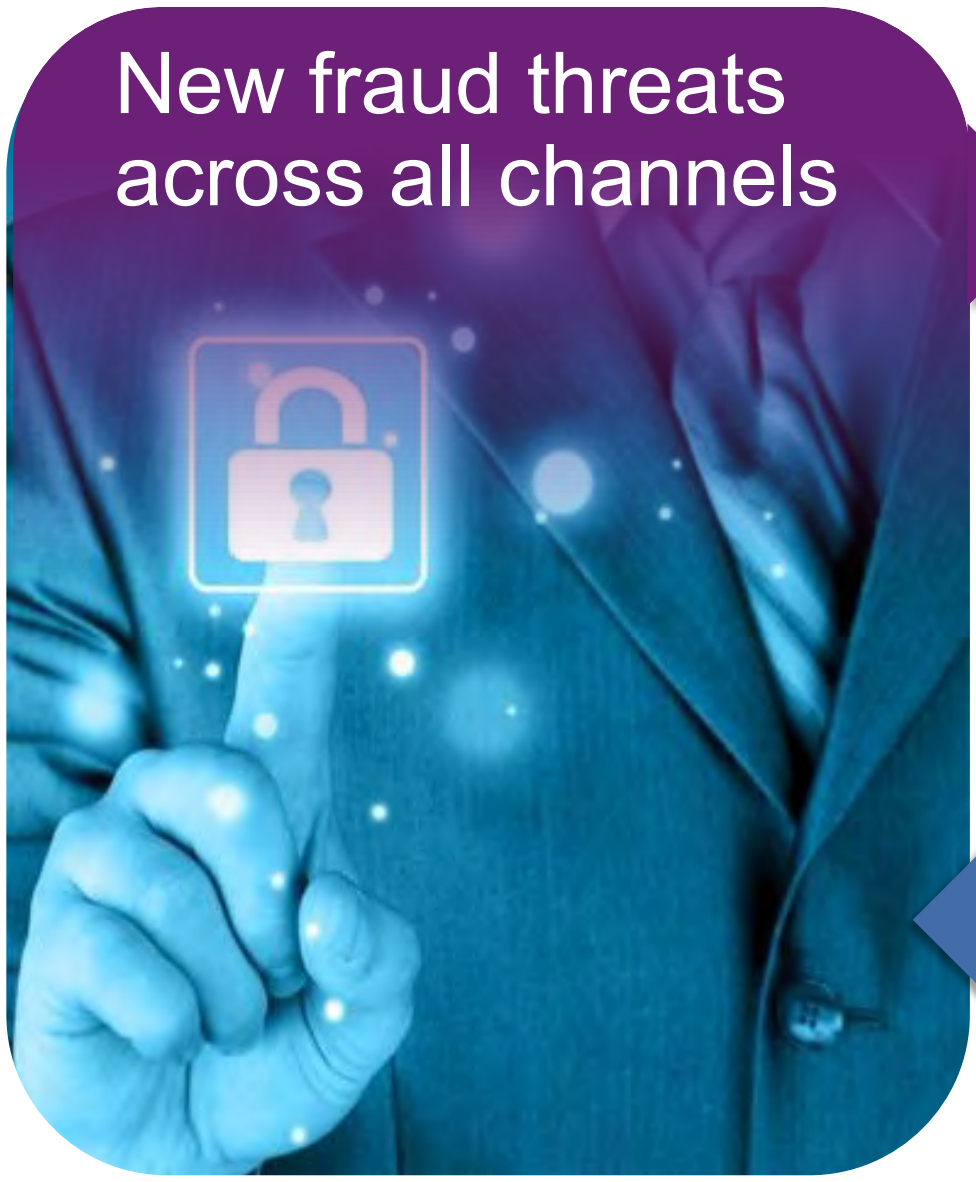
Common Challenges



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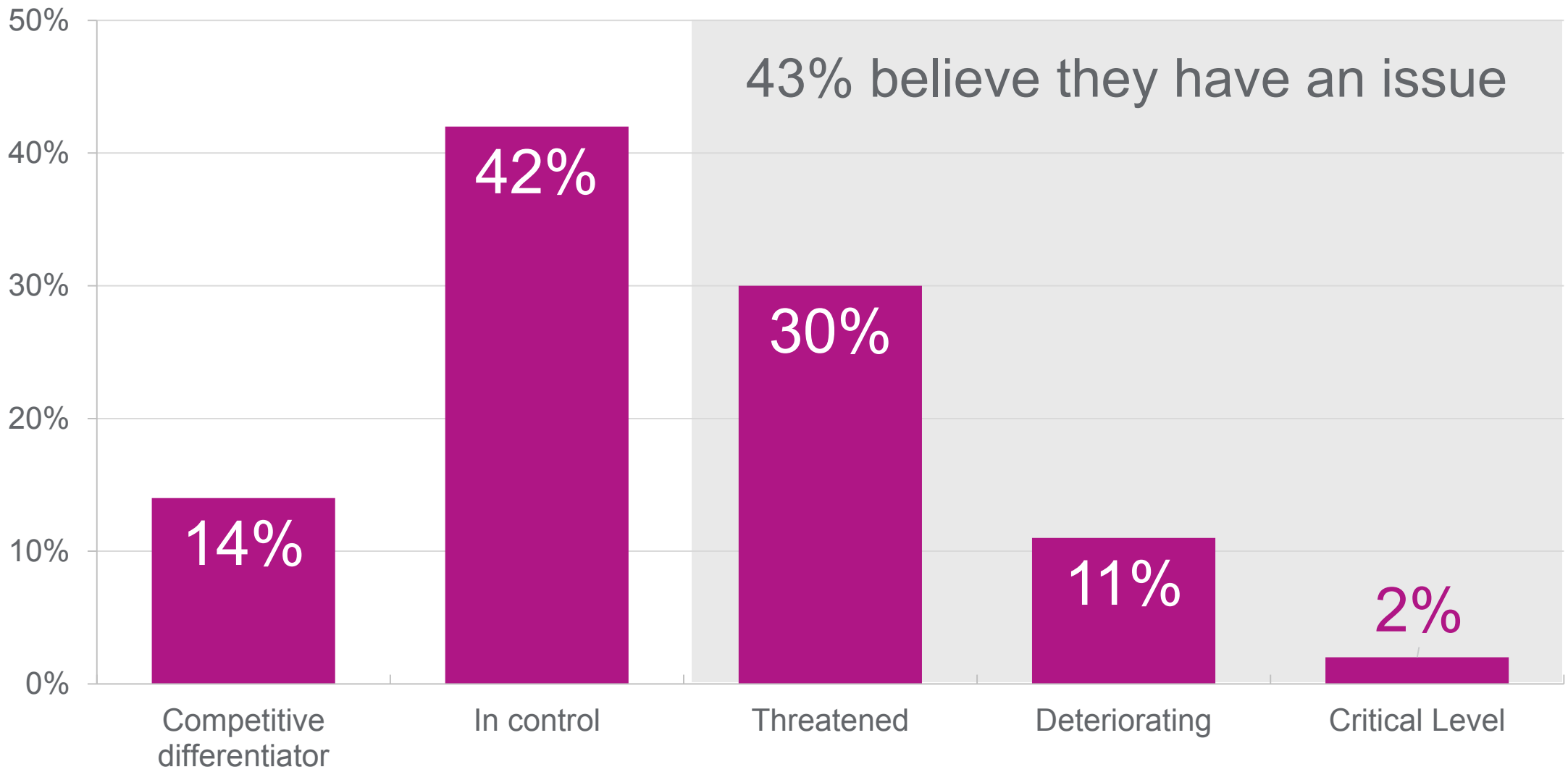
Where Does Your Credit Union Fit?

For some institutions, fraud fighting is a competitive differentiator; for others, fraud is a serious problem



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Synthetic Identity Fraud

Losses associated with synthetic identity fraud estimated to be in the billions

True scope hard to quantify because many clients associate the synthetic identity losses as a credit risk

- Estimates that synthetic identity fraud account for:
  - 20% of credit card charge offs
  - 80% of credit card fraud losses
- Synthetic Identity losses manifest in several ways including:
  - Bust out
  - Never pay
  - First payment default

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Synthetic Identify Fraud

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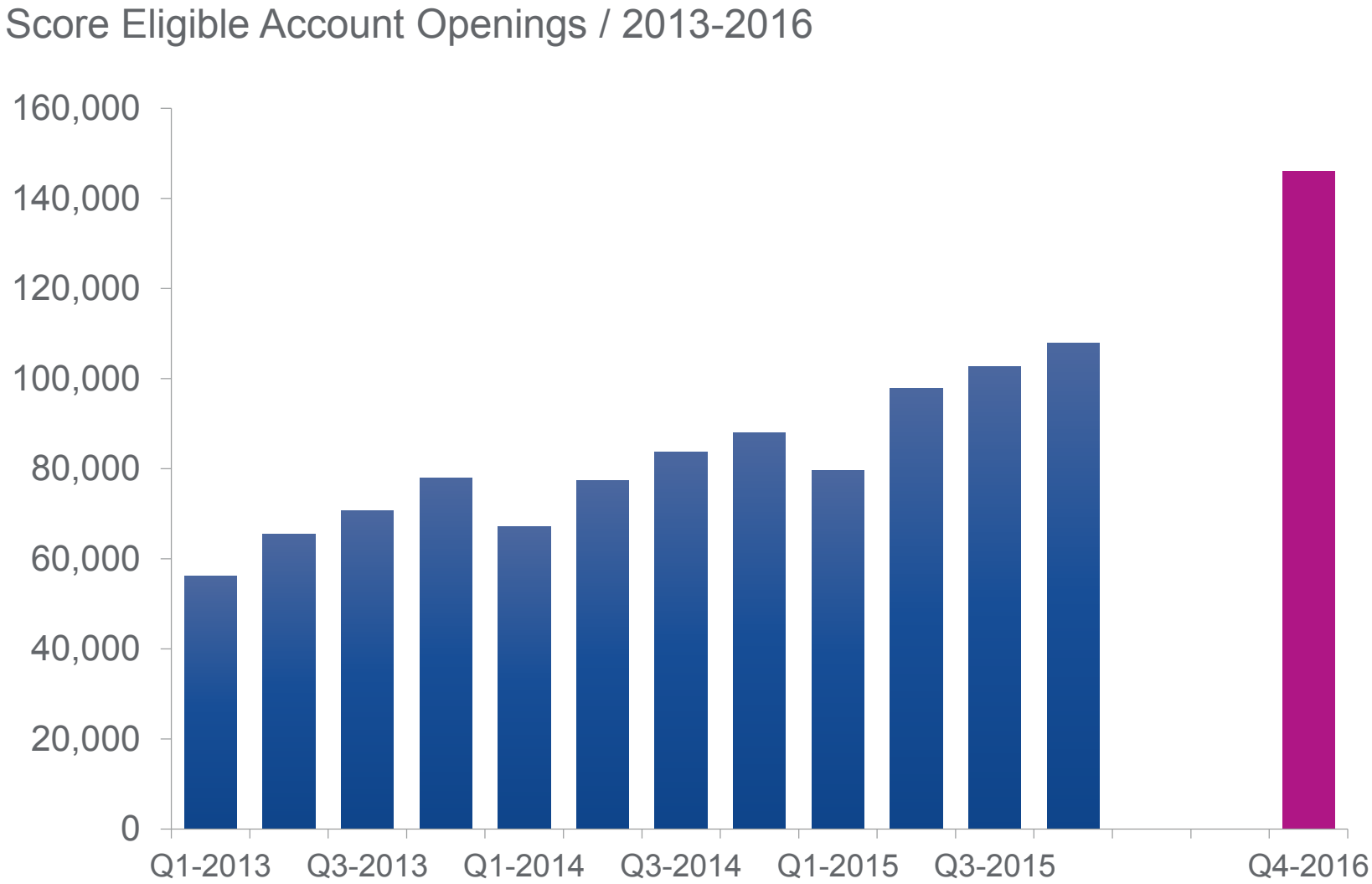
Synthetic Fraud Problem

Scope of the Problem - from Bad to Worse

The number of "score eligible" accounts opened has risen steadily



- Score eligible population increased over 2.5X between 2013 and 2016
- Bad rate on score eligible population increased by ~2.5X in the same time window

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Bust Out Fraud

By taking action on high risk accounts, losses can be reduced significantly:

- Outstanding balance is 40% lower 3 months prior to bust out
- 20% lower 2 months prior to bust out
- BustOut Score is calibrated to predict 3 months prior to bust out
- Earlier prediction = lower losses across accounts

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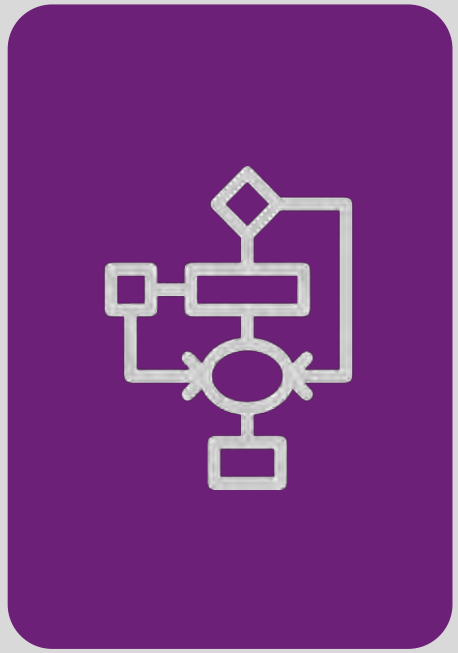
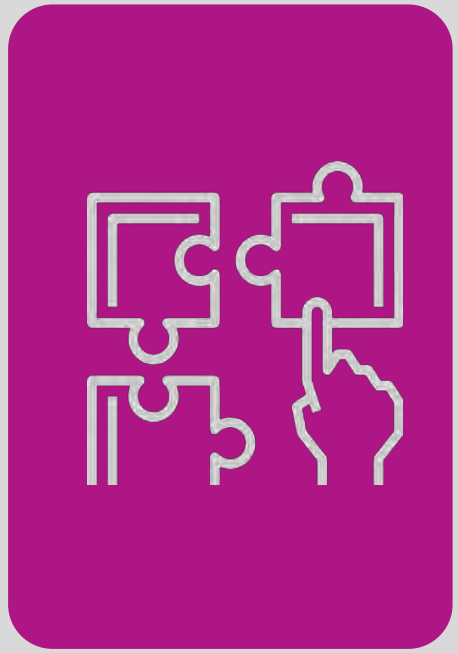
How to Solve

Machine Learning

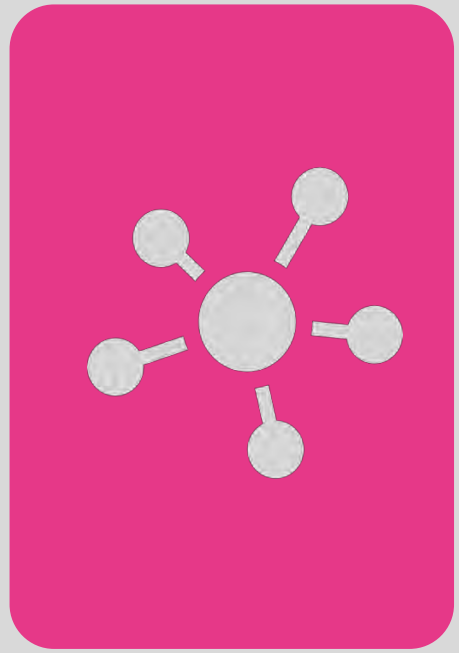
Orchestration



Multi-Layered Strategies



Single Platform



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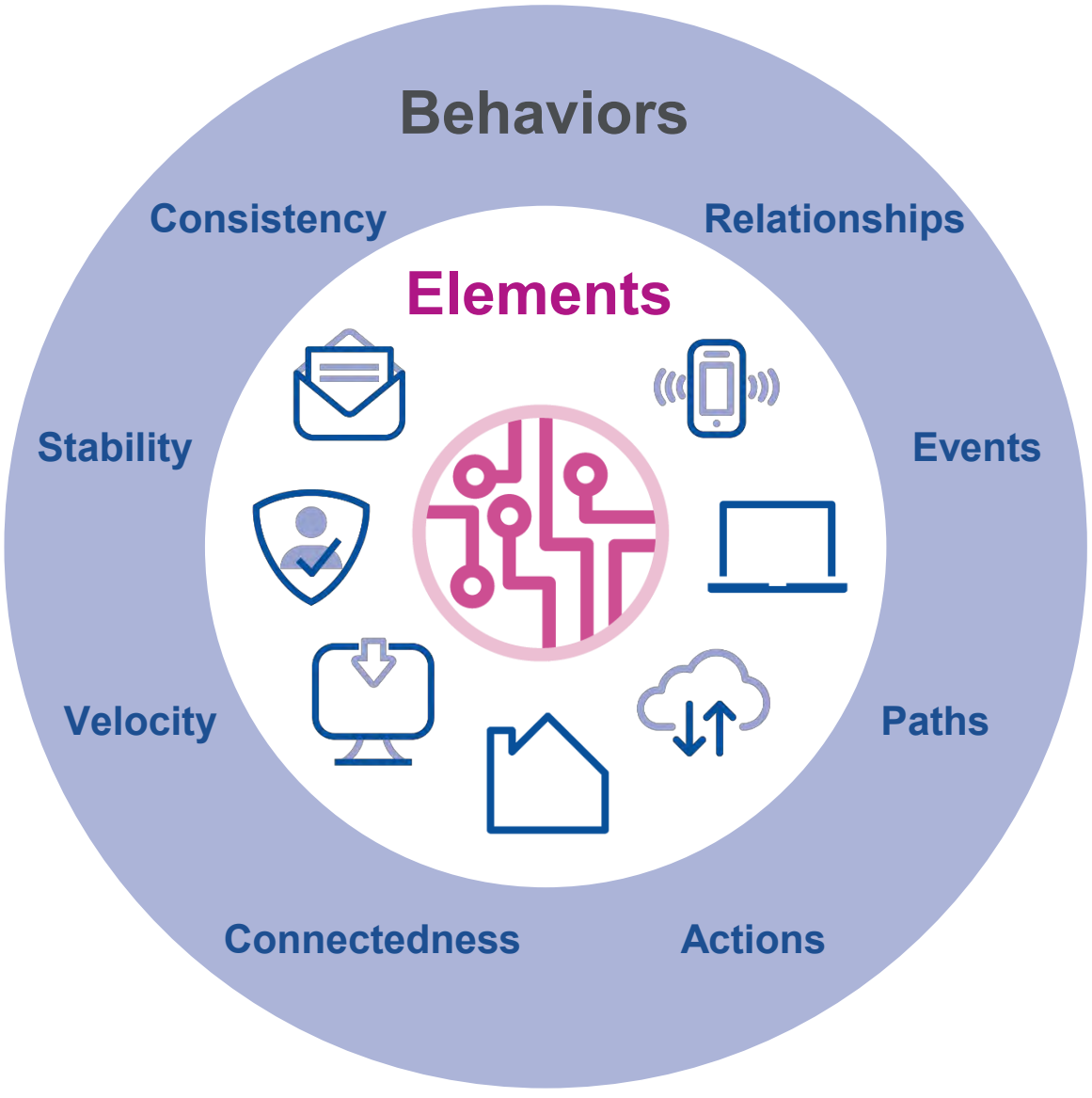
Single Platform



Scalable

Versatile

Flexible

Simplicity

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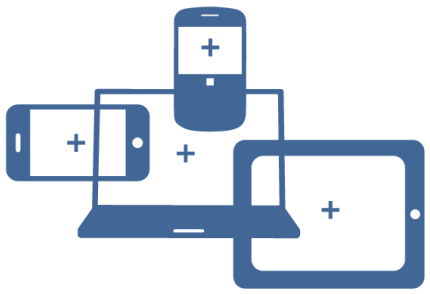
Single Platform

1 Device Insight

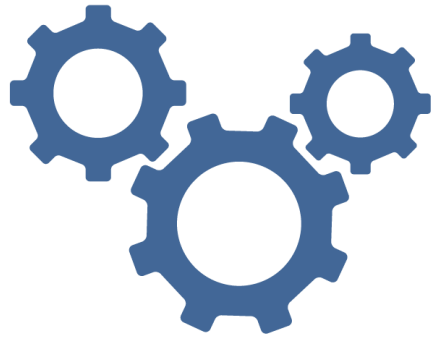
Collects data enables deep insight into the device



Device Fingerprint PLUS
Rich Attribute Collection
Patented Techniques

2 Risk Engine

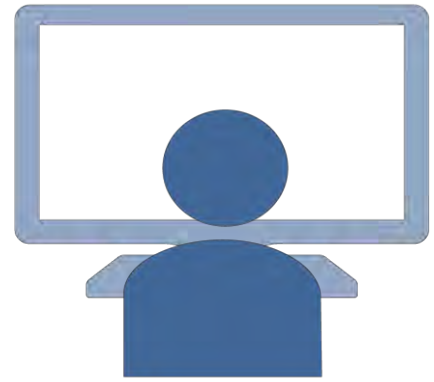
Analyzes data and produces risk scores, decisions and details



Configurable
High Performance
Fraud Focused

3 Work Bench

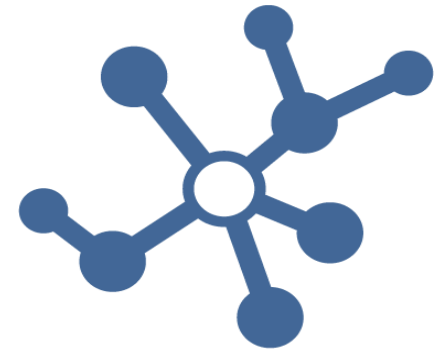
Presents analysts with digital intelligence within a highly-efficient interface



Highlights key information
Audit trail
Management Reporting

4 Link Analysis

Identifies fraud through hidden associations



Automated linking to many degrees of separation

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Effective identity management requires standardized and measurable identity proofing at onboarding in combination with ongoing authentication of existing user activities and an underlying program of identity management (monitoring) of all identities within a portfolio or user population to identify and act upon substantive changes in the verification, confidence, or inherent risk associated with a specific identity.

Identity Proofing

The goal of identity proofing is to verify individuals are who they claim to be at a specific point in time. Identity proofing is applied in the acquisition and origination stages of the Customer Life Cycle and typically performed during or prior to activities such as account opening, profile registration and biometric enrollment.

Authentication

Authentication is the ongoing verification of an individual's identity. In the Customer Life Cycle, authentication is most often applied during account login, account access and management and digital transactions.

Identity Management

Identity management is the behind-the-scenes monitoring of an individual's identity, performed throughout the Customer Life Cycle and supported by proactive issuance of risk alerts and warnings.

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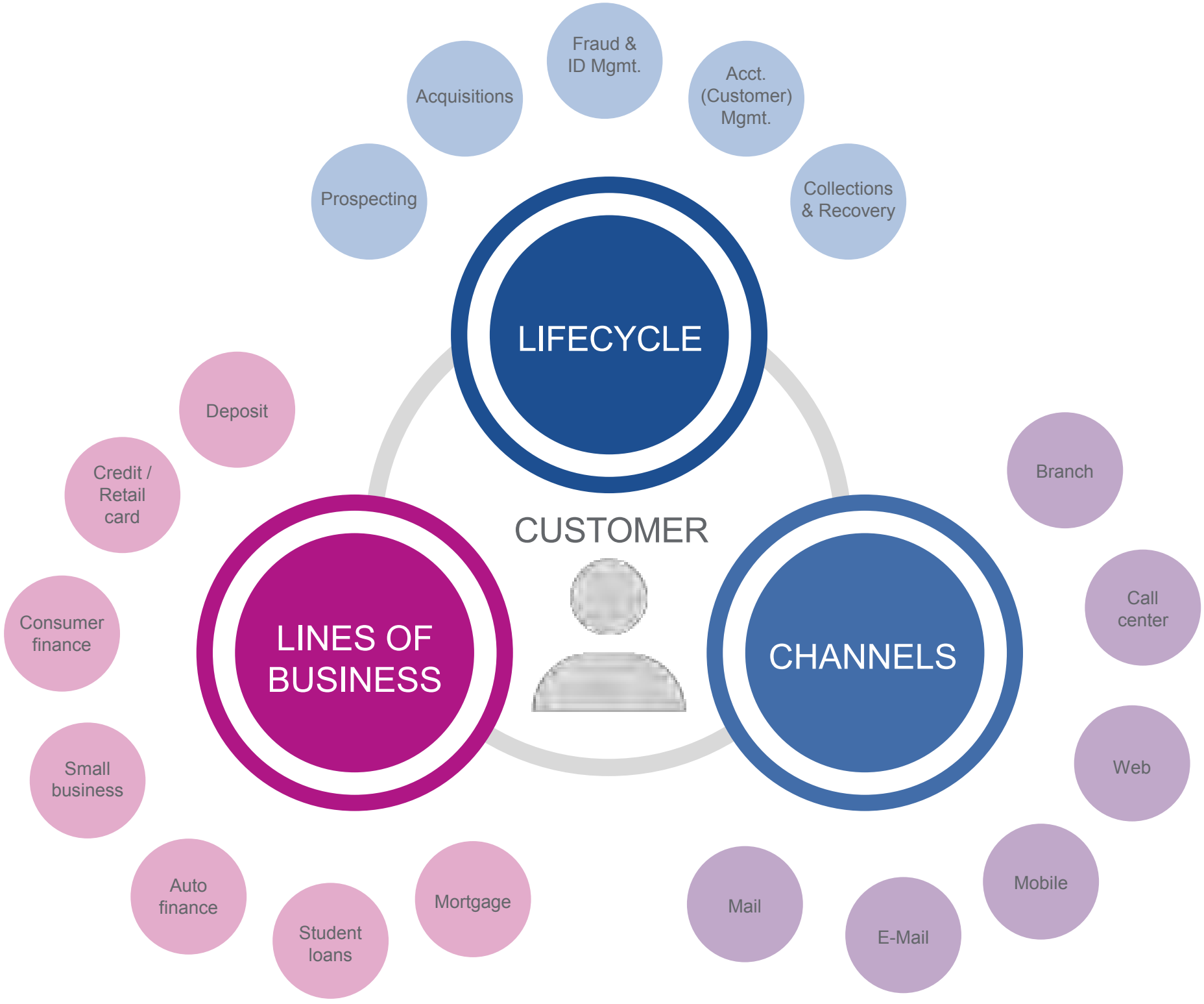

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Customer Lifecycle

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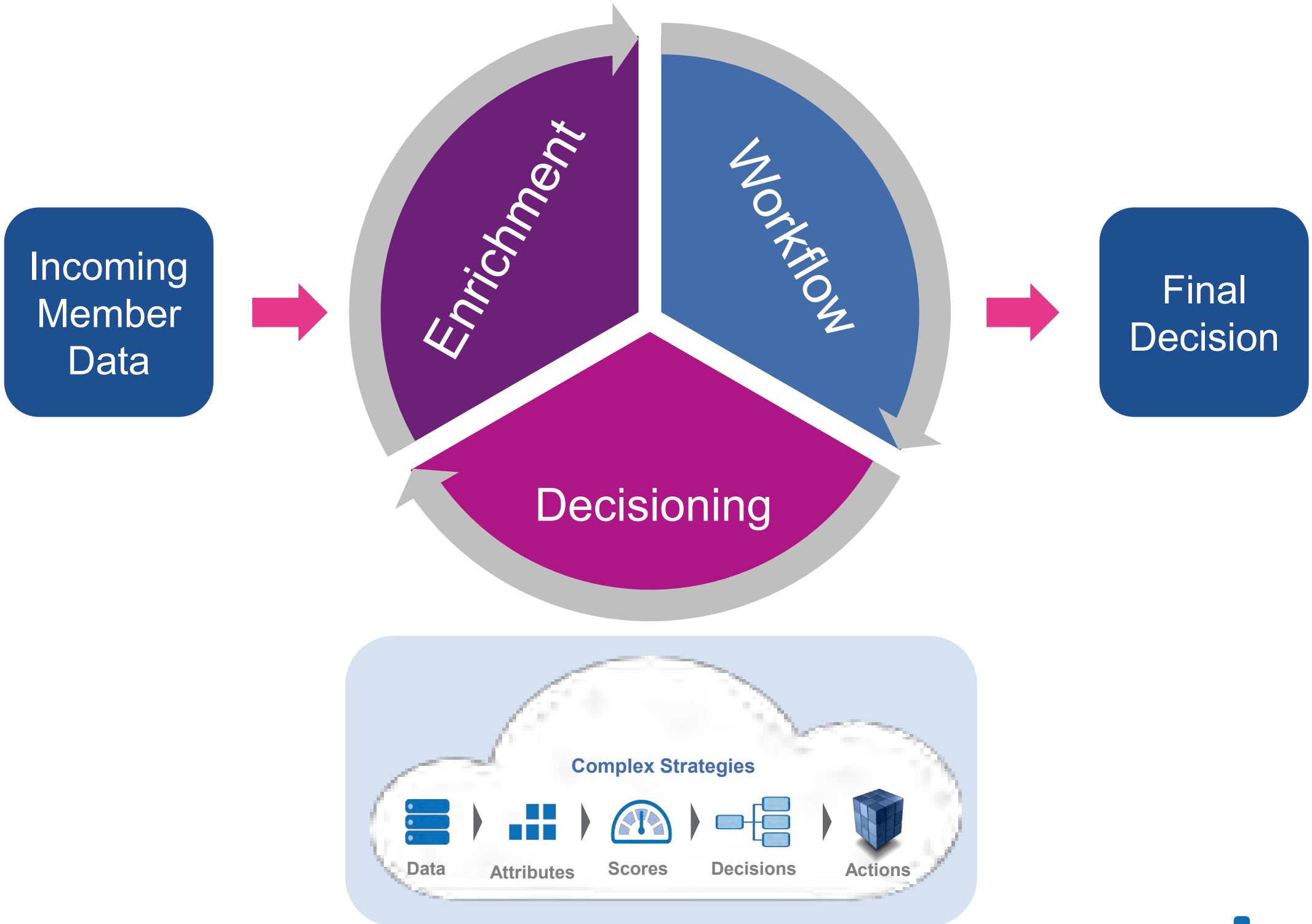
Orchestration



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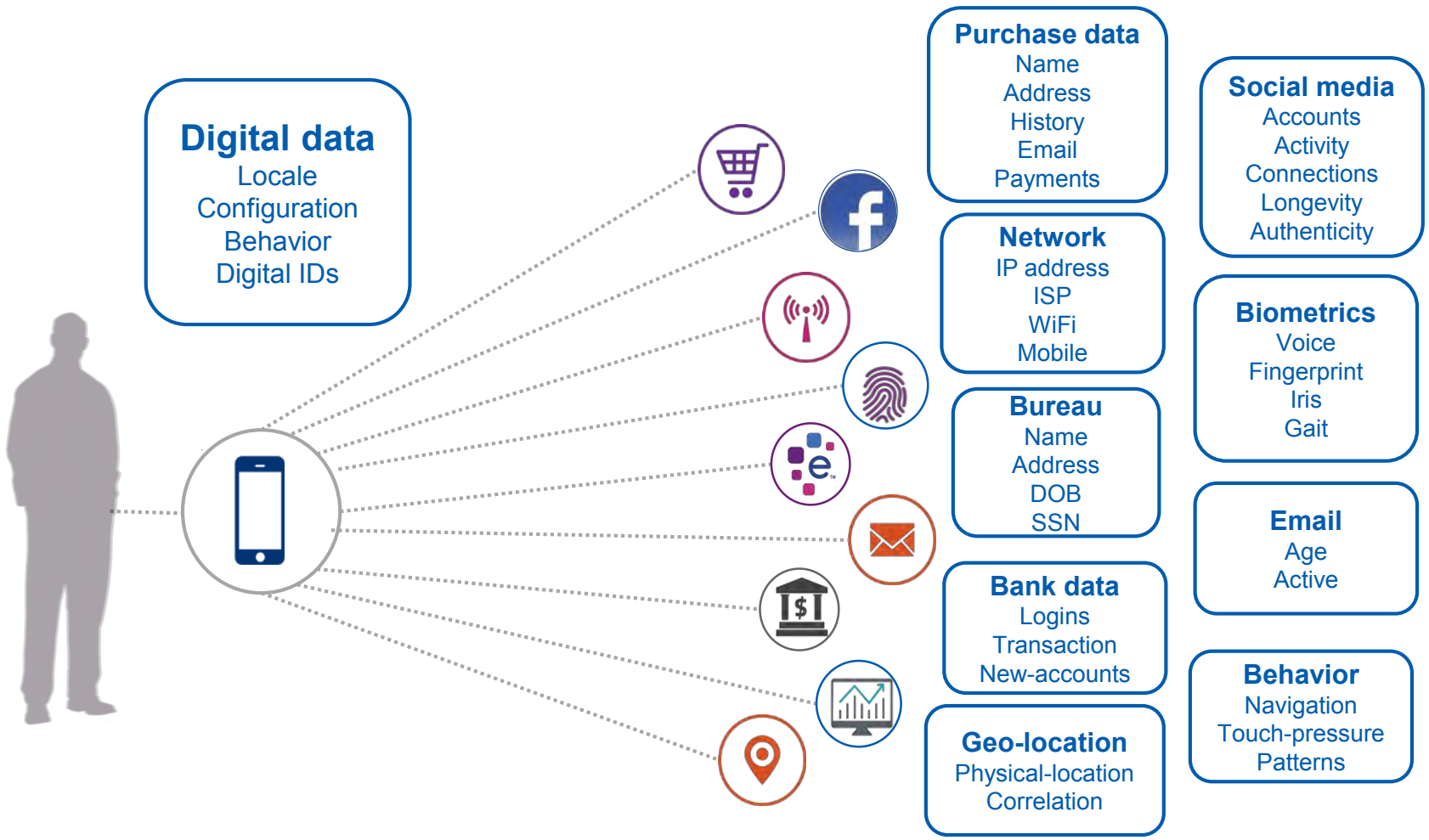
Create the Ultimate Consumer ID Profile . . .



Traditional ID solutions use basic Bureau-based personal identification information approach – ***"Essential, but not sufficient"***

The market is asking for richer ***context-based data assets****, like digital*

There are also new ***emerging alternative data sources****, which we can leverage…*

. . .To Truly Recognize Your Member

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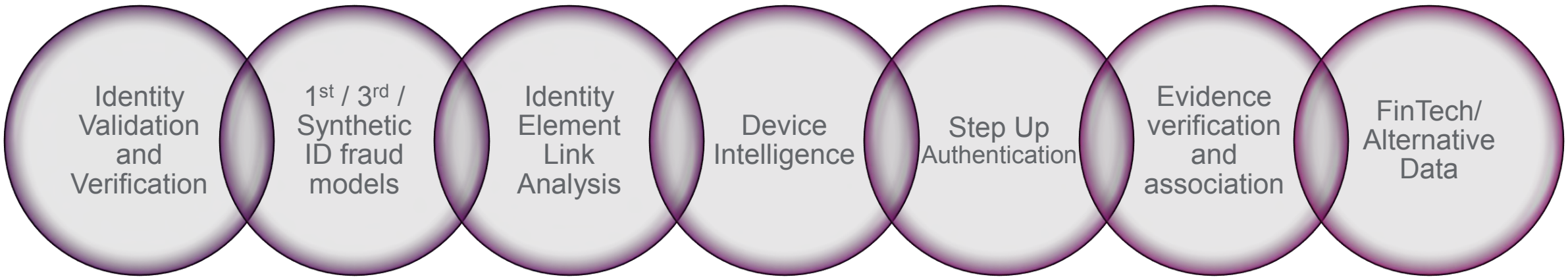
Layered Identity Verification and Risk Segmentation

Additive recognition, detection, and false positive reduction using a combination of:

- Targeted scores
- Observations, attributes and indicators
- Device risk assessment
- Comprehensive risk typing and workflow
- Holistic, consistent, and measurable decisioning
- Ongoing tuning
- Proofs of concept
- Efficient integrations and use cases



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Machine Learning

Millions of instructions per second

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Key Points

- PII data has been and should be assumed compromised – decisions require breadth and depth
- Omni-channel view across identities and devices has been our primary road map driver
- Fraud risk management must be layered and contextually invoked
- Compliance requirements and fraud risk assessments can and should be aligned
- Origination targets across varied populations and products require specific strategies

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Introducing CrossCore®

The First, Smart Plug-and-Play Platform for Fraud and Identity Services

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CrossCore

A Better Way Forward

Manage the entire fraud and identity portfolio

Define the level of confidence required — at a transaction level

Optimize decisions across services

Take back control — move at the speed of fraud

Purpose-built for fraud and identity services

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CrossCore

EFFICIENCY

- Maximize straight-through processing
- Increase fraud detection
- Reduce fraud losses
- Decrease operational costs

CONTROL RISK

- Reduce fraud losses with layered, risk-based authentication
- Consistently manage fraud risk across all channels
- Monitor performance and adjust strategies over time

COMPLIANCE

- Increase efficiency of regulatory reporting and compliance
- Comprehensive knowledge around customers
- Consistent policies and processes

CLIENT SATISFACTION

- Minimize friction on customer relationship
- Safeguard customer offline and online identities
- Improve client retention

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Overcoming the Challenges

New capabilities

- Faster speed to market
- More from existing systems
- Easier to justify new tools

Better outcomes

- Less friction
- More top-line growth
- Catch fraud faster
- Improve compliance
- More efficiency
- Lower cost

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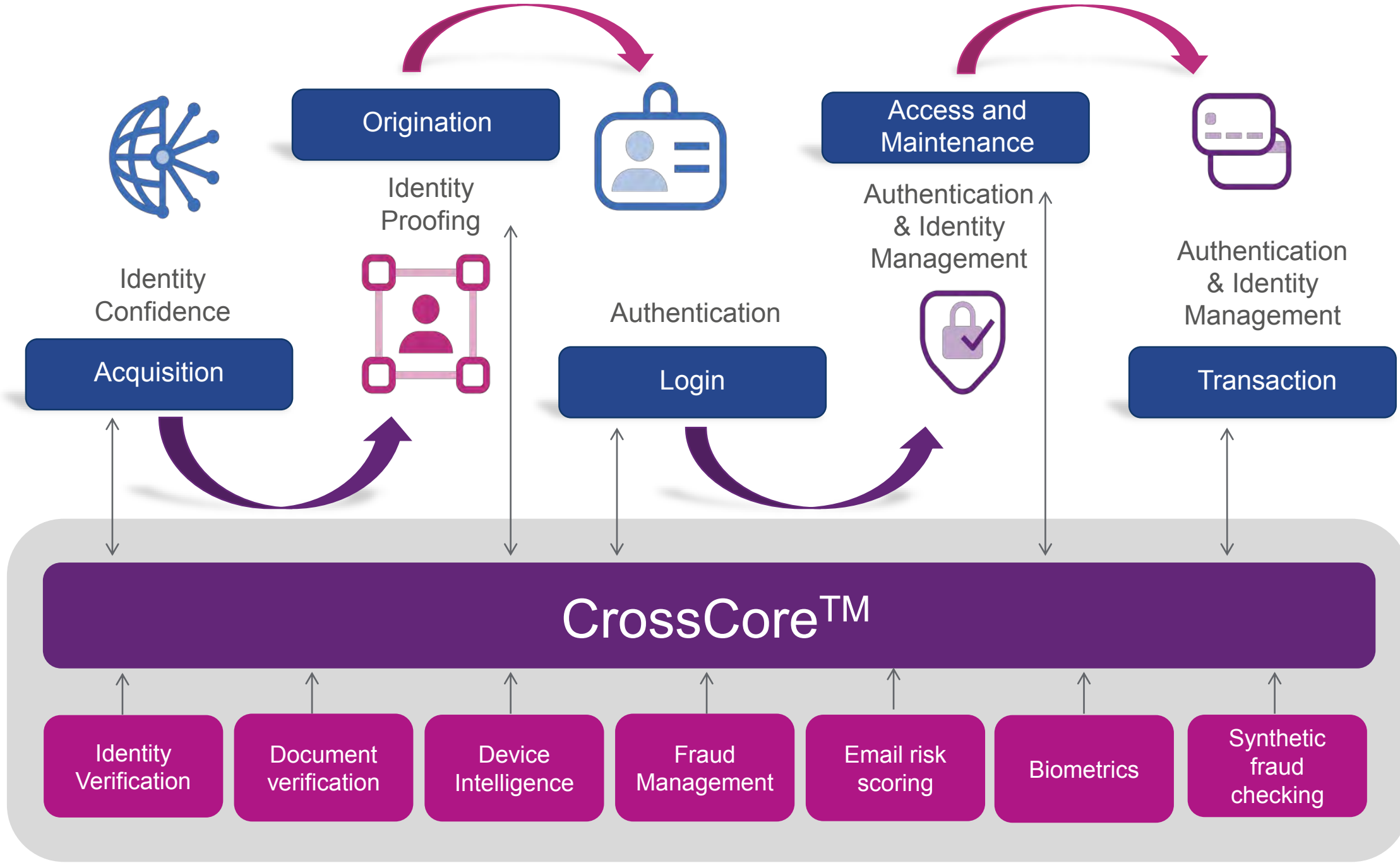
CrossCore and Your Customer Journey



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Experian Products and Innovation

Behind the CrossCore Platform

PRECISE ID + **FRAUDNET**

Customer identity verification	+	Detect application and new account opening fraud
High level of identity data assurance via risk based authentication	+	Detect when one device is attempting to open several accounts
Score options to best assess risk based on portfolio type	+	Automated risk assessment and issue resolution
Consulting and analytics expertise to recommend industry best practices	+	Case management, archiving, searching link analysis and data visualization tools

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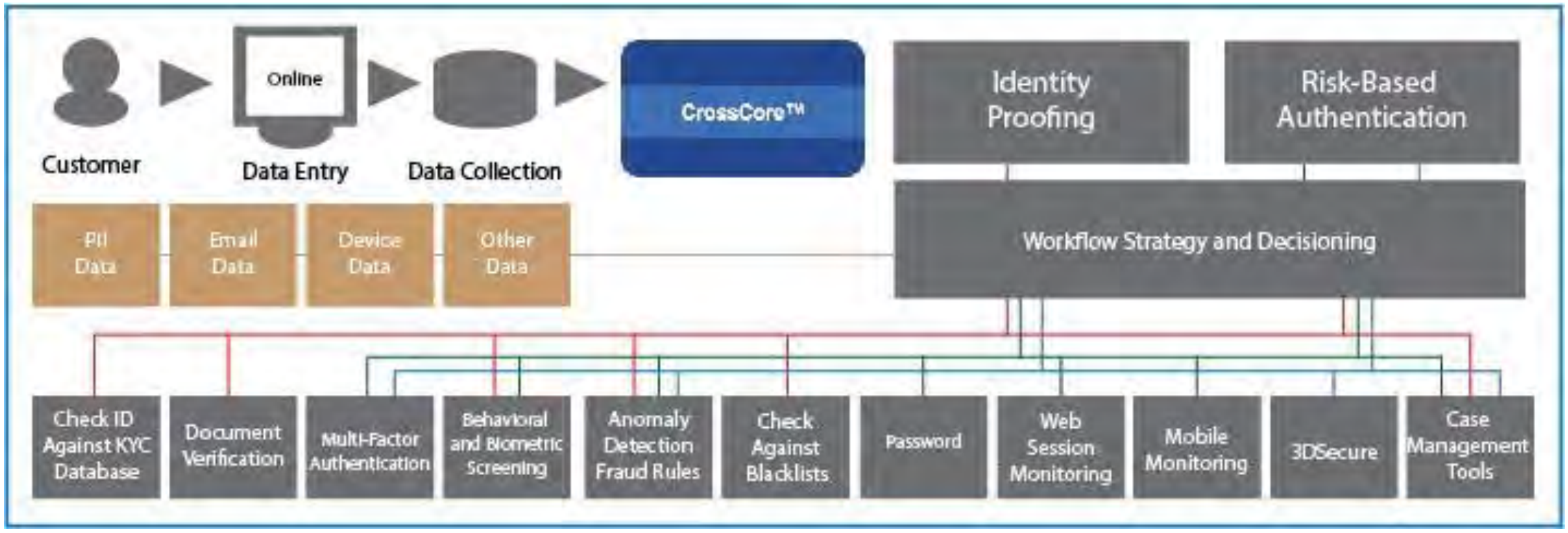
The Total Solution

A smart hub that scales to each processing activity

Dynamically activate the best risk-based decisioning process based on logic



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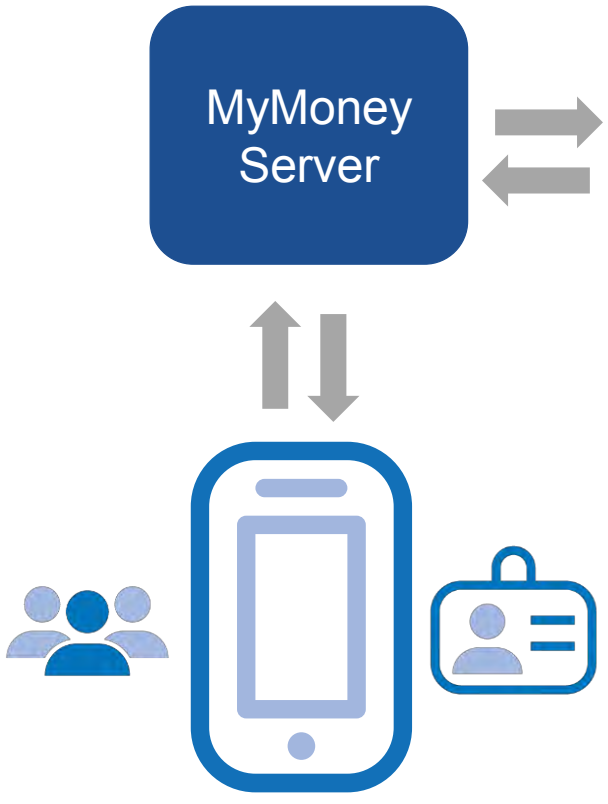
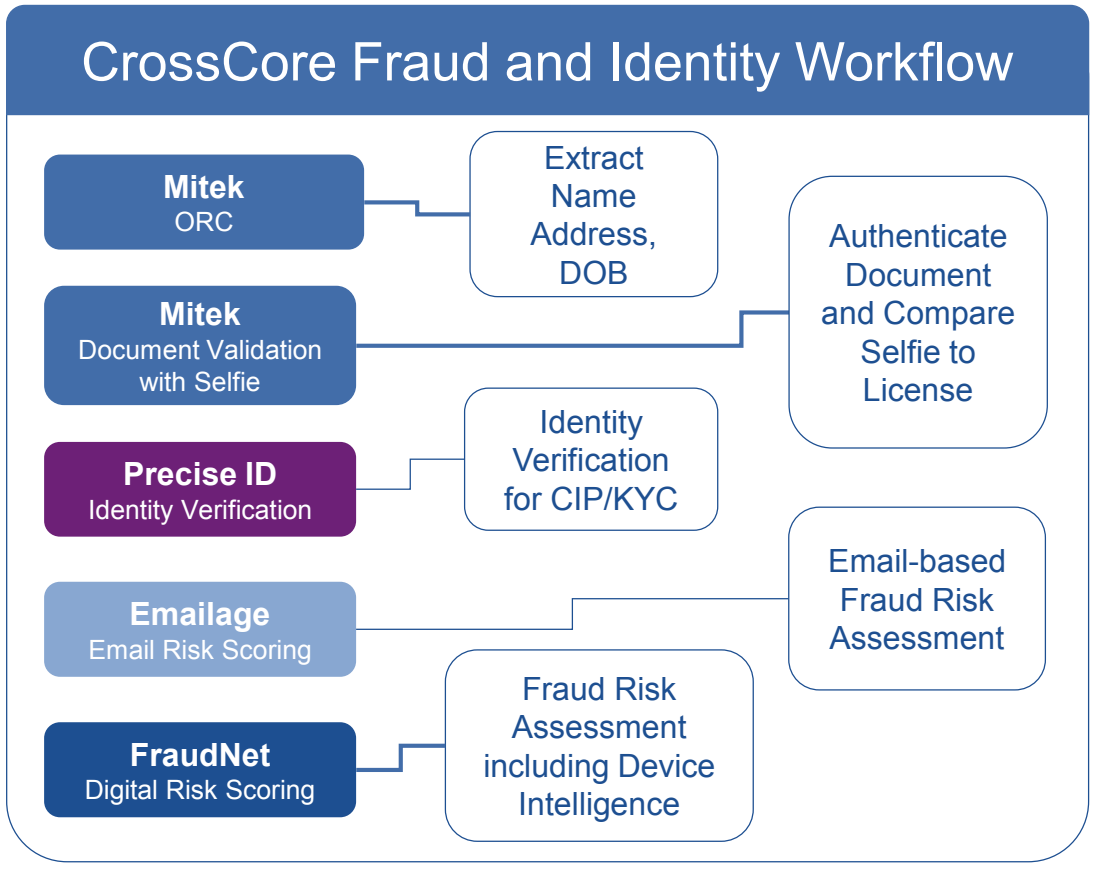
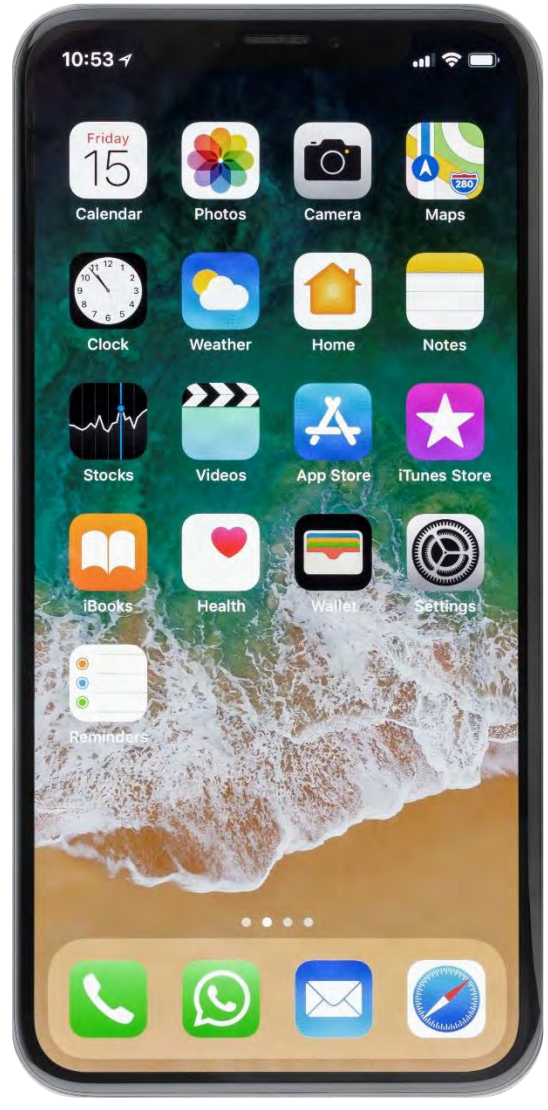
Demo: CrossCore

Scenario

Financial Institution that allows mobile account creation with just a valid driver's license and email address







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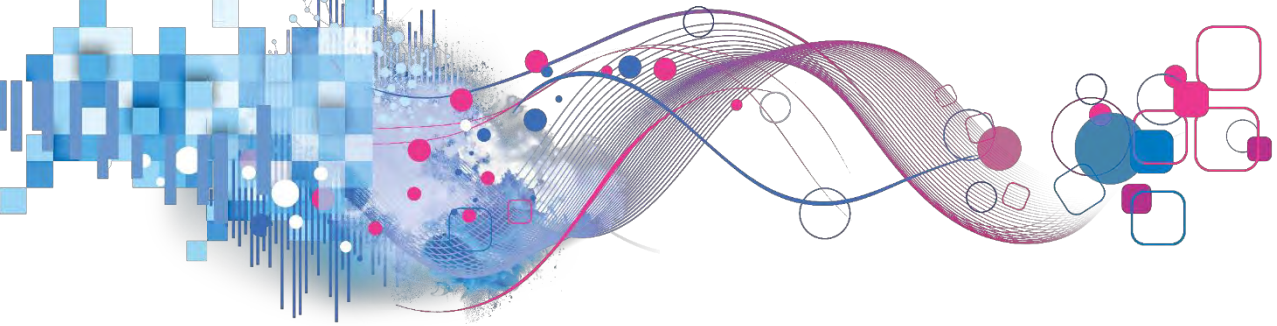

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Break

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New Product Innovation Showcase

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Day 1 Wrap-Up: Connecting the Dots

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Networking and Dinner

6:30pm
Event Lawn

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Breakfast

Available at your leisure

8:00am

Thursday, October 4, 2018

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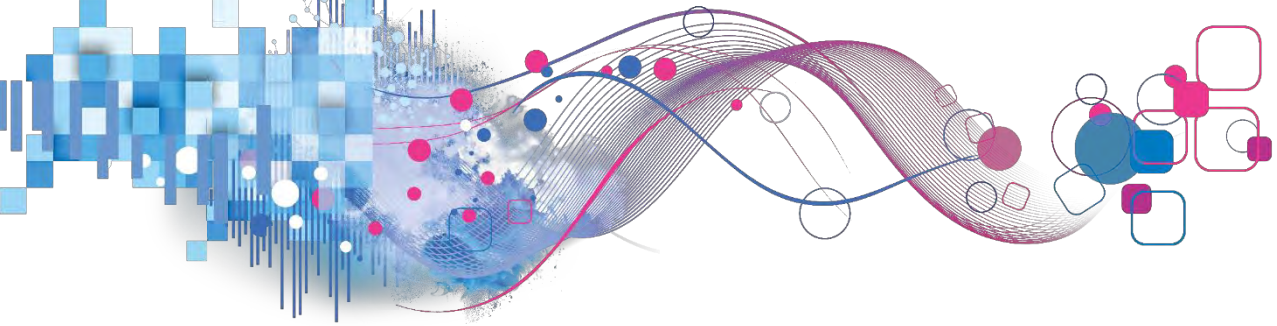

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Experian Public

Good Morning!

2018 Credit Union Advisory Council

October 2-4, 2018
Marriott Irvine Spectrum

Day 2 Kick-Off

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Today's Agenda

Thursday, October 4, 2018

Time	Topic	Presenter
8:00-8:30	Breakfast	
8:30-8:45	Day 2 Kick-Off	
8:45-9:45	Strategic Planning for Growth: Working Session	Gavin Harding, Scott Butterfield
9:45-10:00	Break	
10:00-11:00	From Indirect Auto Lender to PFI: Panel Discussion	Moderator: Gavin Harding
11:00-11:45	Driving Member Engagement	Ross Stewart
11:45-12:00	Wrap-Up Day 2	
12:00	Departure	

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Strategic Planning for Growth

Working Session

Gavin Harding
Consultant, Experian Advisory Services

Scott Butterfield
President & Founder, Your Credit Union Partner

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Strategic Planning for Growth

October 4, 2018

your Credit Union partner

Strategic Question One

Who will be tomorrow's borrowers?

Who will be tomorrow's borrowers?

By 2044 more than 50% of all Americans are projected to belong to a minority group

50% of consumers have subprime credit AND make less than $30,000

75% of consumers are living paycheck-to-paycheck

Millennials are carrying more debt and make less

45% of millennials have supplemented banking activities with some form of predatory financial services – within the past year

Who will be tomorrow's borrowers?

Global Financial Literacy Excellence Center surveyed more than 5,500 people between the ages of 23 and 35. Their research unveiled the following statistics on Millennials:

- **54%** worry that they cannot repay their student loans
- **76%** lack basic financial knowledge
- **50%** would have trouble coming up with $2,000 in one month
- **34%** are unhappy with their current financial situation

Gallup suggests that Millennials are the most vulnerable generation to the threats AI poses, with **37%** of Millennials being at risk of redundancy.

Who will be tomorrow's borrowers?

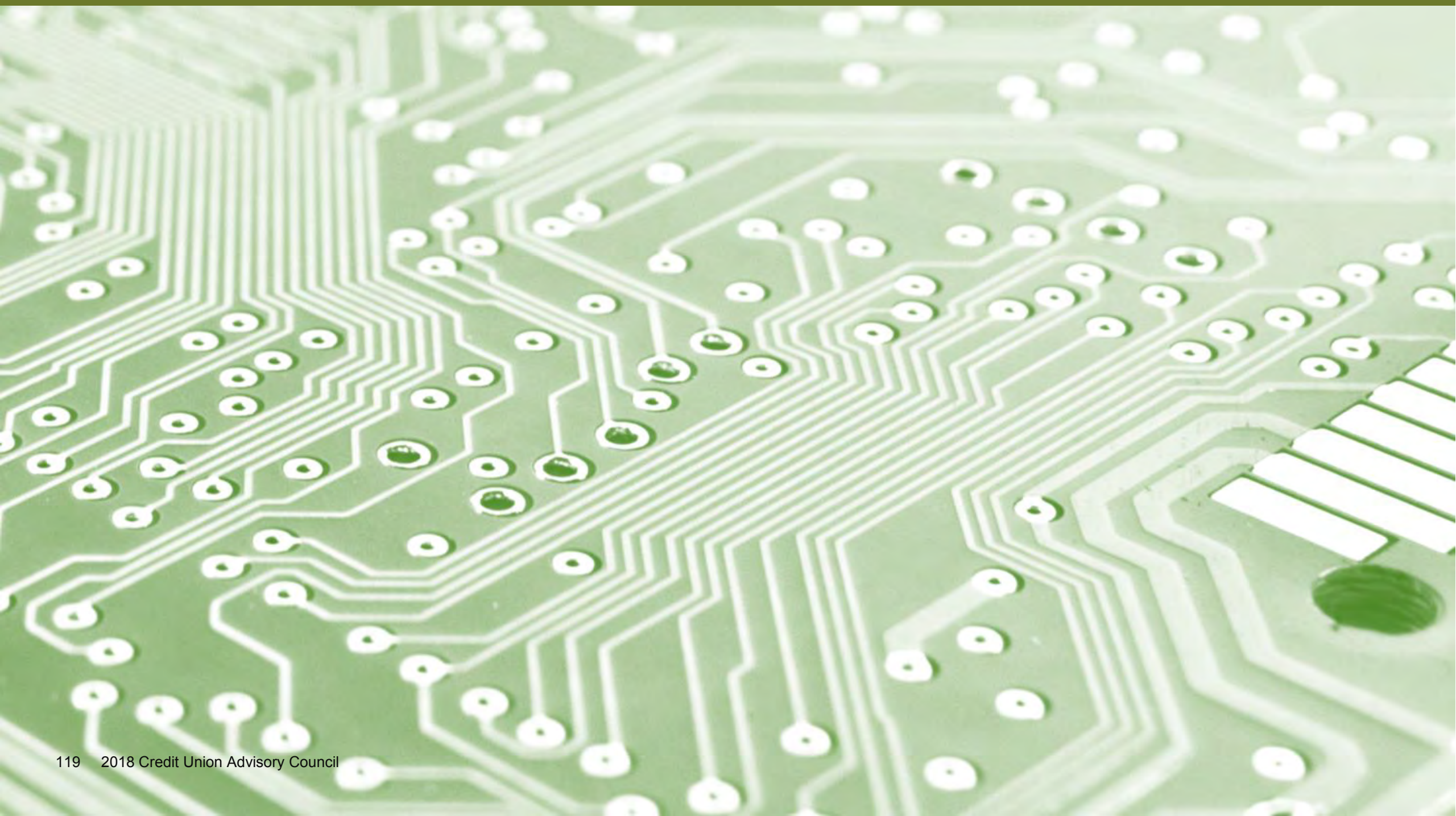
Key Questions:

How will changing preferences and demographic/ economic realities change:

- Who we lend to?
- Features and benefits of loan products?
- What skill sets will employees need to serve them?
- Our brand promise?
- Our service culture?
- How will we differentiate?
- Who will we compete with for these loans?

Strategic Question Two

How will tech effect the way we do business?



How will tech effect the way we do business?

Financial technology expectations run very high among young adults (21-35)

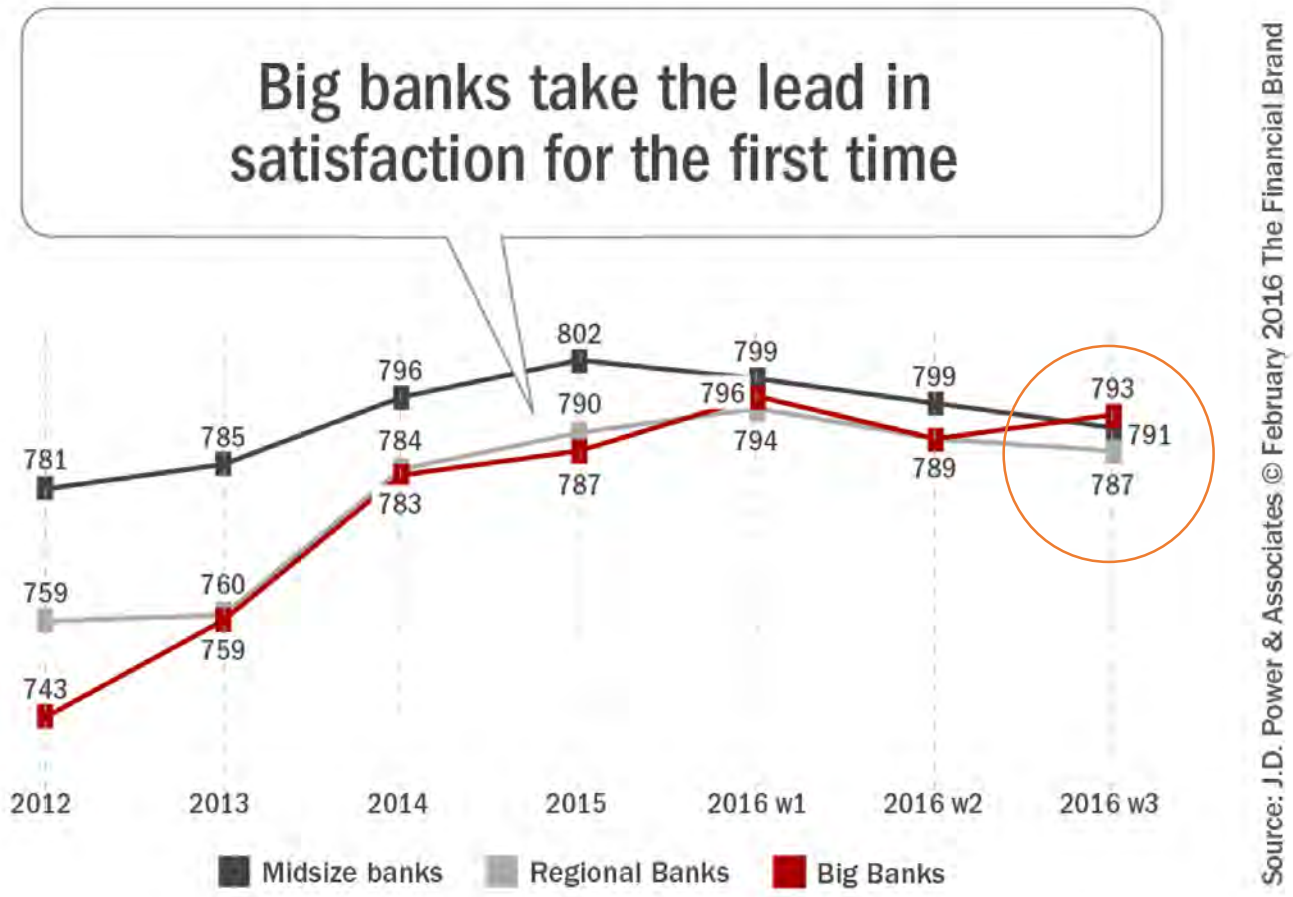
- Real-time loan quotes on mobile
  70.7%
- Real-time alert notifications
  75.7%
- Real-time financial management tools
  73.7%
- Initiate/close a loan digitally
  69.6%

amazon

According to a Jan 2017 survey from Accenture, millennial participants would consider parking their money with nontraditional institutions like Amazon and Google.

Google

How will tech effect the way we do business?



"The largest banking organizations improved in overall customer satisfaction, while mid-sized banks declined and regional banks plateaued. This was attributed primarily to improved mobile and online satisfaction."

How will tech effect the way we do business?

- JP Morgan Chase raised eyebrows when it said it would invest an additional $1.4 billion in technology in 2018. This is on top of the estimated annual $9.5 billion tech budget. Last year, the Largest bank spent 16 percent of its budget on technology last year.
- The tech investment will fund what executives called JPMorgan's "digital everything" model, including new mobile features and back-office uses of the blockchain.

Key Questions:

- Can the credit union space *"catch up quickly"?*
- Is your Tech strategy where it needs to be?
- At your current pace of adoption, will you be left behind?

Strategic Question Three

How will we manage fraud risk?

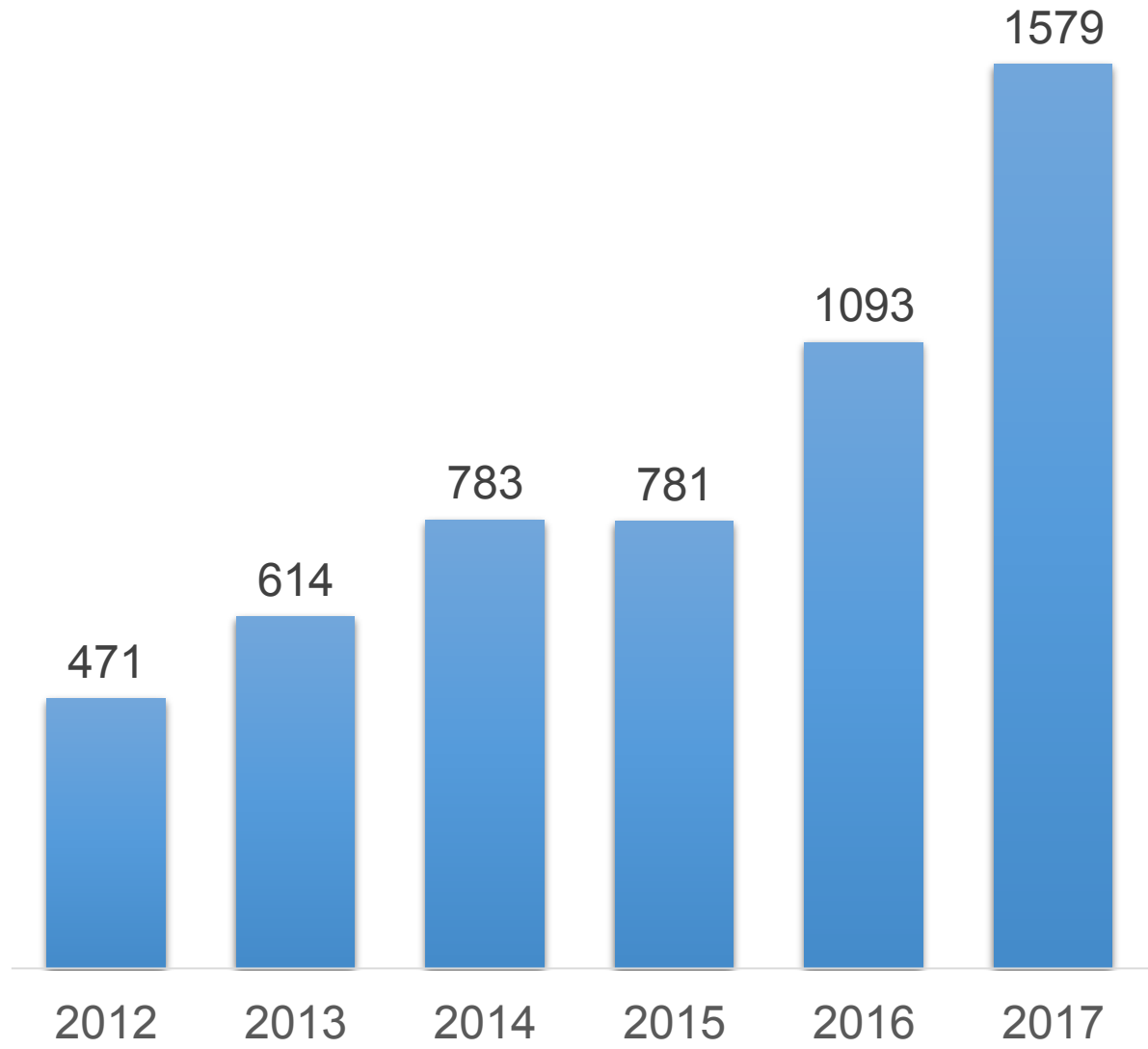
How will we manage fraud risk?

In 2017, 16.7 million U.S. consumers were victims of identity fraud (which includes credit card fraud), resulting in $16.8 billion in total losses.

Javelin Strategy says this figure was up 8% from 2016 despite new security protections implemented by the credit card industry such as EMV chips.

Number of Data Breaches in the U.S.

Source: Identity Theft Resource Center (2018)



How will we manage fraud risk?

$1

According to the LexisNexis 2017 True Cost of Fraud study, every $1 of fraud - costs organizations in industries such as financial services and lending sectors an average of $2.67.

6%

Nearly half of all CUs increased their annual security budget by 6%.

Key Questions:

- Culturally, how does your organization respond to increasing risks?
- Does your organization have the risk management plan needed to respond to increasing future risks?
- Where do you draw the line between member service and security?

Scott Butterfield

Founder/Principal

Phone 253-507-2443

Email scott@yourcupartner.org

your Credit Union partner

Break

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From Indirect Auto Lender to PFI

Panel Discussion

Gavin Harding
Moderator

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Driving Member Engagement

Ross Stewart
Director, Experian Partner Solutions

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70% of consumers responded that checking their score had a positive impact on their credit

74% agree that having access to their FICO Score information will help better manage their financial health

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73% online daters say good credit score is indicator of a stable relationship

69% say financial responsibility is very important quality

58% feel having a good credit score is more attractive than driving a nice car

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40% consumers view credit updates in the same session when notified

>50% views occur within 7 days of pushing updated credit content

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Lead Generation, Education and Protection

On One Experian Platform

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EPS Value Proposition…Simple

More Members

Better Engaged

Producing Incremental Revenue

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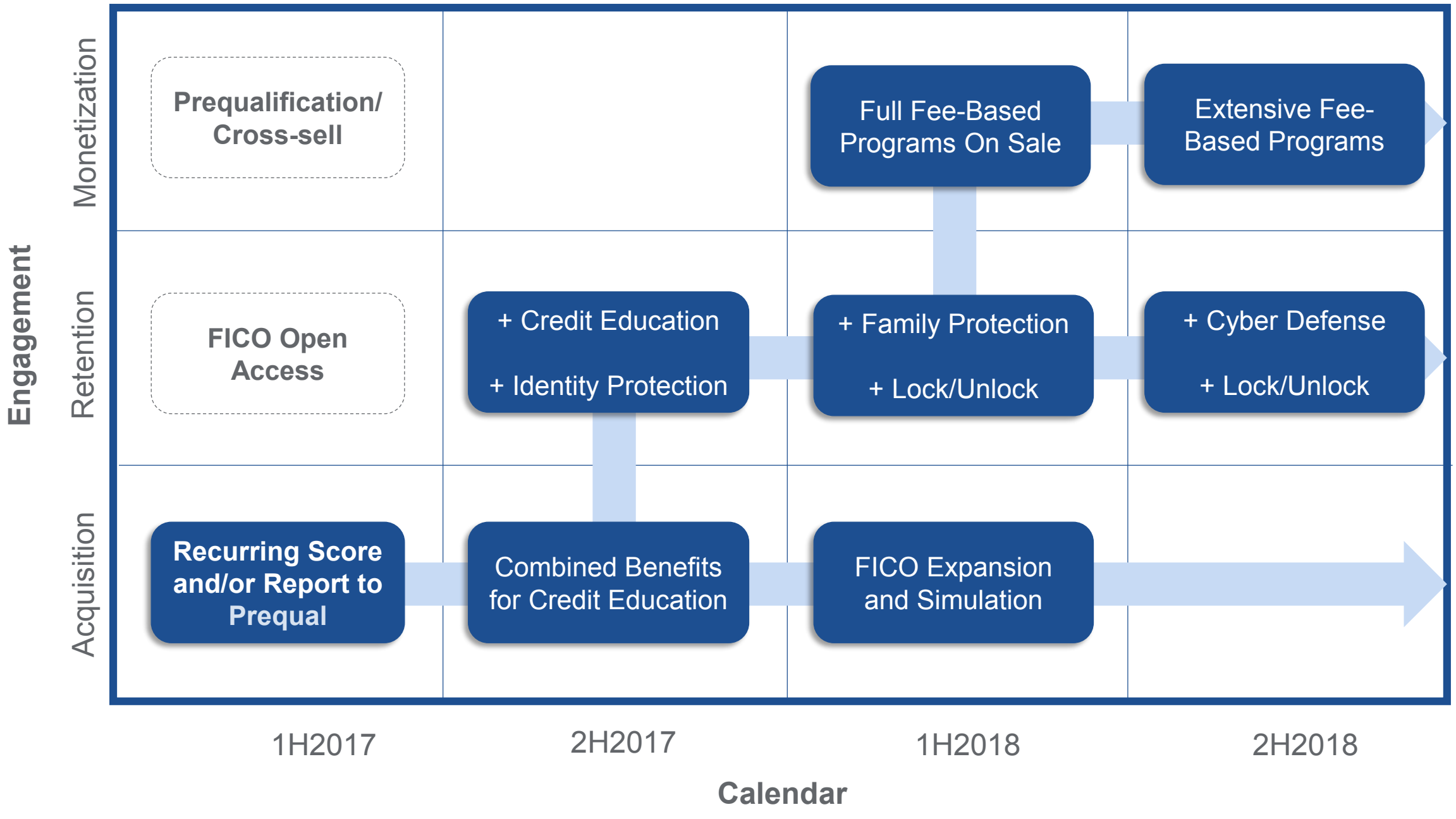
Education AND Protection, Free AND Fee Is the Future Trend for CY2018 and Beyond



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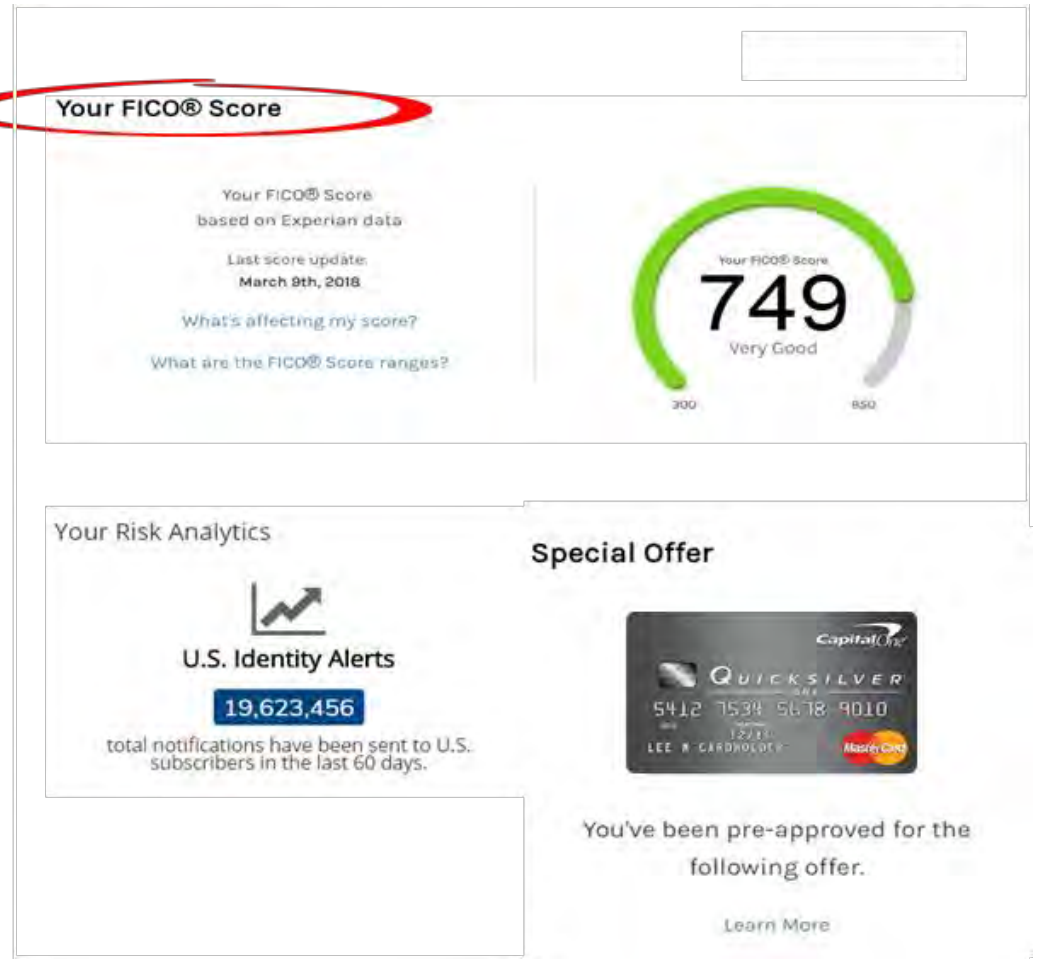
Monetization

FICO Score for Marketing and Score Consistency

Credit Education and Prequalification that aligns with hard pull decision criteria dramatically increases the success of providing offers to customers who will ultimately be approved



FICO Score

Prequalification

Identity Restoration

Credit Reports

Provide better consistency between credit education and underwriting to significantly bolster conversions

A la carte and ongoing subscription services provide a compelling revenue stream to offset free services

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FICO® Score Ingredients

FICO SCORE The score lenders use.

695

GOOD

Poor — Exceptional

300 — 850

FICO® Score 8 based on Experian data as of 01/12/2018.

experian.

Your score is near or slightly above the average of U.S. consumers and most lenders consider this a good score.

Score Factors

What's Helping Your Score

- Bills paid on time recently
- Many accounts paid on time
- Substantial installment loan repayment

What's Hurting Your Score

- Serious delinquency
- High credit usage
- Short account history

Score Ingredients

Special Offer

Earn a $150 cash rewards bonus when you spend $500 in the first 3 months.

Learn More

Your Credit & Identity Alerts

experian.

Notifications

Type	Date	Actions
Dark Web Monitoring Report	12/04/2017	✖

Compromised Social Security Number

Social Security Number: ***-**-****

: 12/04/2017

We've found a match to your Social Security Number (SSN) online. Below you will find additional information on next steps to take to ensure your personal information is secure.

Additional Info

The following data was found compromised with your SSN.

Email	SA******O2@EXPERIAN.COM	Card Number	**********0003
Social Security Number	***-**-7141	Source	TEST DATA

Here's what to do:

1. Contact Chase Credit Journey at (888) 888-8888. We'll help you determine if an identity theft event has occurred and guide you through any necessary restoration activities. We may assist you with the following activities:

- Contact Social Security administration
- Review your credit report for indications of identity theft
- Place a fraud alert or security freeze with the three credit bureaus

2. As a precaution, keep an eye on your accounts for unfamiliar transactions.

Why monitor your personal information?

If a match to your monitored personal information is found, your risk of identity theft is increased. Being in the know about your compromised personal information can help you mitigate risk by taking proactive steps to protect yourself.

FAQs

Expand All

Where does Dark Web Monitoring's data come from?

Dark Web Monitoring's data comes from Internet forums and websites, web pages, IRC channels, refined PII

Lead Generation Drives the Top of the Funnel

FICO

Premium Prequal

Dark Web Scan

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Education

Driving Engagement and Member Outcomes

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Credit Education Drives Engagement and Member Outcomes

Measurable Improvement in Credit Health

Alerts Drive High Engagement

Long-Term Cultivation

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Consumers Achieve Positive Improvements From Credit Education

Action	Educated group	Control group
Average Score	↑ +14 pts	→ +/- 0 pts
Number of credit inquiries	↓ -9%	→ 0%
External collection trades	↓ -21%	↑ +1%
% of trades ever delinquent in last 12 months	↓ - 7%	→ 0%

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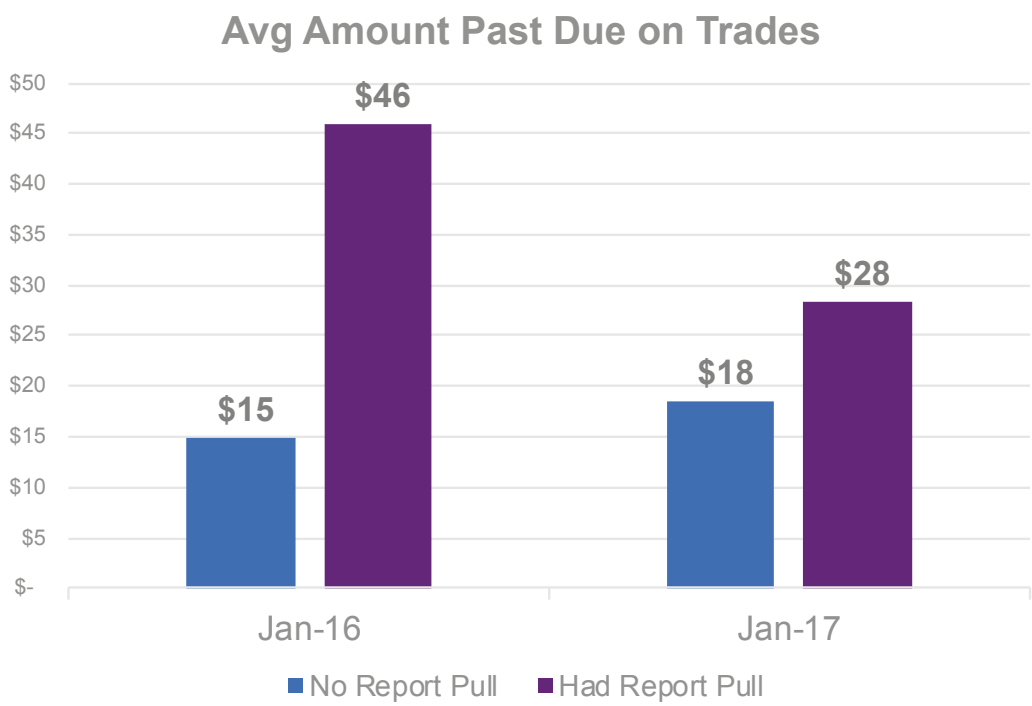
Amount Past Due Is Reduced



Report Pull

- 38% drop in average amount past due

No Report Pull

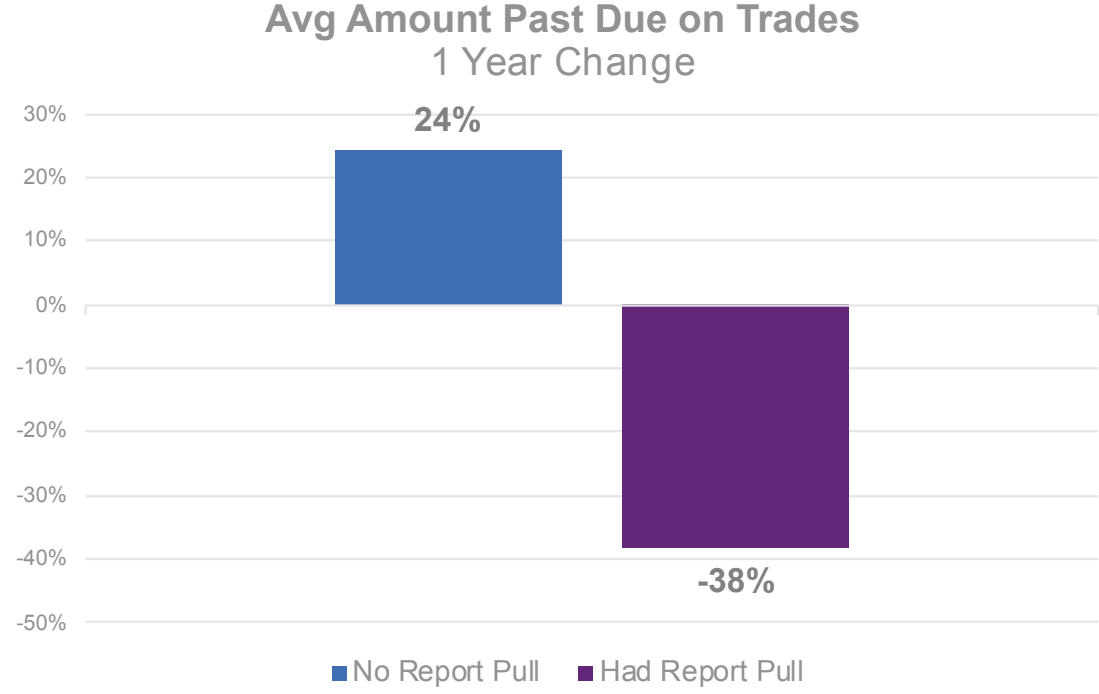
- 24% rise in average amount past due

Report Pull

- Significantly more past due debt overall
- Makes a significant drop from $46 per subscriber to $28 per subscriber

No Report Pull

- Rise in past due amount in the 1 year period



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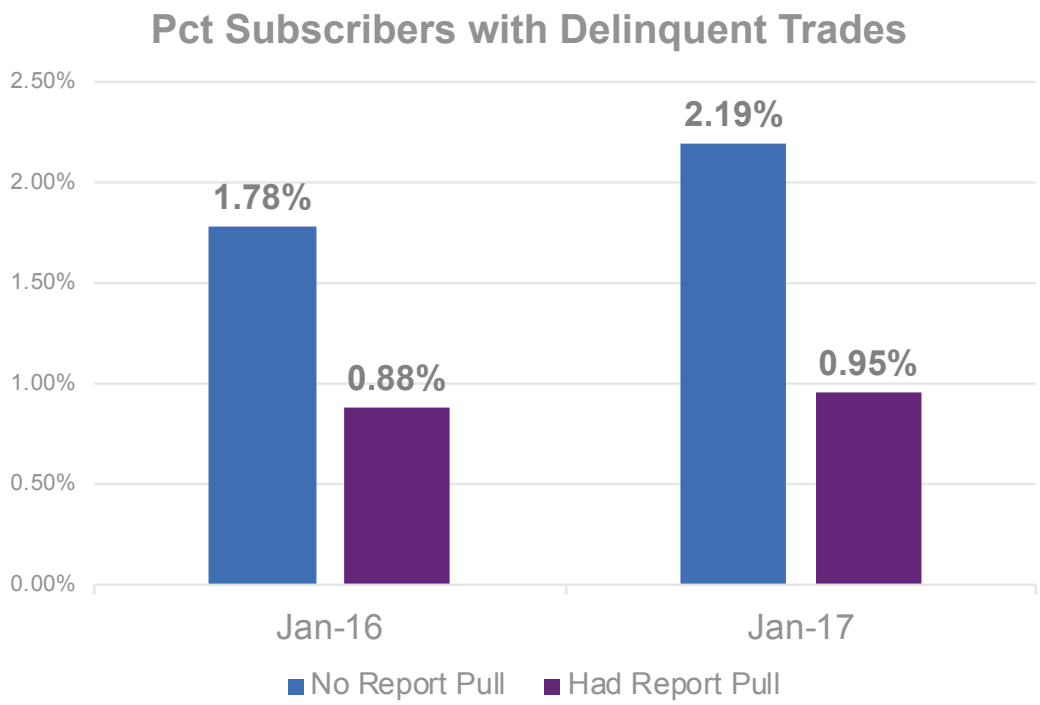
Delinquent Subscribers Can Be Minimized



Report Pull

- In the 1 year period from Jan-2016 to Jan-2017, both segments saw a rise in the percentage with Delinquent Trades, but the Report Pull group had considerably less growth (9% compared to 23%)

No Report Pull

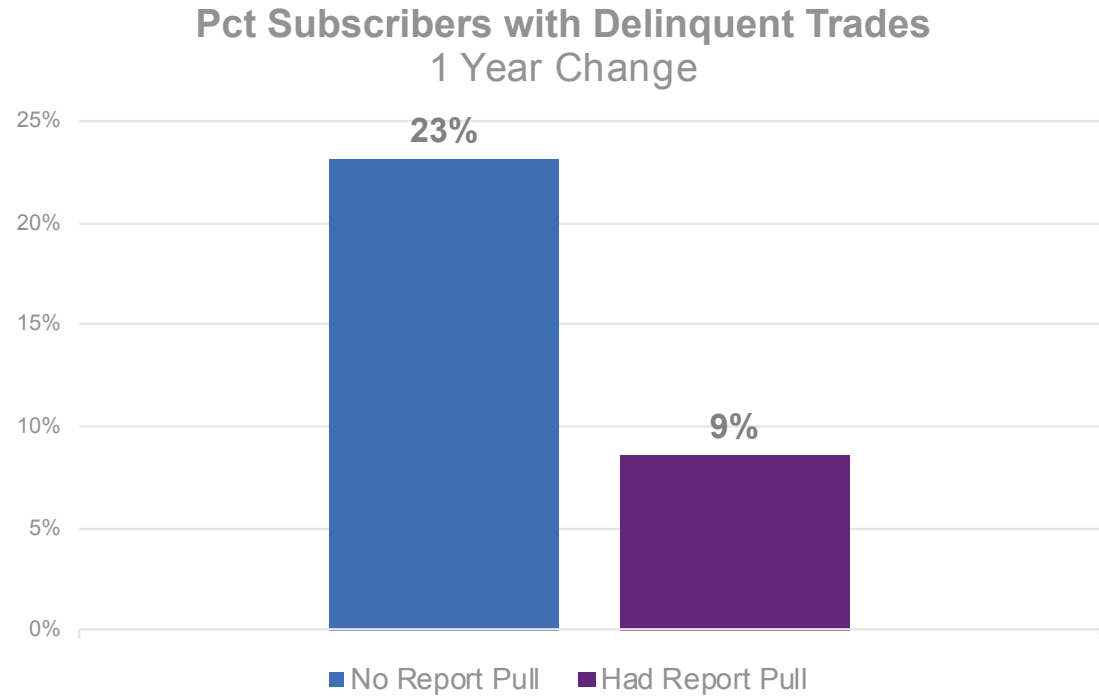
- 23% rise in delinquent trades
- The overall rise for both segments for the 1 year period would seem to indicate a broader trend of higher delinquencies in the economy in 2016

Report Pull

- Interestingly, a much smaller percentage of the Report Pull segment has delinquent accounts
- This indicates that the Report Pull segment has

a) significantly higher borrowing activity

b) significantly higher amounts past due when they lapse on payment



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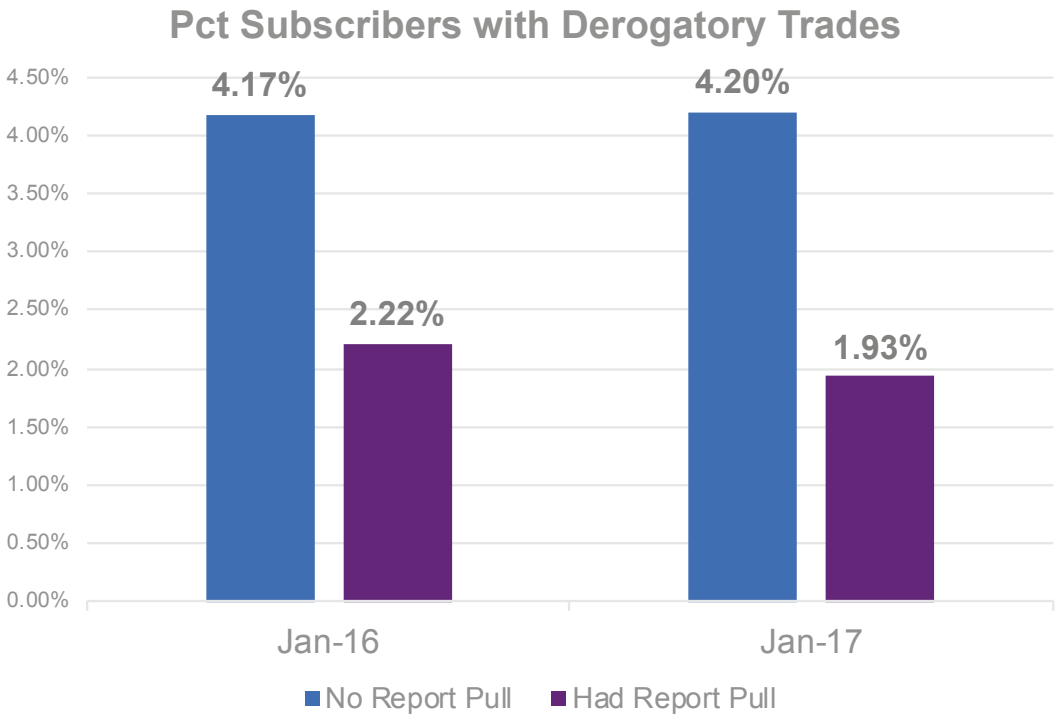
Derogatory Trades Are Mitigated



Report Pull

- The Report Pull segment made noticeable improvement in Derogatory Trades over the year at 13% less

No Report Pull

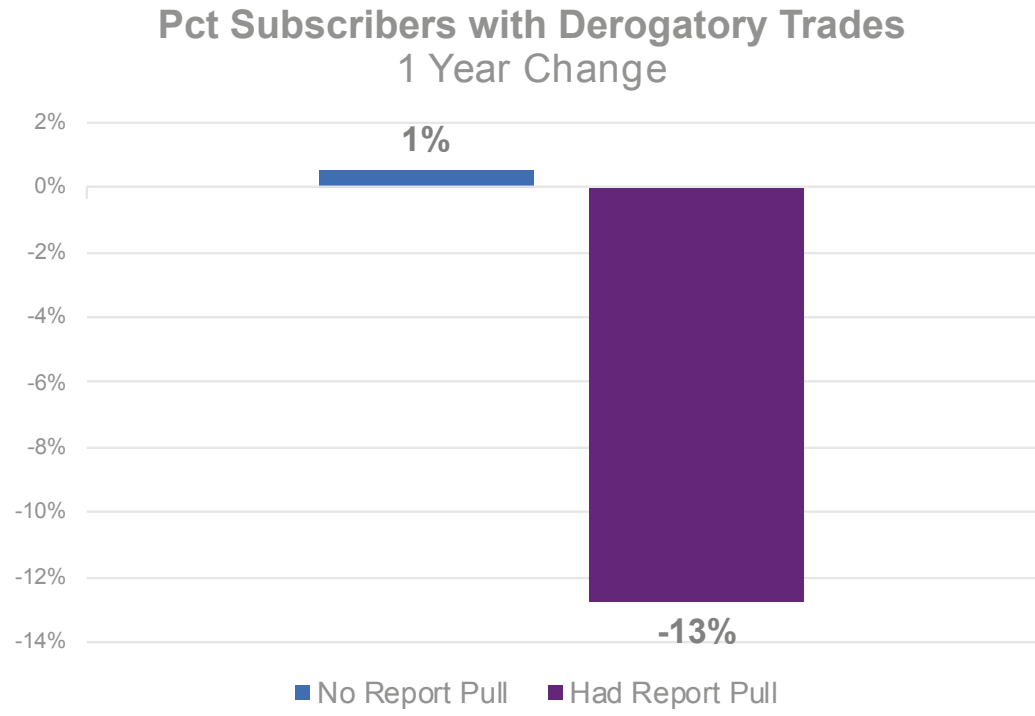
- The No Report Pull segment shows a 1% growth for the year
- The noticeable difference is that the No Report Pull segment is fairly flat in Derogatory Trades for the year

Report Pull

- Derogatory Trades show similar distributions to Delinquent Trades

No Report Pull

- The noticeable difference is that the No Report Pull segment is fairly flat in Derogatory Trades for the year



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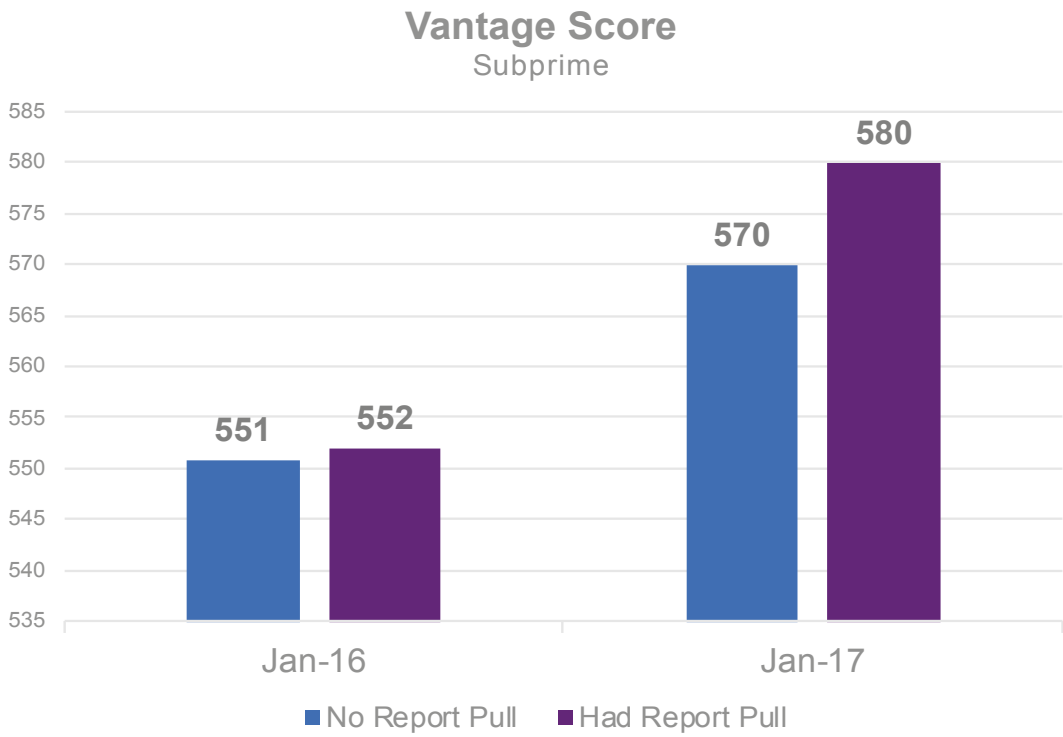
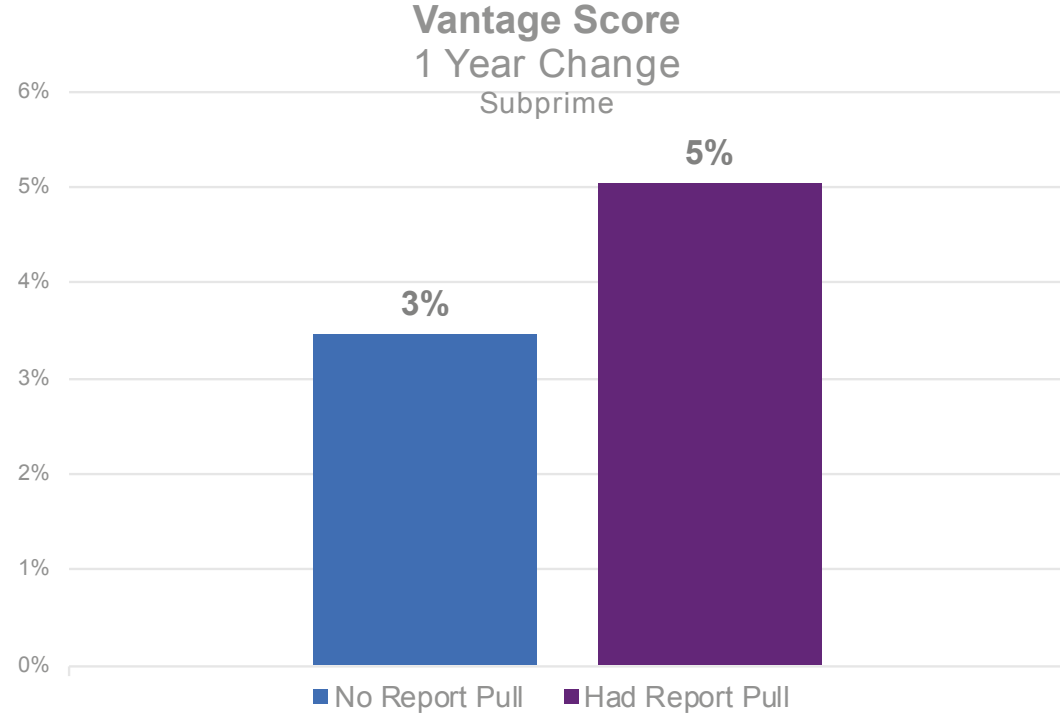
Subprime Segment Score Improvement



Credit tiers	VantageScore 3.0
Superprime	781–850
Prime	661–780
Near prime	601–660
Subprime	300–600

Report Pull

- Vantage Score improved 28 points
- Segment had a significantly larger improvement at 5%, compared to 3% for No Report Pull group
- **40% greater Vantage Score improvement for the educated segment**



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Summary

Credit Education and Credit Health Are Related

1	The Report Pull segment had **38% less** in average amount past due compared to a 24% rise for the No Report Pull segment
2	Having Report Pulls is associated with **significantly less growth in delinquent accounts**
3	Derogatory Trades goes down for the Report Pull segment and had mild growth for the No Report Pull segment
4	**45% greater Vantage Score improvement for Subprime consumers** who were educated indicates that engaged and educated consumers in the lowest tiers of credit score are seeing the greatest improvements

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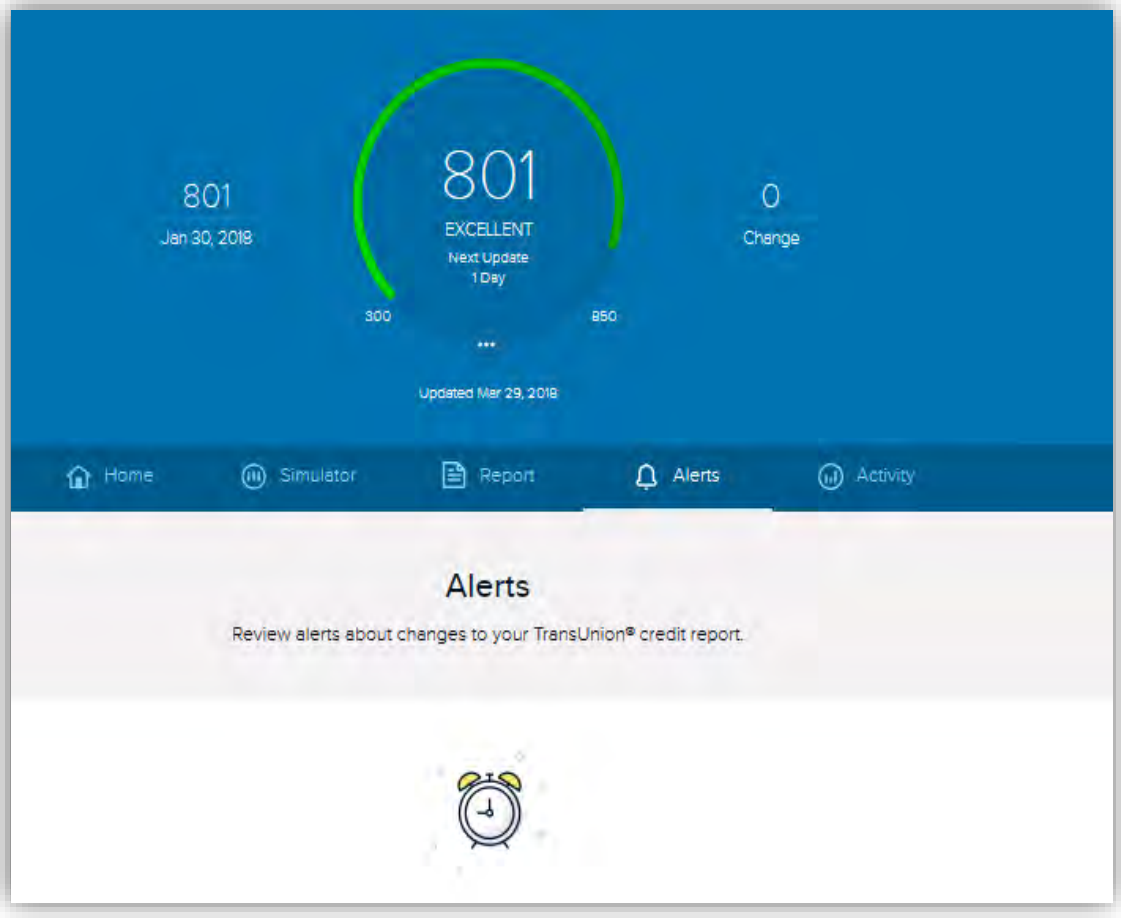
Alert Frequency Drives Engagement

Partners that use CLUB notifications and Positive Activity Alerts see an increase of **45%+** in alert frequency per service, translating to a commensurate increase in portal visits and time on site



C.L.U.B. Notifications

Alerts when credit card limits, utilization, and balances change within certain parameters, as reported on the Experian credit file

Positive Activity Alerts

Alerts when positive activity affects an Experian credit file; triggers on positive credit improvements such as paid collection accounts, closed accounts by the customer, and public records

SmartMetrics Data

Ability to see relevant identity-related data pertinent to the customer and their geographical area

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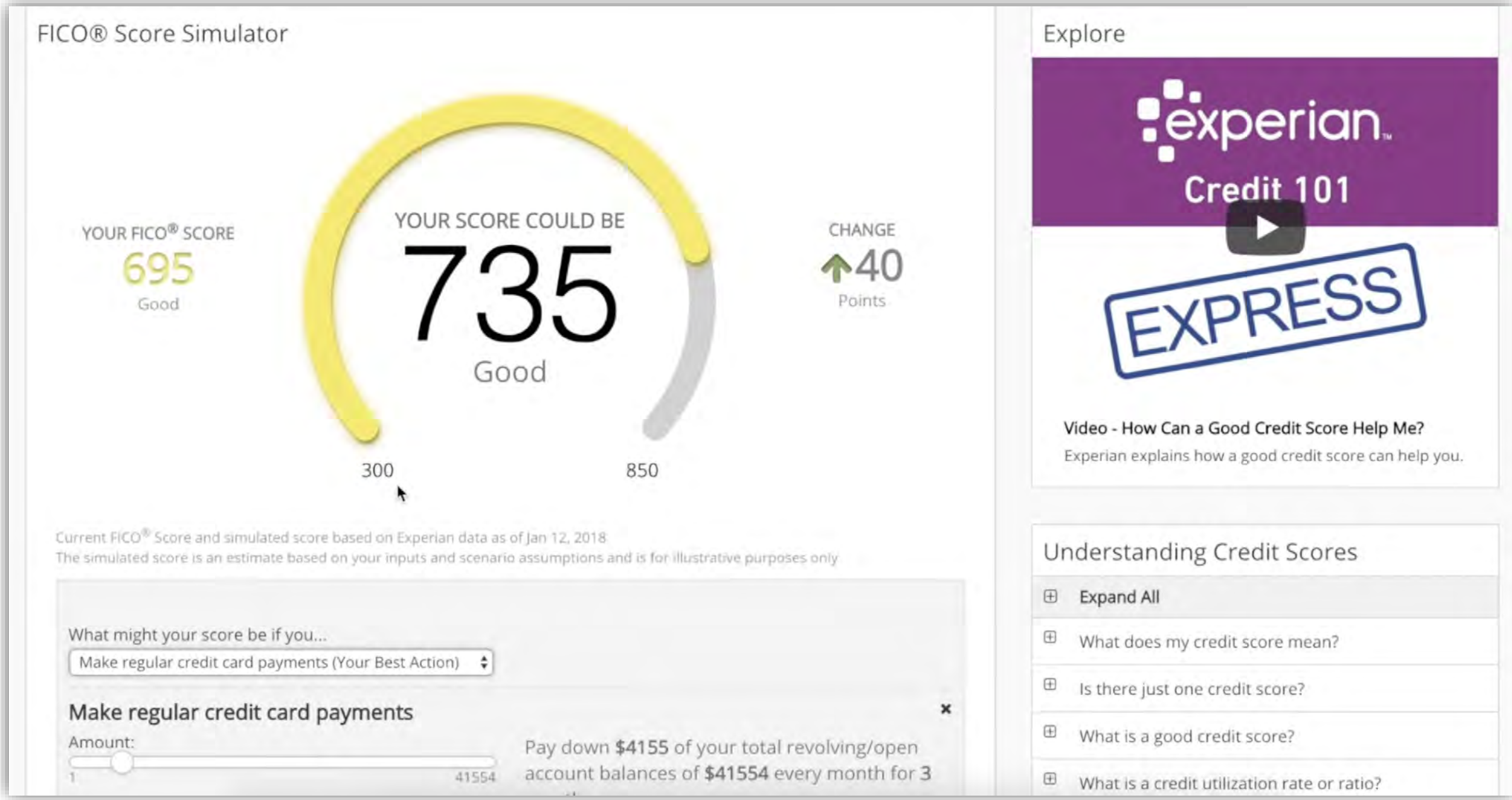
Education Solutions for Long-Term Use



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Protection

High Value Services for Loyalty and Monetization

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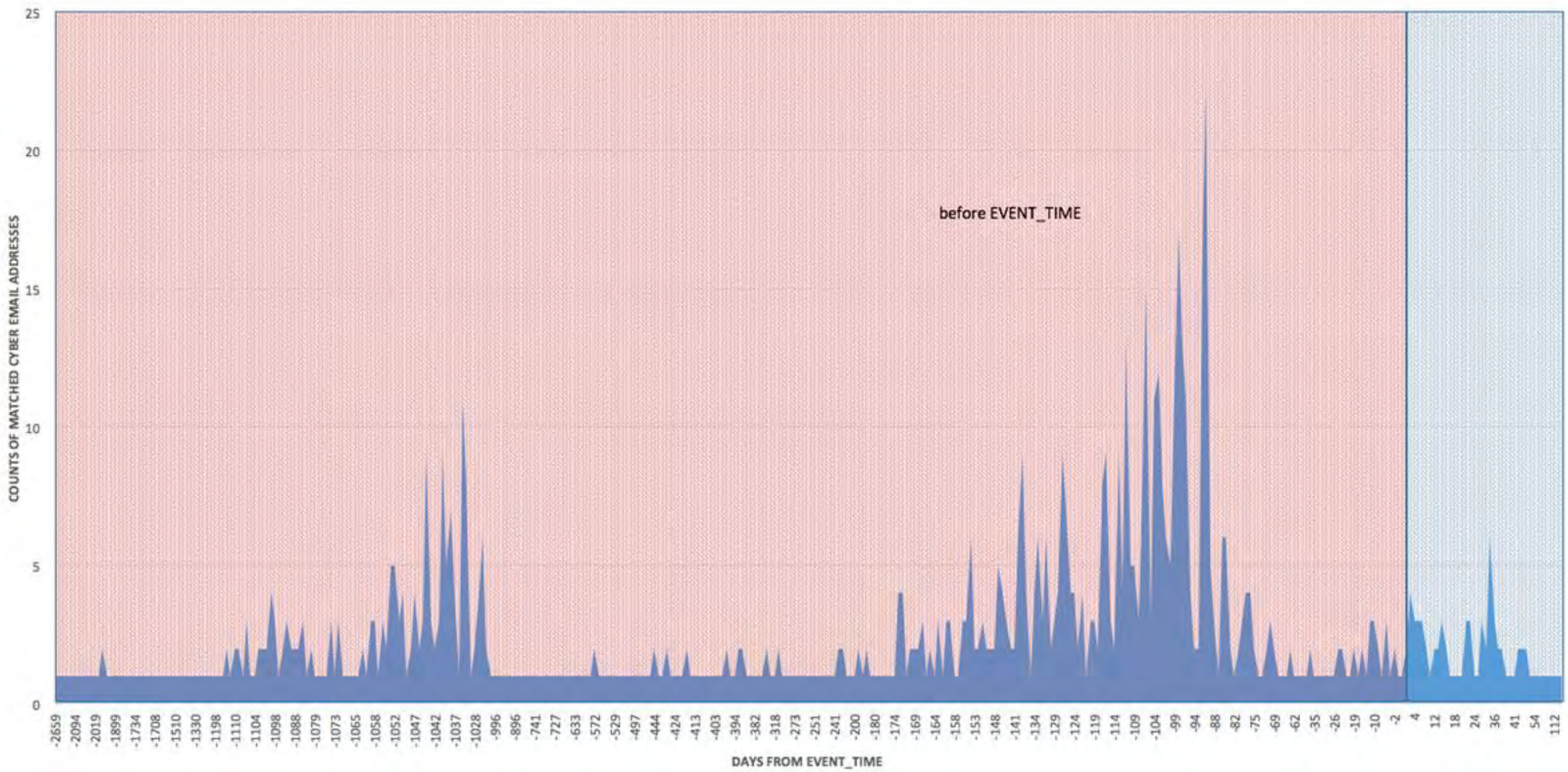
Example: Labs Study on Cyber Identifying Risk 100 Days Before Fraudulent Transactions



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Protection Is the Next Step Beyond Education

Name:	Atul Pathak	Password:	<redacted>
Location:	Gautam Buddha Nagar, India	Password Risk:	High (clear text, alpha-numeric)
Email:	<Redacted>	Extraction Dates:	January 25, 2018
Title:	Team Leader: Information Security at Fortune 50 Bank	Source:	Hacker Forum

50,000+ more employee credentials

- Dark Web Monitoring finds compromised data, often months before it is used for Identity Theft
- Identity Restoration is the most valuable service for your customers
- Extensive suite of ID Protection products, including Credit Lock, Social Media, Real-time Monitoring

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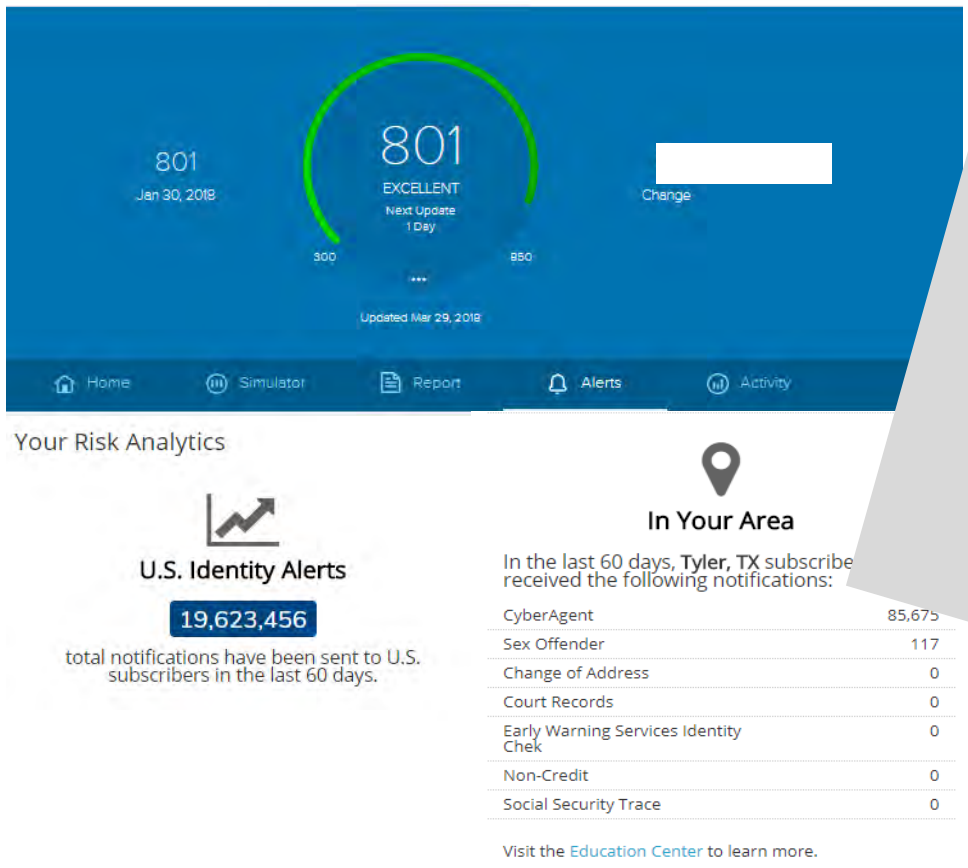
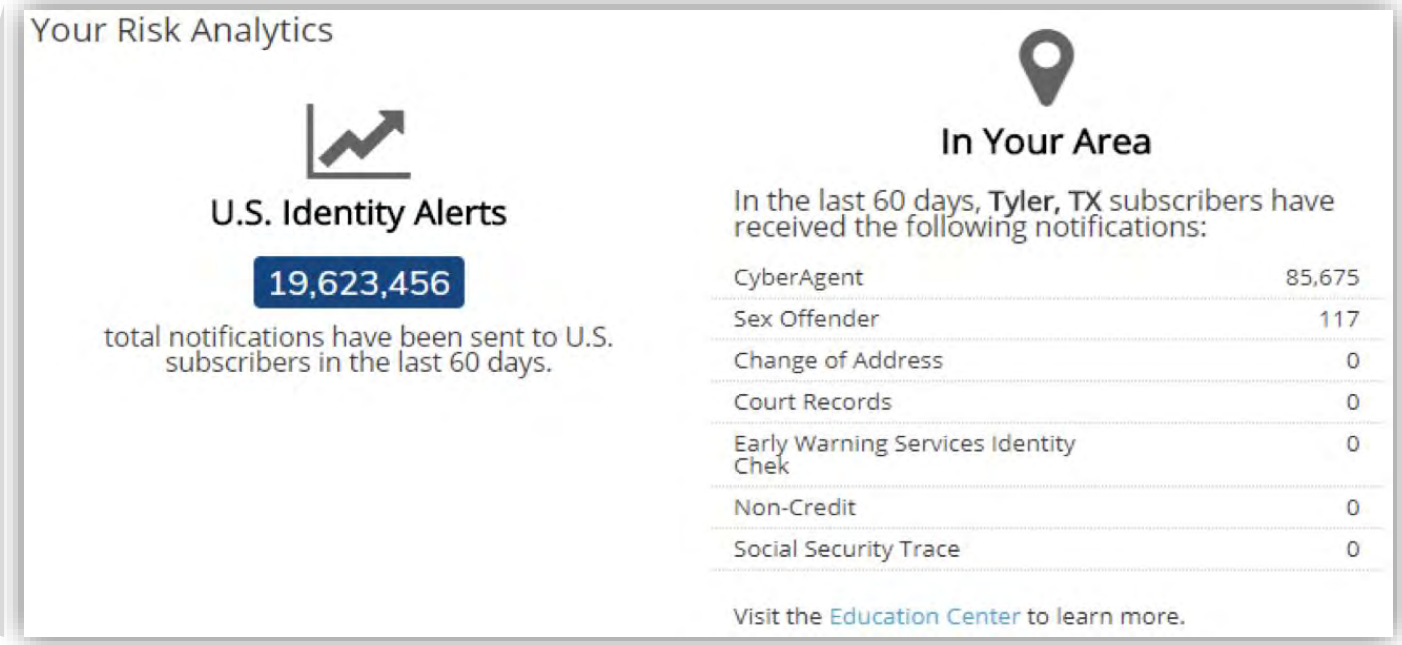
Engagement

SmartMetrics Drives Relevance and Participation

Data can be displayed within Member Portal, as well as in monthly summary notification emails or alerts to help drive overall visits back to the portal or app





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Expansion Social Media Monitoring

Privacy Risks

Alerts customers if the content they are sharing on their social networks – profile information, comments, wall posts and more – may exposure personal data that puts them at risk for identity theft

Reputational Risks

Tells customers if content found on their social network profile could be damaging to their reputations. Such content could include foul language, sexual content, and drug and alcohol references

Parental Risks

Enables customers to monitor their children's social networks for the same privacy and reputational concerns in addition to instances of cyberbullying, references to weapons or intended sexual abuse

Connects to

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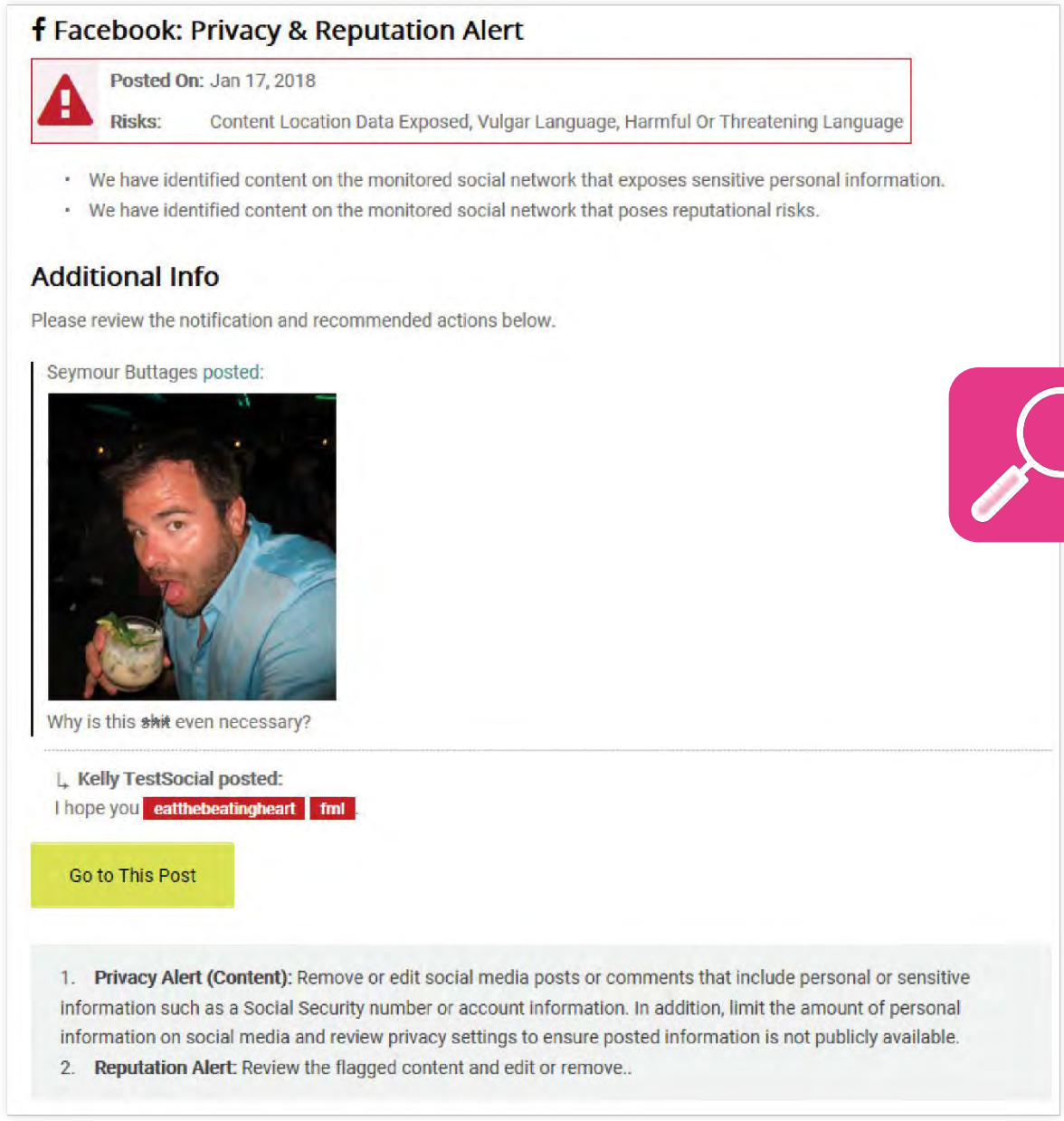
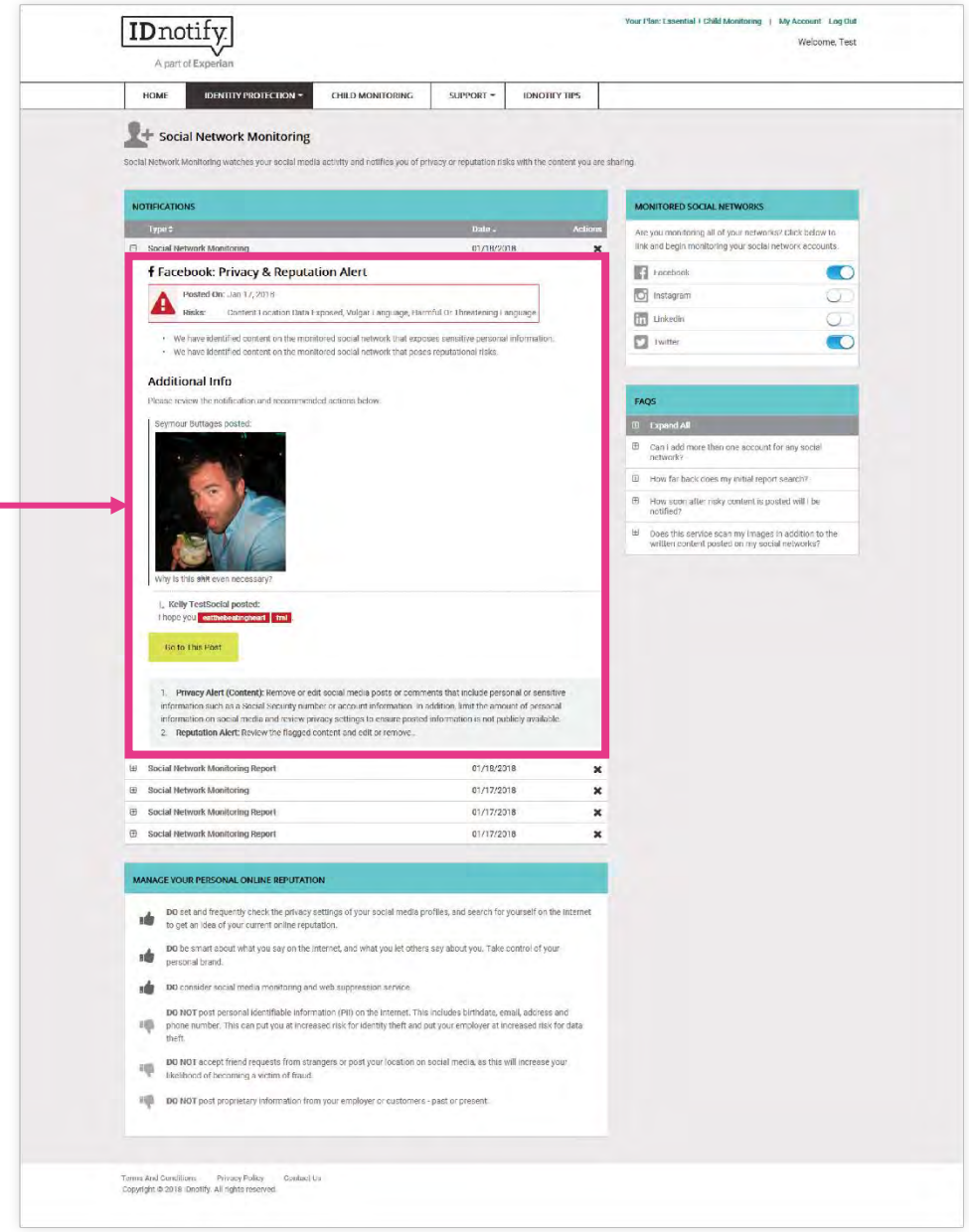
Expansion Social Media Monitoring





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Broadest Service Offering on the Most Flexible Platform

Protection

- Credit Monitoring
- CreditLock
- Real-Time Credit Inquiry Alerts
- Real-Time Authorization Alerts
- Dormant Account Alerts
- Social Media Monitoring
- SSN Trace Monitoring
- CyberAgent®
- Financial Account Takeover
- Non-Credit Loan Monitoring
- Child Monitoring
- Court Records & Bookings Monitoring
- Change of Address Monitoring
- Sex Offender Monitoring
- Identity Restoration
- Lost Wallet Replacement
- Identity Theft Insurance
- My Customer Experience
- Small Business Monitoring

Education

- Credit Reports
- Credit Scores
- Credit Education Center
- Credit Score Updates
- Credit Score Simulator
- Credit Snapshot
- Financial Calculators
- Credit Score Alerts
- C.L.U.B. Notifications
- Positive Activity Alerts
- Identity Education Center
- ID Theft Risk Assessment
- SmartMetrics Data

Lead Generation

- FICO Score
- VantageScore
- Decisioning as a Service
- Prequalification

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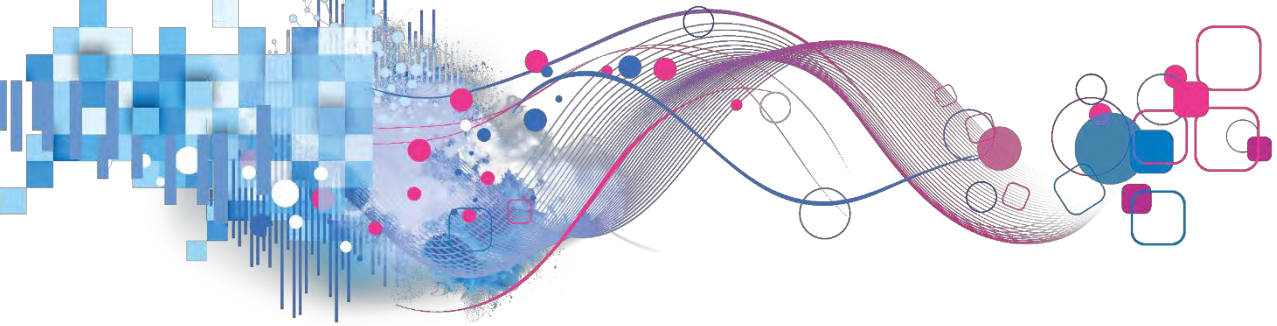

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Wrap-Up Day 2

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Advisory Council 2.0

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Advisory Council 2.0

Over the Coming Year, We're Raising Our Game

The Why

- Meeting the needs of Credit Unions is at the forefront for the dedicated Credit Union team
- Staying closely connected with the Council beyond the once-a year-meeting

Your Involvement

- More engagement throughout the year on topics such as:
  - New product development
  - Emerging trends
  - Unmet needs in the marketplace
  - Insight into hot topics facing Credit Unions
  - Feedback on our service

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Advisory Council 2.0

Over the Coming Year, We're Taking the Council to the Next Level

What is the time commitment?

- Within a given calendar quarter, members will not be asked to participate more than two hours
  - Most quarters, the participation will be far less

What we will need your partnership?

- Participate in quarterly 1-hour Webex calls with your peers to discuss hot topics and/or provide feedback on Experian initiatives (3x's throughout the year)
- In-depth interview to learn more about you, your role and how we can serve you better
- Occasional surveys or 1-on-1 conversations to gather insights
- Offered an opportunity to be quoted in thought leadership (optional)

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RESERVE YOUR SPOT AT VISION

Your decisions affect your organization. You work hard to fuel its growth and enhance ROI.

For more than 36 years, Experian's Vision Conference has connected business leaders like you to ideas and solutions that help them meet future challenges. This is an exciting time for our industry, and change is required to remain agile and meet your customers' growing expectations.

Vision offers:

- Unique networking opportunities with your peers.
- One-on-one conversations with subject matter experts.
- A content-rich agenda that provides useful insights from the industry's thought leaders.
- Face-to-face with Experian executives and product leaders – exchanging ideas, discussing best practices and hearing about the latest industry technology and innovations.
- Intriguing keynotes. Past speakers include Tom Brady, Steve Wozniak, President Bill Clinton, Leon Panetta, Magic Johnson and Madeleine Albright.

Our attendees come from a wide range of industries, and the content is relevant to members from all levels of your organization:

- C-level executives.
- Business line management.
- Functional roles, including:
  - Credit and collections management.
  - Business development.
  - Consumer and commercial lending.
  - Analytics.
  - Modeling.
  - Fraud management.

For more information on industries we focus on or to reserve your spot now, go to www.experian.com/vision.

Early-bird registration ends January 15.

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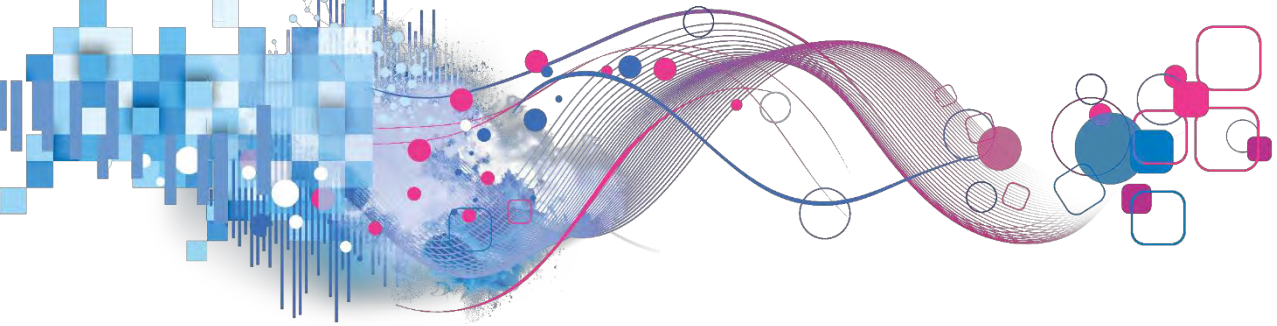

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