

# State of Everything

*...and what it means for the future of credit unions*



Lee Wetherington

Director of Strategic Insight  
Jack Henry & Associates, Inc.

 @leewetherington



**rkl**  
LLP  
FOCUSED. ON YOU.

**jack henry Banking**  
A DIVISION OF JACK HENRY



# dis·rup·tion

/dis'rəpSH(ə)n/

*noun*

disturbance or problems which interrupt an event, activity, or process.  
"the schedule was planned to minimize disruption"

**Similar:**

disturbance

disordering

disarrangement

disarranging



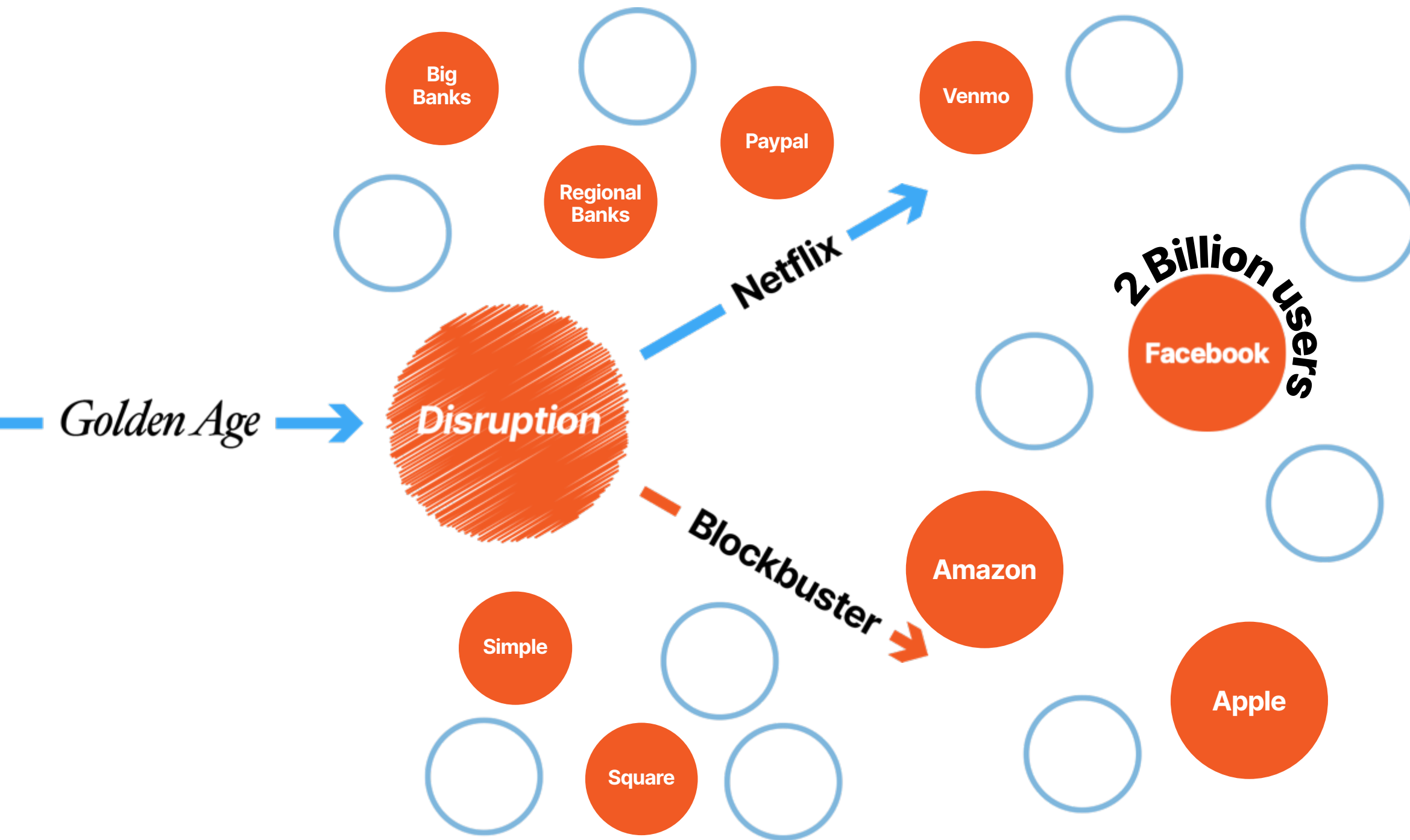
# What is “disruption” in financial services?

In **business** theory, a disruptive innovation **is** an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market-leading firms, products, and alliances. ... Not all innovations **are** disruptive, even if they **are** revolutionary.

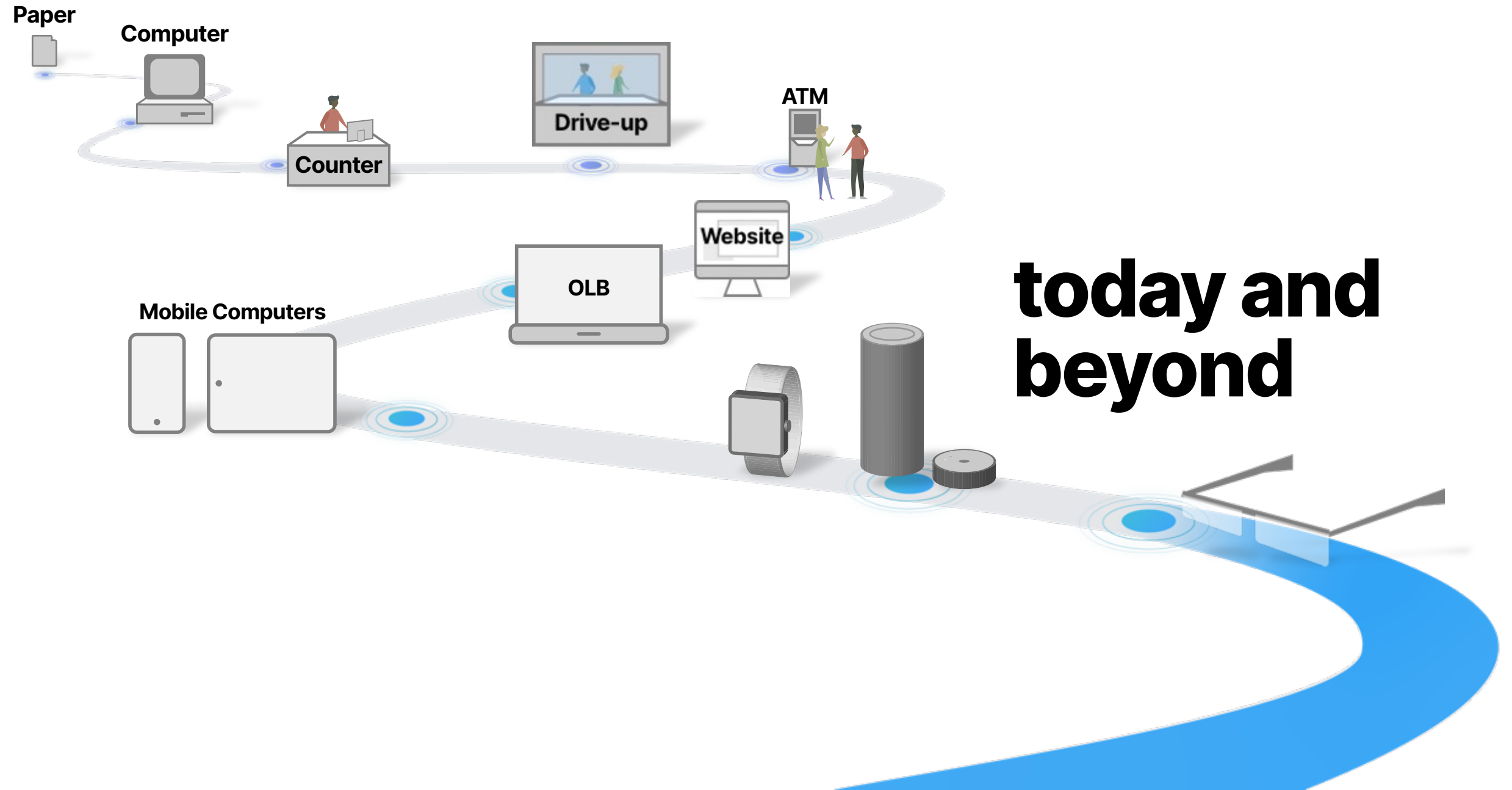


How we think of  
**disruption** today...





But **disruption** in banking  
started **50 years ago...**



# We're caught in a **trap**

Credit unions differentiate on service (and sell in the context of service) but technology has systematically eliminated the people at the CU who provide that service (and sell within it).

“FIs **overestimate** preference for **digital**...  
and **underestimate** preference for  
**in-person** experiences.”



*David Kerstein, President  
Peak Performance Consulting Group*

# Communication-channel preference by age

Customers who prefer the following channels when communicating with companies

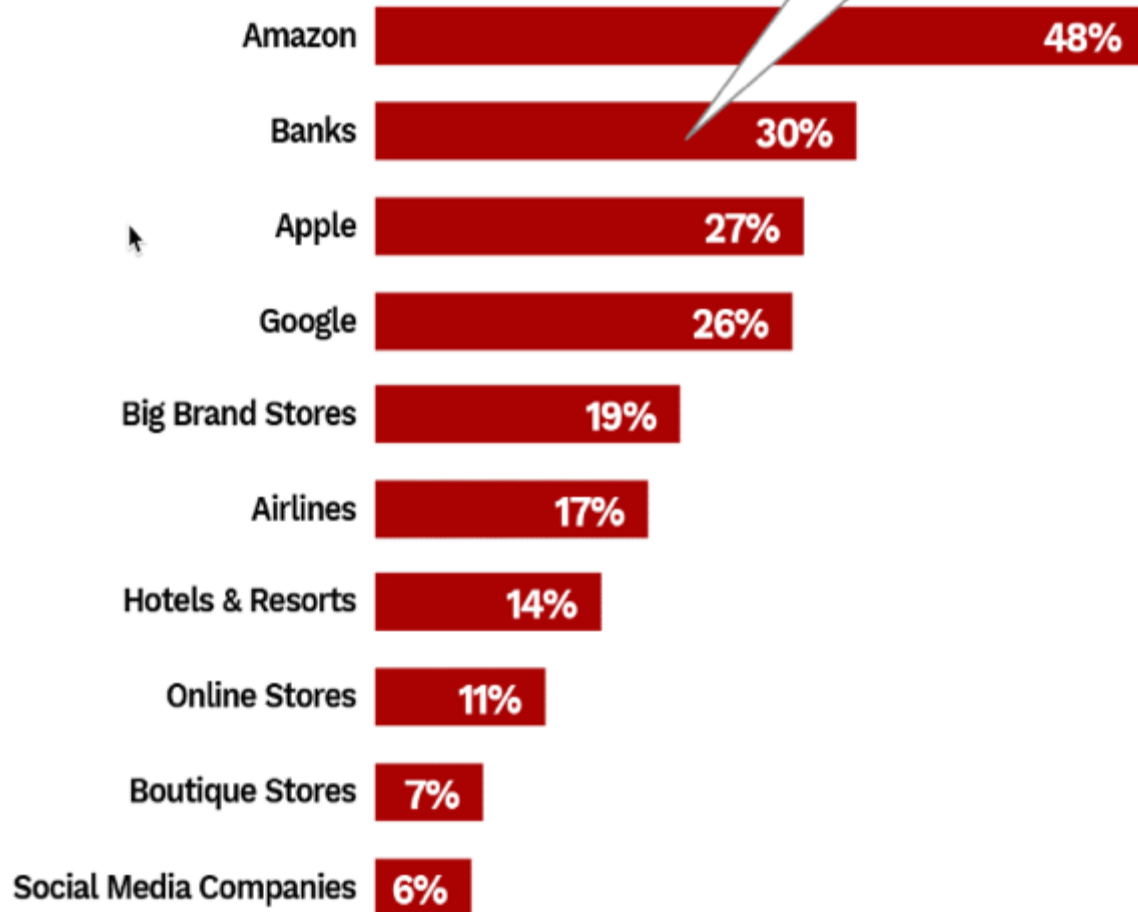
Channel	Overall	Millennials/ Gen Zers	Gen Xers	Silents/ Baby Boomers
Email	64%	64%	65%	62%
In-person	59%	59%	59%	62%
Phone	56%	53%	57%	58%
Online chat/live support (e.g., pop-up windows on website)	45%	55%	45%	28%
Mobile app	43%	56%	42%	24%
Social media	32%	45%	30%	15%
Text/SMS	31%	35%	30%	25%
Voice assistants (e.g., Siri, Alexa)	22%	28%	22%	13%

SOURCE: Salesforce via Digital Banking Customer Engagement report; July 2019

# **Trust** disruption...



Brands and industries people trust to use their data responsibly

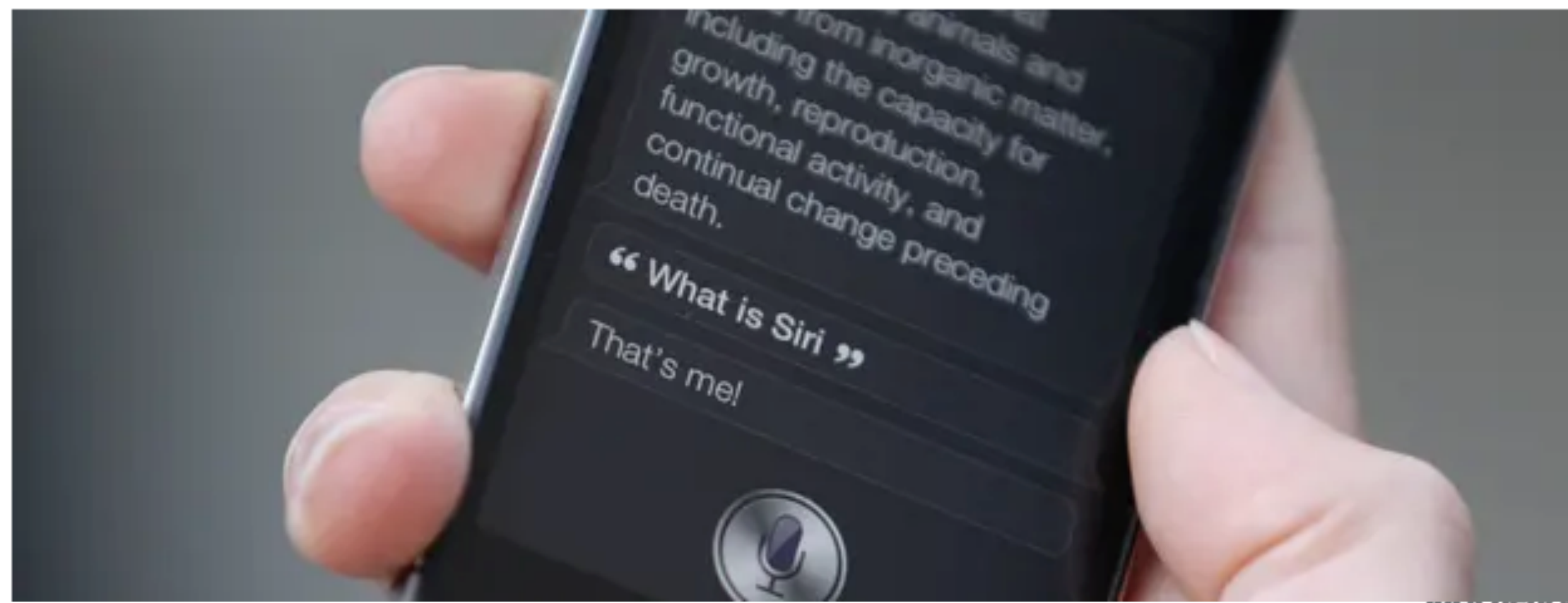


SOURCE: SmarterHQ © August 2019 The Financial Brand

Who do you trust?

# Apple contractors 'regularly hear confidential details' on Siri recordings

**Workers hear drug deals, medical details and people having sex, says whistleblower**





"Trust me: this is a book you need to read." —ADAM GRANT

# WHO CAN YOU TRUST?

How Technology  
Brought Us Together *and* Why  
It Might Drive Us Apart

RACHEL BOTSMAN

**TRUST** IS A CONFIDENT  
RELATIONSHIP WITH  
THE UNKNOWN.



RACHEL  
BOTSMAN



**TRUST** IS A RELATIONSHIP  
THAT GIVES YOU CONFIDENCE  
WITH THE UNKNOWN.



# **Economic** disruption...

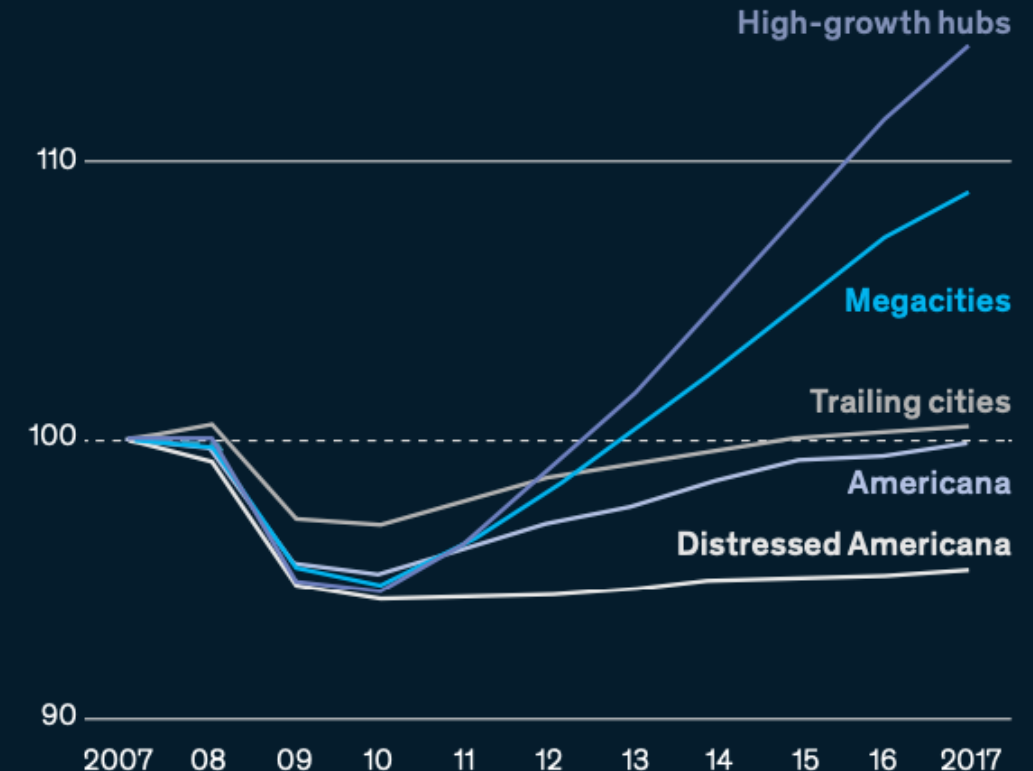
# America is a mosaic of local economies on diverging trajectories

Automation could widen existing disparities

## 13 community segments have varying economic and demographic profiles

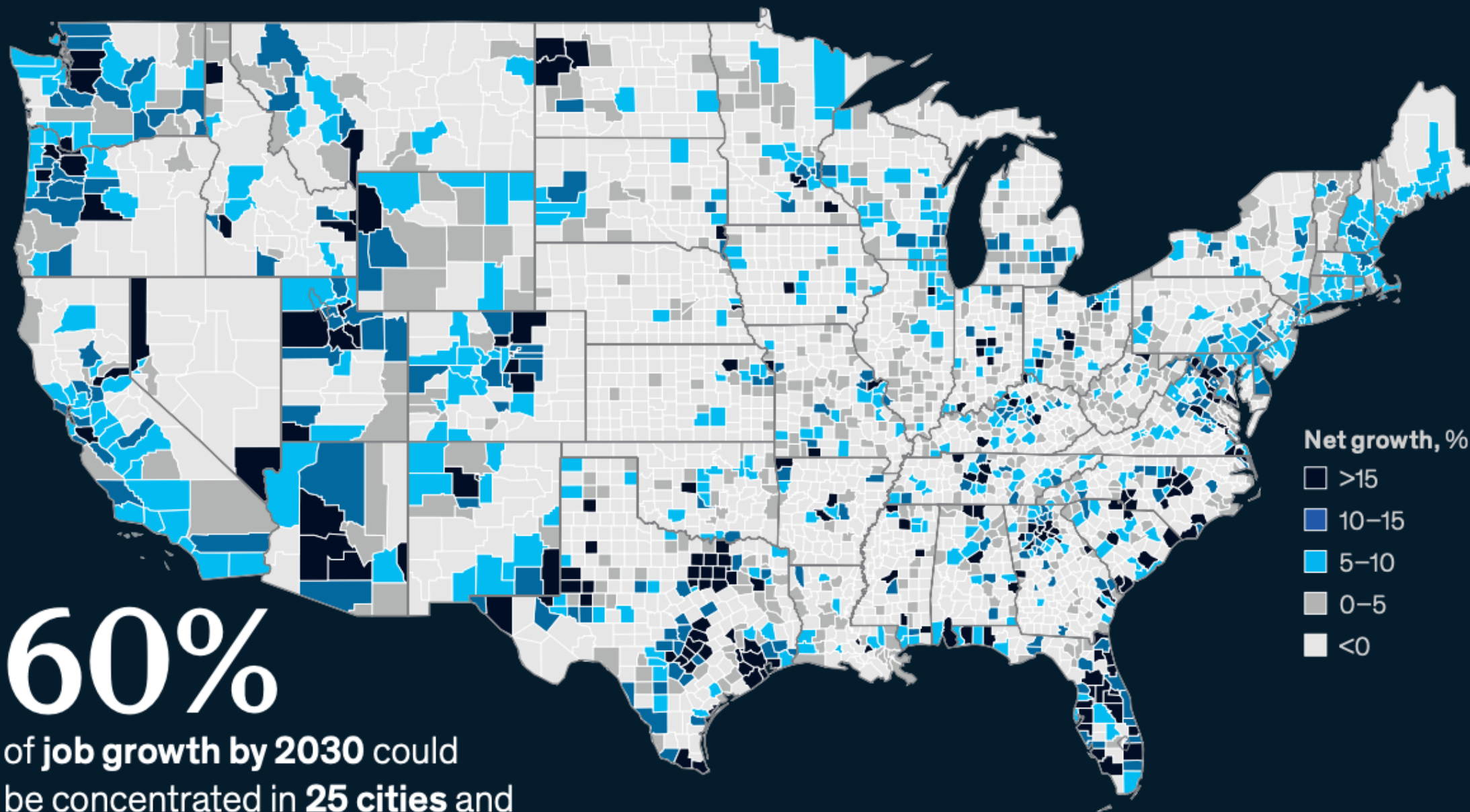
Economic dynamism	Most	<b>Urban core</b> Megacities; High-growth hubs	63 counties	30% of US population
		<b>Periphery</b> Urban periphery	271 counties	16% of US population
		<b>Niche cities</b> Small powerhouses; Silver cities; College-centric towns	89 counties	6% of US population
		<b>Mixed middle</b> Stable cities; Independent economies; America's makers	325 counties	24% of US population
	Least	<b>Low-growth/rural areas</b> Trailing cities; Americana Distressed Americana; Rural outliers	2,365 counties	24% of US population

## Employment change for select community segments, % of 2007 employment

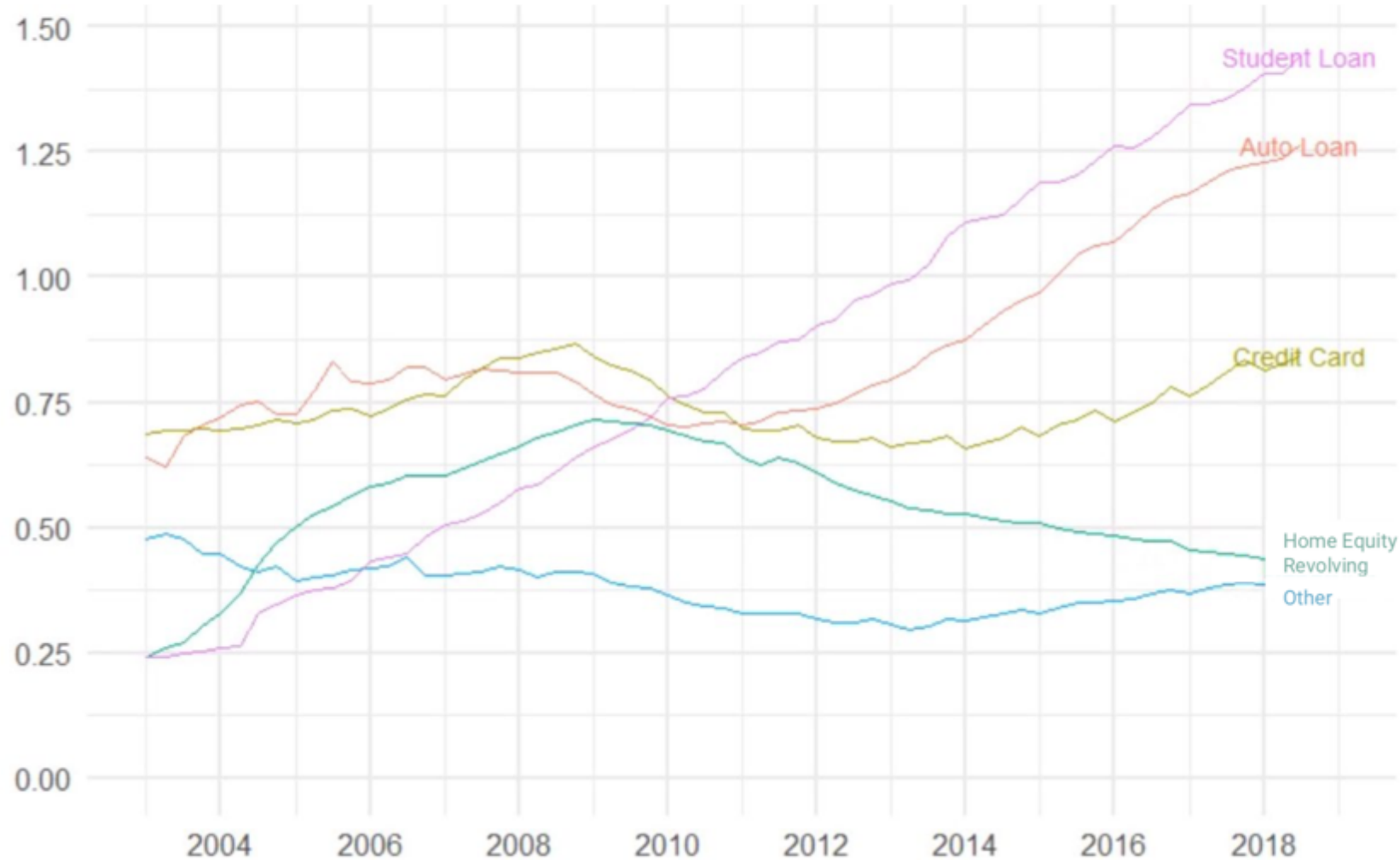




## Estimated net job growth in midpoint adoption scenario, 2017–30, %



# Household debt balances have accelerated and total over \$13 trillion



**\$1.4T**



**\$1.25T**



**\$850B**



**\$440B**



# 75% of working Americans live “paycheck-to-paycheck”

28%

Financially  
Healthy

55%

Financially  
Coping

17%

Financially  
Vulnerable

# Fintech firms are unbundling the paycheck to alleviate and prevent predatory debt

## PAYROLL FLEXIBILITY



## DEBT PAYOFF

scratch.

## PRE-TAX SPENDING

ALICE

## PAYDAY ADVANCE

earnin

SALARY  
FINANCE

neyber

CBINSIGHTS

The University of North Carolina at Chapel Hill 101 South Building, Campus Box 9100 Chapel Hill, NC 27599-9100		Pay Group: SPN-SBIRA Non-Exempt Pay Begin Date: 01/10/2017 Pay End Date: 01/23/2017		Business Unit: UNCCCH Advice #: 000000000214873 Advice Date: 08/04/2017	
Employee Name 1777777777777777 CHAPL HILL, NC 27517		Employee ID: 000000000 Department: 260108-WISEE HR Information Mgmt Location: CHL-Off of the Vice Chancellor Job Title: Admin Support Specialist Pay Rate: \$43,000.00 Annual		TAX DATA: Federal: 0 NC State: 0 Tax Status: Single Allowances: 0 Addr. Percent: 0 Addr. Amount: 0	
HOURS AND EARNINGS				TAXES	
Description	Rate	Current Hours	Earnings	Description	Current
Regular	20.346846	74.50	1,515.84	Fed Withholding	182.98
Sick	20.346846	3.50	71.21	Fed MED/EE	22.12
Bonus Leave	20.346846	2.00	40.69	Fed OASD/EE	94.58
Adverse Weather Cond III Close			0.00	NC Withholding	61.00
Civil Leave			0.00		
Holiday			0.00		
Mobile-Communication Device \$70			0.00		
Overtime - 1.5x Time			0.00		
Overtime - Straight Time			0.00		
Regular (Overtime Work)			0.00		
Vacation			0.00		
TOTAL:		80.00	1,627.74	TOTAL:	360.68
BEFORE-TAX DEDUCTIONS			AFTER-TAX DEDUCTIONS		
Description	Current	YTD	Description	Current	YTD
TSERS - Retirement	97.66	1,688.82	NC State Eng Credit Union	25.00	425.00
Critical Illness	32.10	513.60	Reliance Standard AD&D Empl	2.00	32.00
UNC Traffic Office - Parking	26.51	425.84			
NC Flex Group Life Employee	12.70	203.20			
Dental Plan	10.61	169.76			
Cancer Plan	7.59	121.44			
State Health Plan 80/20	7.52	120.32			
Vision Plan	4.29	68.64			
NC Flex Voluntary AD&D Empl	0.85	13.60			
TOTAL:	199.83	3,325.22	TOTAL:	27.00	457.00
TOTAL GROSS			TOTAL TAXES		
Current	1,627.74	1,627.74	Current	360.68	360.68
YTD	28,707.21	28,707.21	YTD	3,782.22	3,782.22
TOTAL DEDUCTIONS			TOTAL DEDUCTIONS		
Current	1,627.74	1,627.74	Current	360.68	360.68
YTD	28,707.21	28,707.21	YTD	3,782.22	3,782.22
LEAVE BALANCES/ACTIVITY			NET PAY DISTRIBUTION		
Year Begin Balance	161.83	244.00	Account Type	Checking	Account Number
Earned This Year	79.33	56.00	Advice #000000000214873		XXXXX000000
Used This Year	33.50	27.50			
Fed Reserve	213.66	272.50			
LEAVE DATA VALID THRU:		07/23/2017			
For current and detailed leave information, log into TIM			TOTAL:		

## EARNED-INCOME ADVANCE

Even

WAGESTREAM

dailypay

PayActiv  
Security | Dignity | Savings

## STUDENT LOAN PAYOFF

Goody

Vault

commonbond

PEOPLEJOY

## DIRECT DEPOSITS

chime

## EMERGENCY FUND

Brightside

HoneyBee®  
Employees Matter

## FINANCIAL LITERACY

LEARNLUX


Onward

edukate

SMARTPATH




# Startups are partnering with employers to offer salary linked benefits



earnin

## MAKE ANY DAY PAYDAY.

Join Earnin to get paid the minute you leave work with no loans, fees, or hidden costs.


Enter phone number  [DOWNLOAD EARNIN](#)

**Last Funding:** \$125M Series C in Dec'18

**Select Investors:** DST Global, Andreessen Horowitz, Spark Capital, Matrix Partners, Coatue Management, Ribbit Capital

Earnin is an app that allows employees to access earned income ahead of a scheduled payday. Earnin partners with Starbucks, Pizza Hut, Walmart, and other white-collar job employers.

Earnin reported they work with employees across 50K companies and that the app has been downloaded 1M times.



**SALARY FINANCE**

## ADVANCE EARNED PAY

Sometimes having to wait until payday can mean falling back on high-cost debt like a payday loan or overdraft. We allow employees to draw down their pay as they earn it, making it easier for them to budget.

[ADVANCE](#)

**Last Funding:** \$20M Series B-II in Aug'18

**Select Investors:** Blenheim Chalcot, Legal & General

UK-based Salary Finance offers installment loans that deducts loan repayments directly from an employees Salary. In December 2018 they launched a payday advance service allowing employees to access earned income.

In Q4'18 they launched in the and announced partnering with the United Way as a preferred solution for their network of 10K employers.

# DISRUPTING PAYROLL, STARTING WITH PAYDAY



## Last Funding

\$140M Series C // Jul'18

## Valuation \$2B

Gusto is an HRIS platform that provides HR, benefits administration, and payroll automation software.

Since February of 2015 the company has added over 60K+ small businesses (~1% US SMB population).

In June 2018, at the CB Insights' Future of Fintech conference, Josh Reeves CEO and co-founder announced Flexible Pay, the company's digital paycheck advancement service that allows employers to offer earned income to employees in advance of a traditional bi-weekly pay cycle.

## 2018 PARTNERSHIPS



529 College Savings



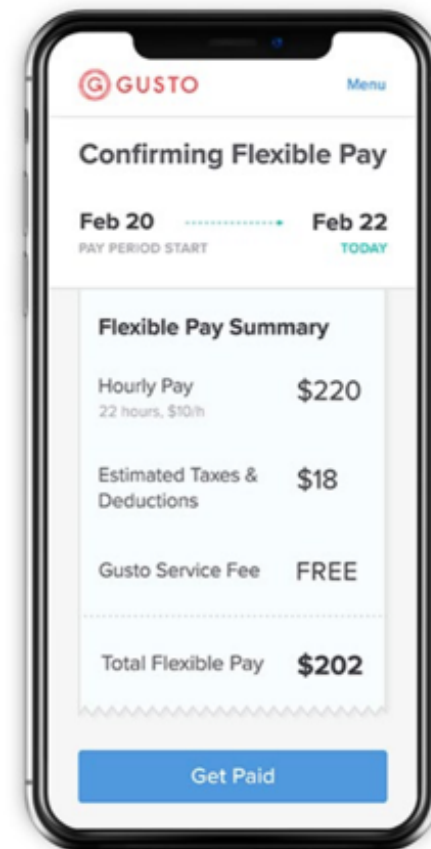
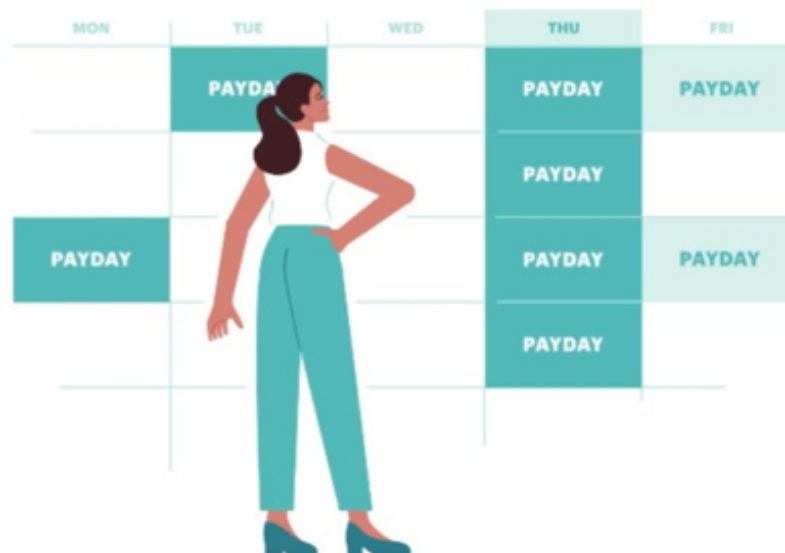
Workers' Compensation

SCALE FACTOR

Accounting

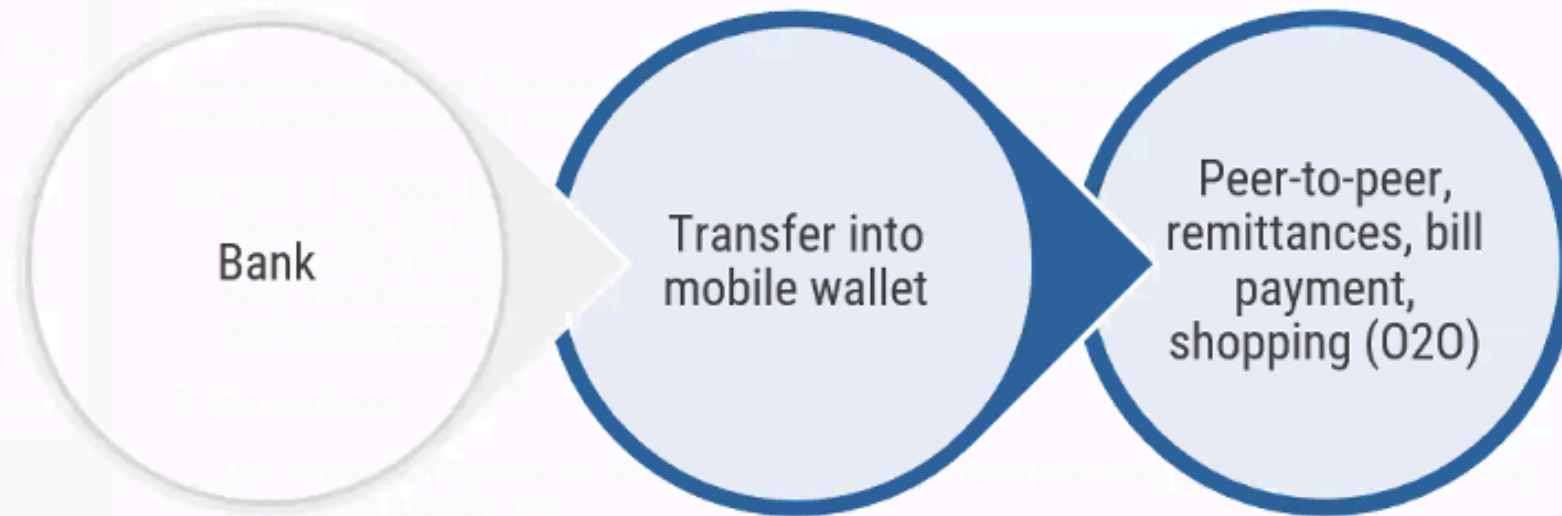


401(k)



SOURCE: CBINSIGHTS; 2019 Fintech Trends To Watch

# Faster income could shift how consumers bank










If payroll is more liquid, then employees might start treating mobile wallets like de-facto bank accounts

SOURCE: Payments Landscape, CB Insights, 2019






# Competitor disruption...

# Amazon's growing financial services ecosystem

<b>Wallet and payments network</b>		Amazon Pay is a wallet for users and a payments network for both online and brick-and-mortar merchants. The mobile wallet has 33M+ users.
<b>Cash deposits</b>		Amazon Cash connects offline and online commerce by allowing users to top up digital accounts (with cash) at partnering retailers.
<b>SMB lending</b>		Amazon Lending offers loans to Amazon sellers, ranging from \$1K to \$750K (for one year). The program has lent \$3B+ since 2011.
<b>Member rewards</b>		To minimize Amazon's interchange fees, Amazon Reload incentivizes Prime users with 2% cash back when they use a digital Amazon debit card.
<b>Insurance</b>		Amazon Protect offers accidental and theft insurance in select EU countries, partnering with the Warranty Group's London General Insurance Company.
<b>Credit cards</b>		Amazon offers the Store Card and Prime Store Card in partnership with Synchrony Bank. The card can be used at select websites and retailers.
		A consumer credit card offered via Chase offers 3% back on Amazon.com and at Whole Foods. Chase and Amazon are reportedly in talks to offer an SMB commercial card as well.

# Apple deepens its foray into financial services

ANT FINANCIAL COULD SERVE AS A BLUEPRINT FOR APPLE'S EXPANSION IN FINANCIAL SERVICES											
	P2P	In-store payments	In-app payments	In-browser payments	Consumer lending	Digital remittances	Wealth management	Credit card	Debit card	Mobile top up	Insurance
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			
<div>  </div>											
Source: Apple, Ant Financial, CB Insights											

SOURCE: Apple's push into financial services is just getting started — here's why incumbents should worry, BI Intelligence, May 2019

# Apple Pay Pop Quiz

---



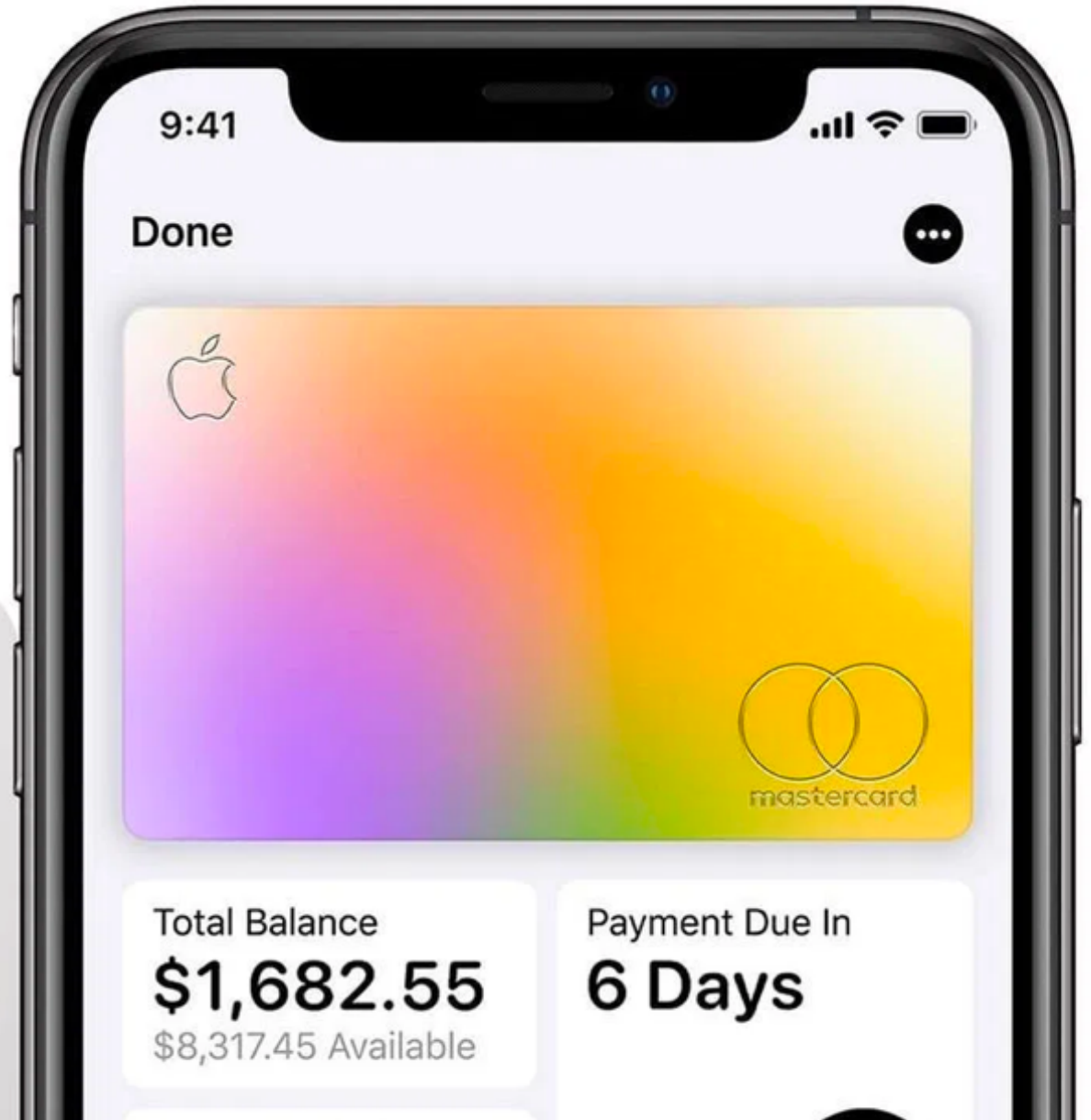
9%

Share of U.S. consumers using Apple Pay

Q: What percentage of U.S. consumers use Apple Pay?










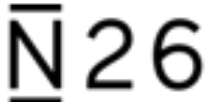


# Apple Card: first card **designed NOT** to be used




...but first example of  
**real-time rewards**





# Neobanks raise record \$2.5B in funding YTD 2019

Country	Challenger Banks
	         
	     
	  
	

U.S. Challenger	Checking Account	Savings Account	Debit Card	Credit Card	Personal Loans	Budgeting & Savings Tools	Additional Features
 SIMPLE	✓	✗	✓	✗	✗	✓	Joint checking
 chime	✓	✓	✓	✗	✗	✓	Early direct deposit for paychecks
 VARO	✓	✓	✓	✗	✓	✓	Early direct deposit for paychecks
 Moven	✓	✗	Prepaid card	✗	✗	✓	Track spending from existing accounts
 Empower	✓	✓	✓	✗	✗	✓	2% cashback on first \$1000 of purchases
 zero	✓	✗	✗	✓	✗	Automated payments to prevent negative balance	Credit card with debit experience
 Aspiration	Cash management account		✓	✗	✗	✗	Investing products, socially conscious
 Oxygen	✓	✗	✓	✗	✓	✓	Flat-fee access to credit, no interest on balance
 JOUST	✓	✗	Coming soon	✗	✓	✓	Comes with merchant account to accept payments
 COGNI	✓	✗	✓	✗	✗	✓	Up to 12% cashback lifestyle perk, multi-currency wallet, invoicing



# Is the neobank business model viable?



**monzo**

## Are neobanks a threat



3%

Millenials with primary checking at a neobank

**Neobanks** (aka “challenger banks”, aka “direct banks”, aka “digital banks”) **launched 10 years ago in the U.S.**

Q: What percentage of **Millennials** have a primary checking account with a neobank?

# Deposit disruption?

## The generations defined

### Post-Millennial generation (Z)

Born: 1997 and later

Age of working-age adults in 2017: 16 to 20

### Millennial generation (Mil)

Born: 1981 to 1996

Age in 2017: 21 to 36

### Generation X (X)

Born: 1965 to 1980

Age in 2017: 37 to 52

### Baby Boom generation (BB)

Born: 1946 to 1964

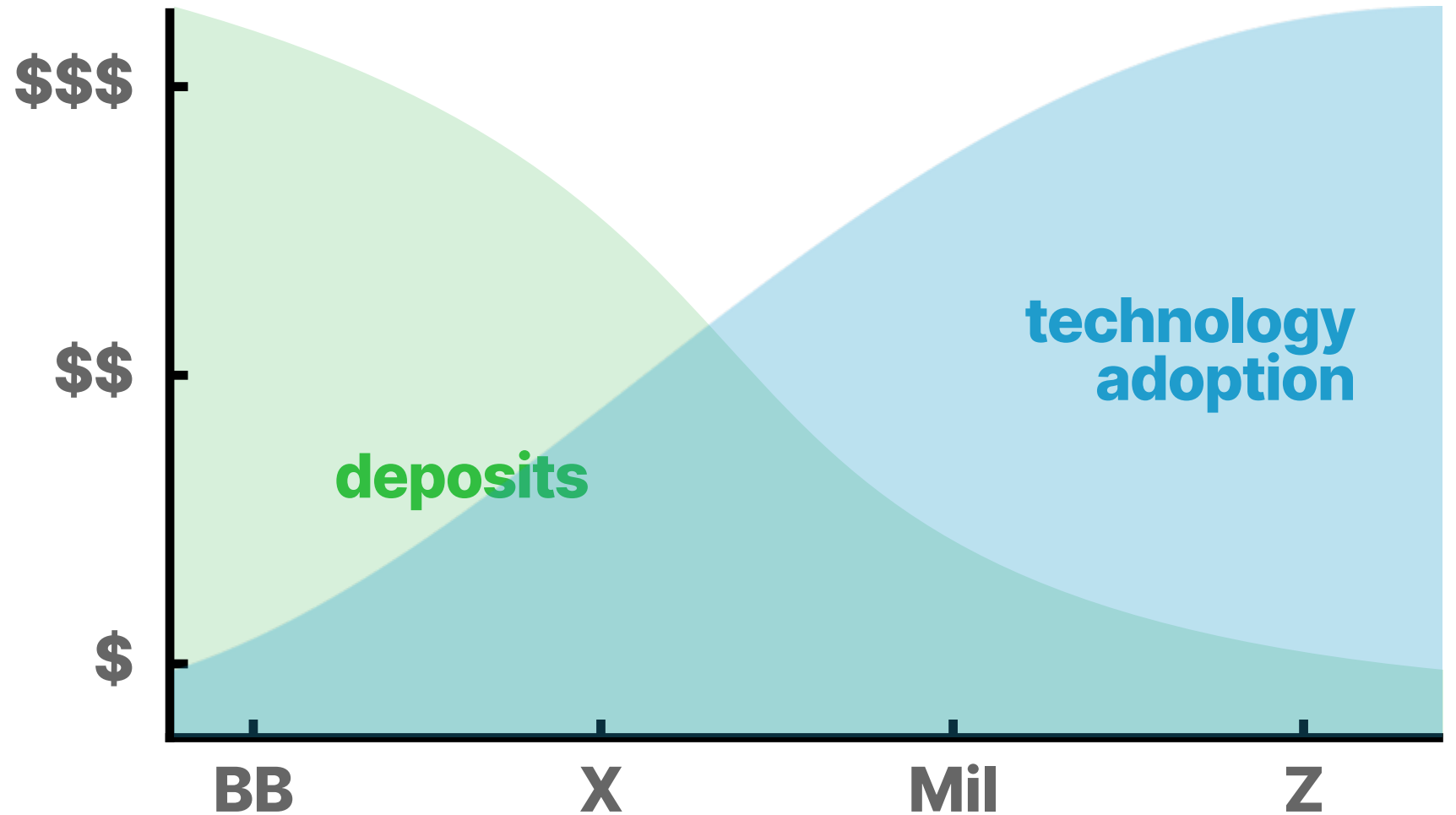
Age in 2017: 53 to 71

### Silent and Greatest generations (S&G)

Born: 1945 or earlier

Age in 2017: 72 and older

PEW RESEARCH CENTER



## The generations defined

### Post-Millennial generation (Z)

Born: 1997 and later

Age of working-age adults in 2017: 16 to 20

### Millennial generation (Mil)

Born: 1981 to 1996

Age in 2017: 21 to 36

### Generation X (X)

Born: 1965 to 1980

Age in 2017: 37 to 52

### Baby Boom generation (BB)

Born: 1946 to 1964

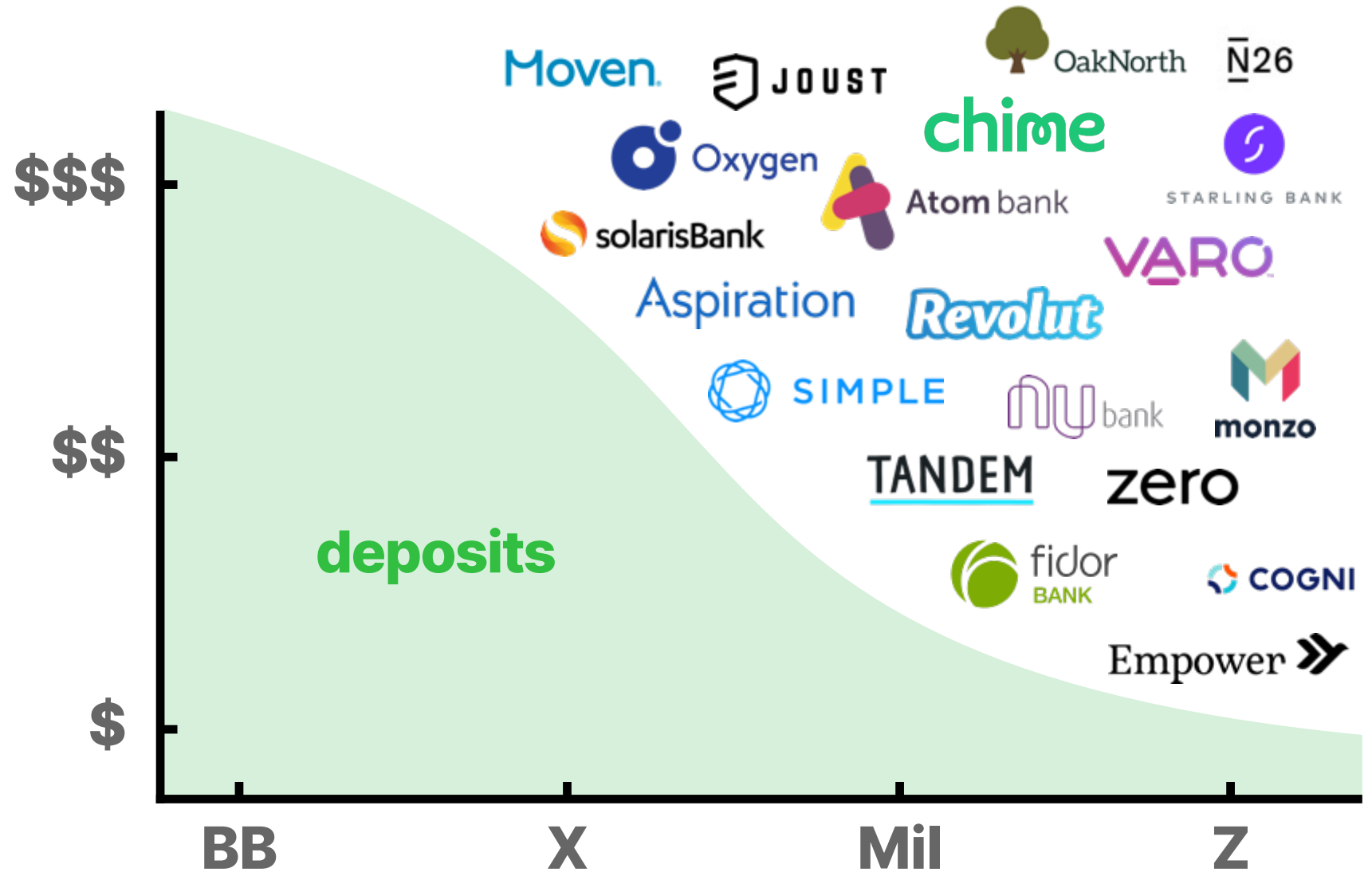
Age in 2017: 53 to 71

### Silent and Greatest generations (S&G)

Born: 1945 or earlier

Age in 2017: 72 and older

PEW RESEARCH CENTER





# Are **neobanks** a **deposit threat**

Neobanks (aka challenger banks, aka direct banks, aka digital banks) launched 10 years ago in the U.S.

# 0.014%

% of U.S. deposits held by top 7 neobanks

Q: What percentage of **U.S. deposits** are **held by** the top 7 **neobanks** in the U.S.?

## The generations defined

### Post-Millennial generation (Z)

Born: 1997 and later

Age of working-age adults in 2017: 16 to 20

### Millennial generation (Mil)

Born: 1981 to 1996

Age in 2017: 21 to 36

### Generation X (X)

Born: 1965 to 1980

Age in 2017: 37 to 52

### Baby Boom generation (BB)

Born: 1946 to 1964

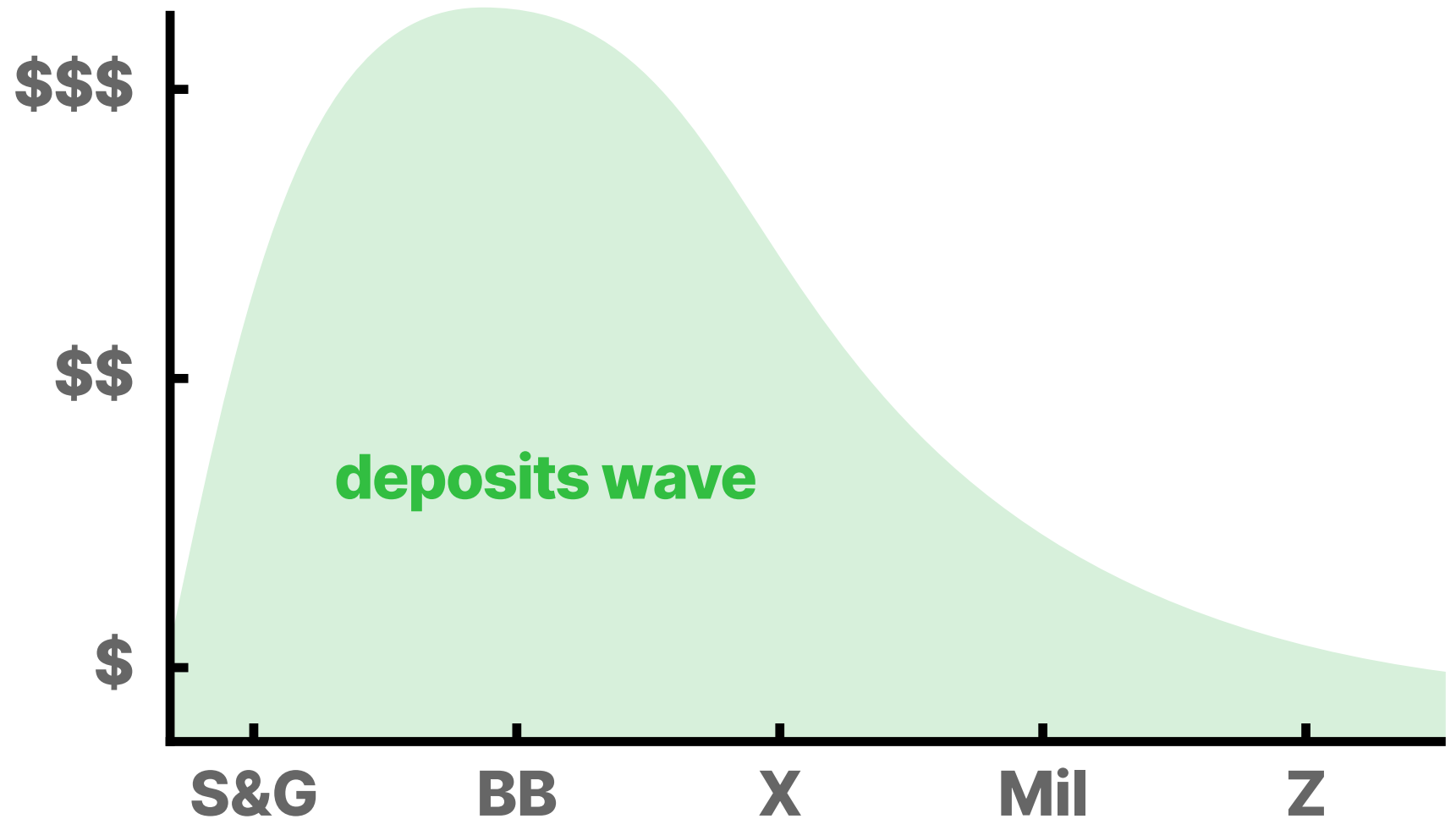
Age in 2017: 53 to 71

### Silent and Greatest generations (S&G)

Born: 1945 or earlier

Age in 2017: 72 and older

PEW RESEARCH CENTER





# Real deposit **threats**?

Ally reached **\$100B in deposits** and 1.9M customers by way of “bringing the best of **digital and human** into the equation.”

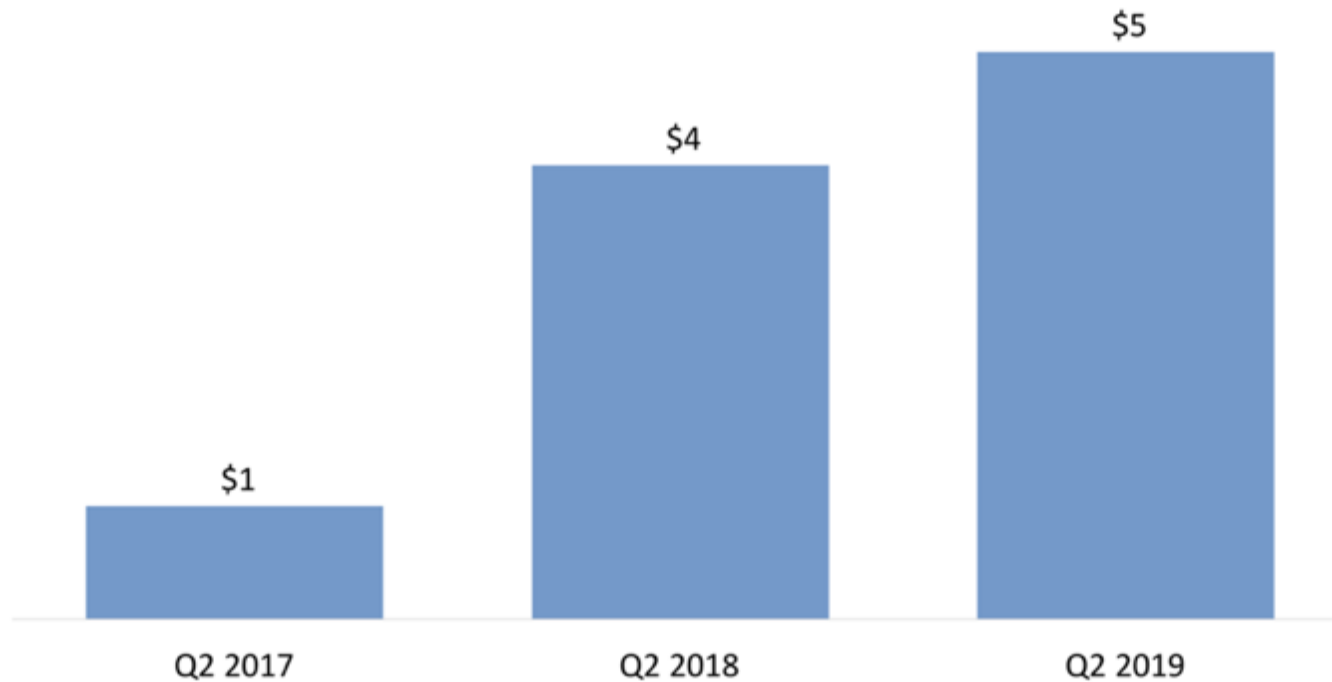
Dinesh Chopra  
Chief Strategy Officer  
Ally Financial

The Ally logo, consisting of the word 'ally' in a bold, lowercase, purple sans-serif font.

## Marcus Quarterly Loan Originations

Billions

**Marcus:**  
BY GOLDMAN SACHS



Source: Bloomberg, Company filings



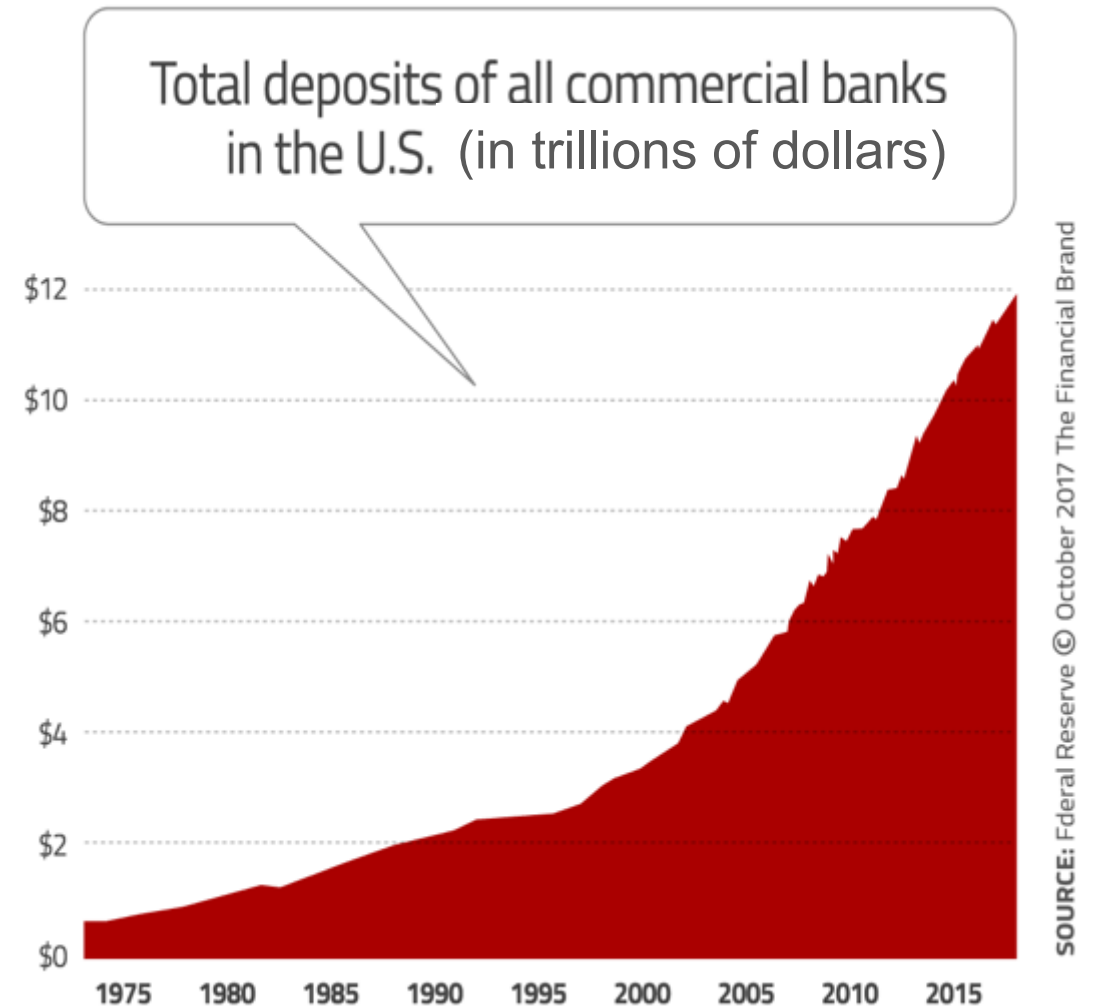
**Wealthfront** ✓  
@Wealthfront

Exciting news 📈! In just 8 short months we grew nearly 100% 📈. Our clients trust us with over \$20 billion and we couldn't be more grateful!



# Deposit Displacement

- **P2P stored value**
  - Venmo<sup>SM</sup> (\$2B)
  - Square<sup>®</sup> (\$2B?)
  - Apple Pay<sup>®</sup> (\$1B?)
- **Retail mobile apps**
  - Starbucks<sup>®</sup> (\$2B)
- **HSAs** (\$45B)
- **Robo-advisory** (\$1.4T)

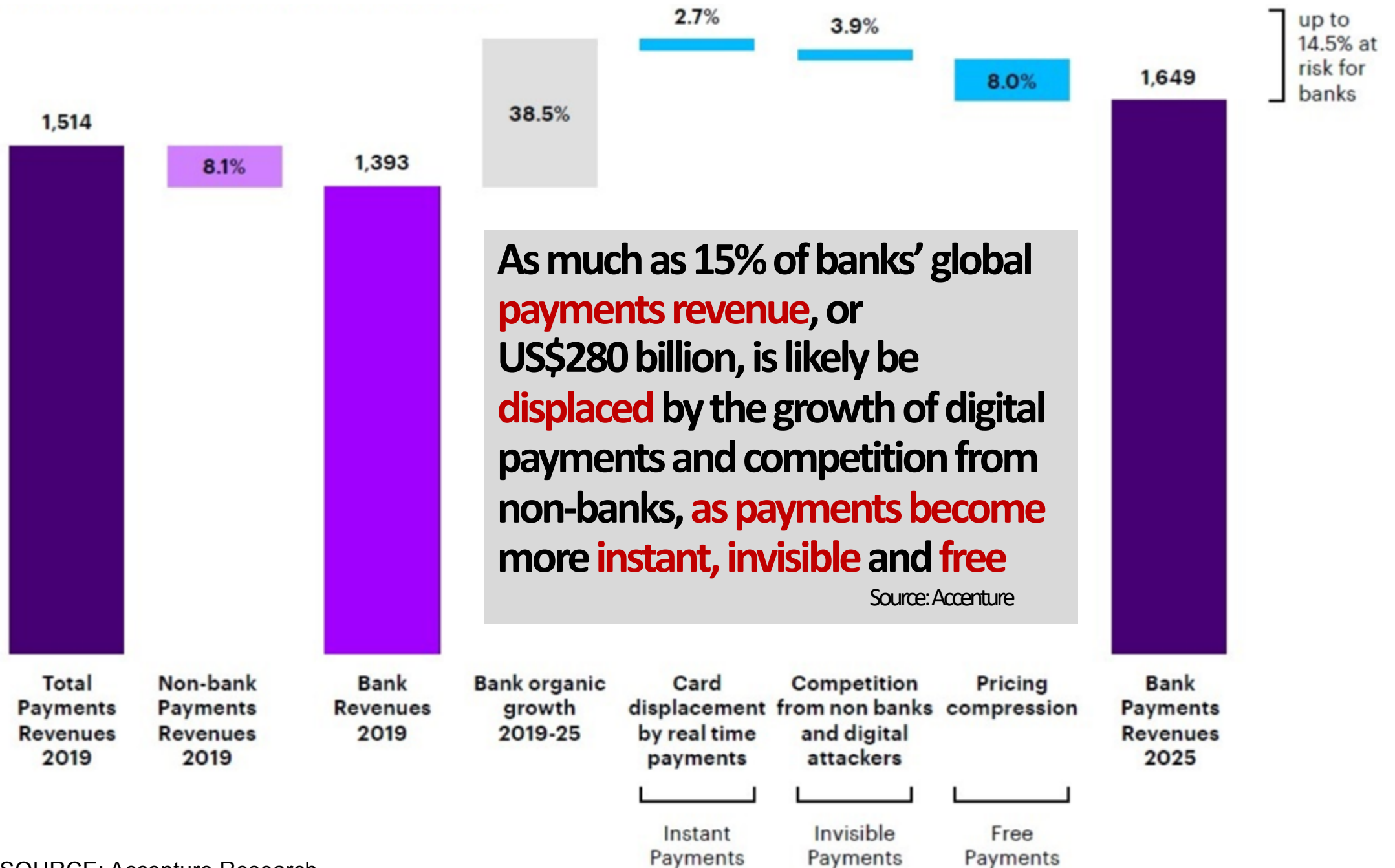


# Payments disruption...



What happens as more payments  
become **instant, invisible** and **free**?

\$280B

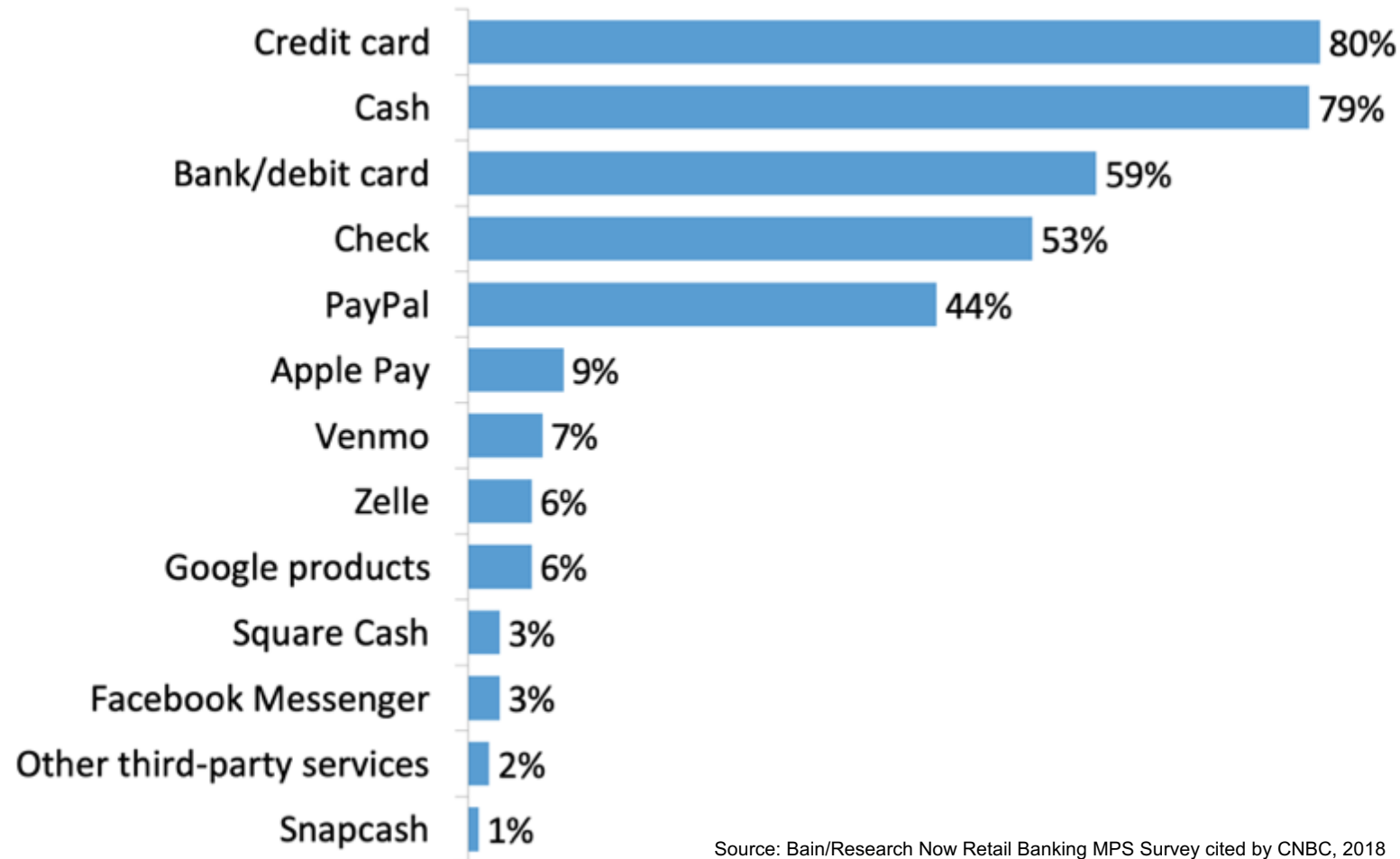


# Drivers of **disruption in payments**...

Driver	Disruption
<b>Instant</b> payments	<b>Card displacement</b> by real-time payments (interchange?)
<b>Invisible</b> payments	<b>Competition</b> from non-banks and digital attackers
<b>Free</b> payments	Pricing <b>compression</b>

# Consumer Use of Payment Methods

## Share of US Consumers Who Used a Payment Method in 2018

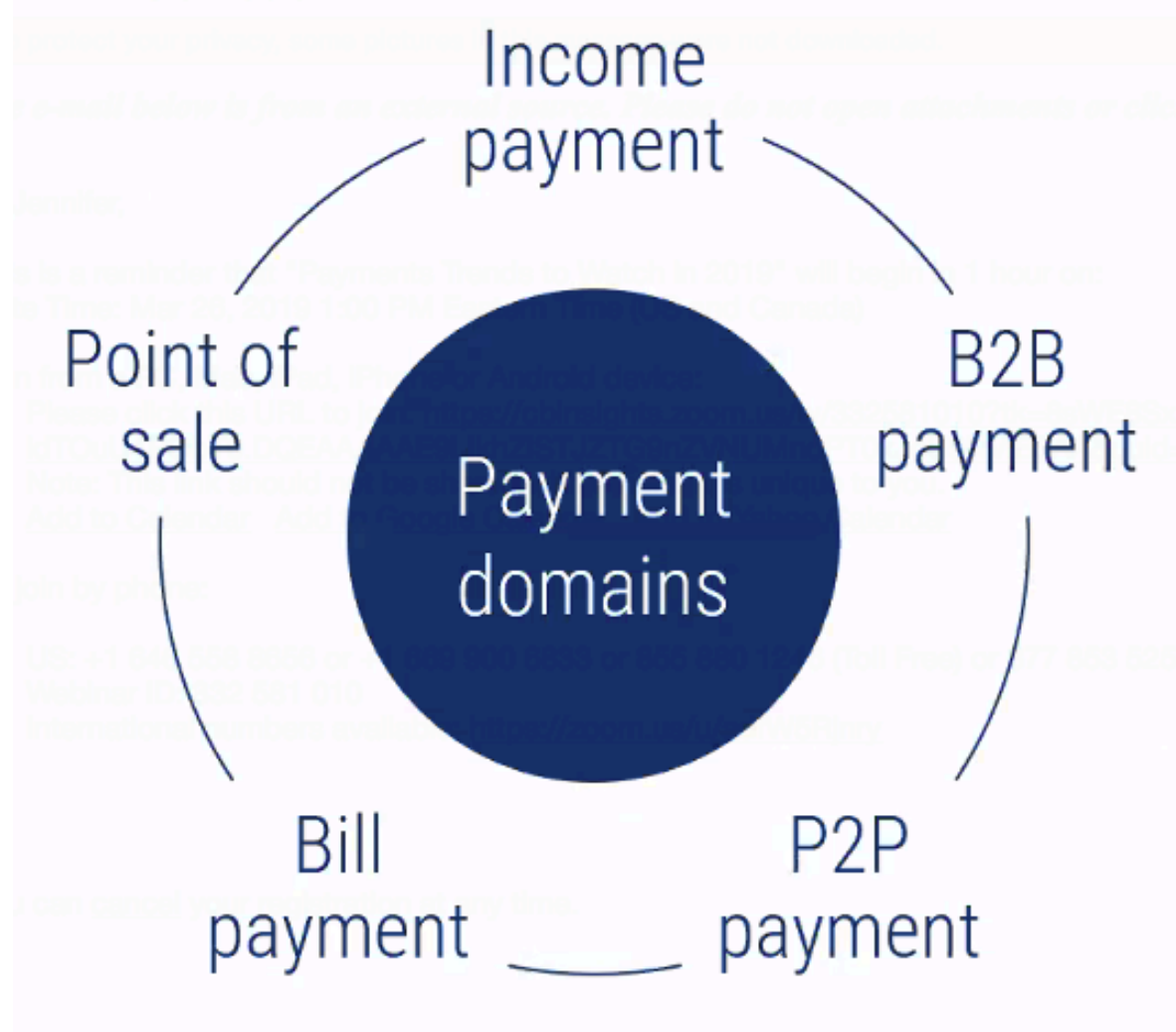


Source: Bain/Research Now Retail Banking MPS Survey cited by CNBC, 2018



**We need to think  
about payments  
differently...**

**Payments** are usually grouped into these **domains**...



...but these **UX categories** are more helpful/strategic:

**MUNDANE**

POS, P2P  
(small \$)

**MEANINGFUL**

Income, Bills, B2B  
(bigger \$)

**One meaningful  
payment can make or  
break a relationship...**

(and the revenue that relationship represents)

# Hahira, GA



**#MomentOfNeed**

**Where** does  
the moment of need  
happen?



**Everywhere** but the branch.

**Real-time adds complexity**  
**...not just speed**



FedNow<sup>SM</sup>

VISA Direct

SDA



zelle<sup>SM</sup>



libra

# Complexity of payments expands need for **simplicity**



A large, light blue arrow pointing to the right, containing two rounded rectangular boxes. The first box is red and contains the text 'Lockbox'. The second box is green and contains the text 'Integrated Receivables'.

Lockbox

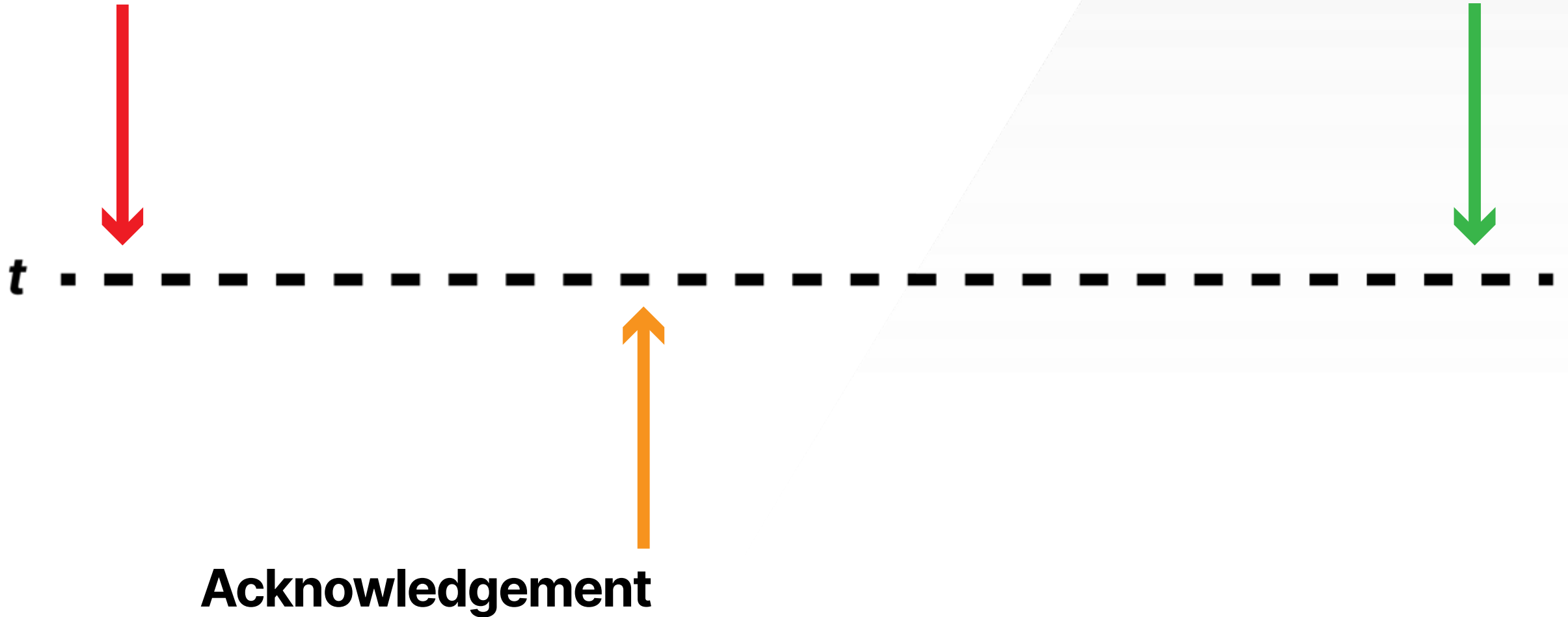
Integrated  
Receivables



**Make personal  
service real-time  
in payments...**

# Moment of Need

## Resolution



# Moment of Need

## Resolution

 $t$ 

## Acknowledgement



< Messages Details Cancel



Michelle



Ben



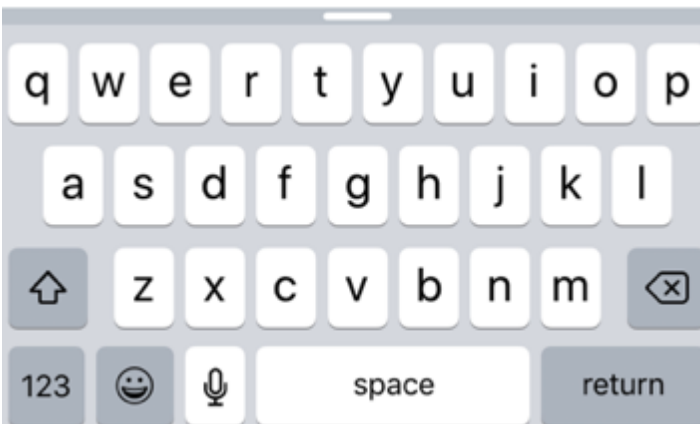
Mei

**We typically reply within 2 hours**

Ask us anything! We'll do our best to get back to you within 2-4 hours during regular business hours (Mon - Fri, 9am - 5pm CST).

Hello!  
I just noticed a few transactions that I definitely didn't make. Can someone help me?

Send



< Messages

Details

Cancel



Michelle



Ben



Mei

**We typically reply within 2 hours**

Ask us anything! We'll do our best to get back to you within 2-4 hours during regular business hours (Mon - Fri, 9am - 5pm CST).

Hello!  
I just noticed a few transactions that I definitely didn't make. Can someone help me?

< Messages

Details



**Shakti** Buffalo, NY  
Customer Service Champion

Hello!  
I just noticed a few transactions  
that I definitely didn't make. Can  
someone help me?

Sent at 10:15 AM

Shakti joined this conversation



Hi Elizabeth!

Sorry to hear about the weird  
charges. I'd be happy to help  
you sort this out!

Sent by Shakti at 11:03 AM

+ Type a message

Send

Hello!  
I just noticed a few transactions  
that I definitely didn't make. Can  
someone help me?

Sent at 10:15 AM

Shakti joined this conversation



Hi Elizabeth!

Sorry to hear about the weird  
charges. I'd be happy to help  
you sort this out!

Sent by Shakti at 11:03 AM

**Win moments of need  
with payments...**



< Messages

Details



Sent at 10:15 AM

Shakti joined this conversation



Hi Elizabeth!

Sorry to hear about the weird charges. I'd be happy to help you sort this out!

Sent by Shakti at 11:03 AM

I also just remembered that I have to send in my W2 for a loan I'm trying to get. Could I just send that here? I have it handy

Sent at 10:15 AM

Elizabeth\_Lopez\_W2\_December-14-2018.pdf  
64.8 KB PDF

Uploading...

I also just remembered that I have to send in my W2 for a loan I'm trying to get. Could I just send that here? I have it handy

Sent at 10:15 AM

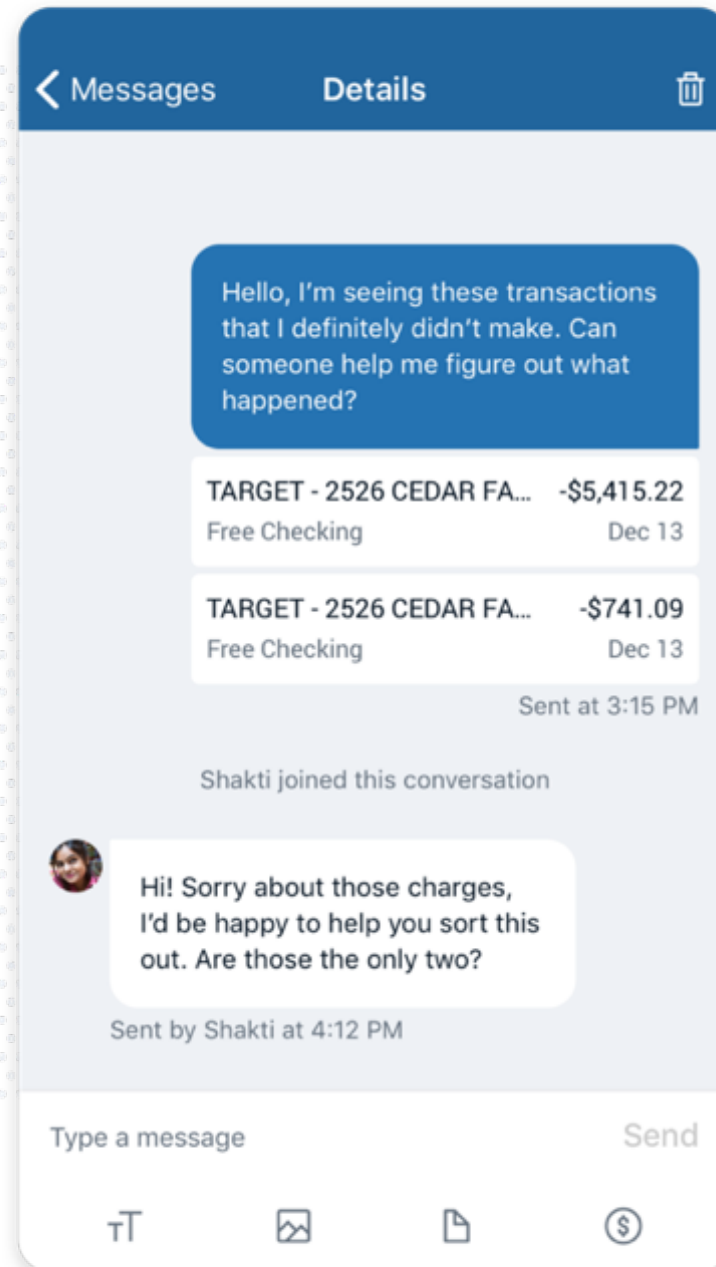
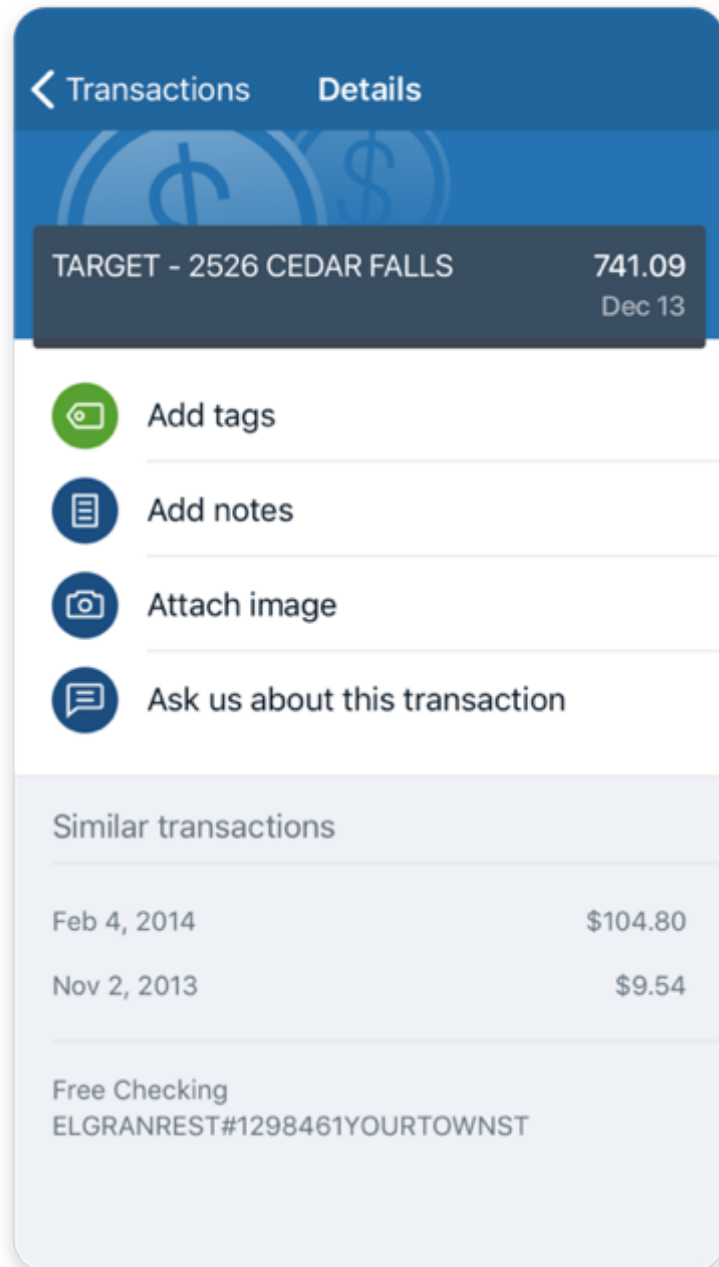
Elizabeth\_Lopez\_W2\_December-14-2018.pdf

64.8 KB PDF

Uploading...

+ Type a message

Send



**Attach  
context**

**Less typing,  
more helping**

Attaching accounts and transactions provides clarity in less time.

6:59



New message

Cancel



Typically reply within 2 hours

Ask us anything! We'll do our best to get back to you within 2-4 hours during regular business hours (Mon-Fri 9am - 5pm CST).



Accounts



Transactions



Deposits



Transfers



More



Type a message

Send



Accounts



Transactions



Deposits



Transfers

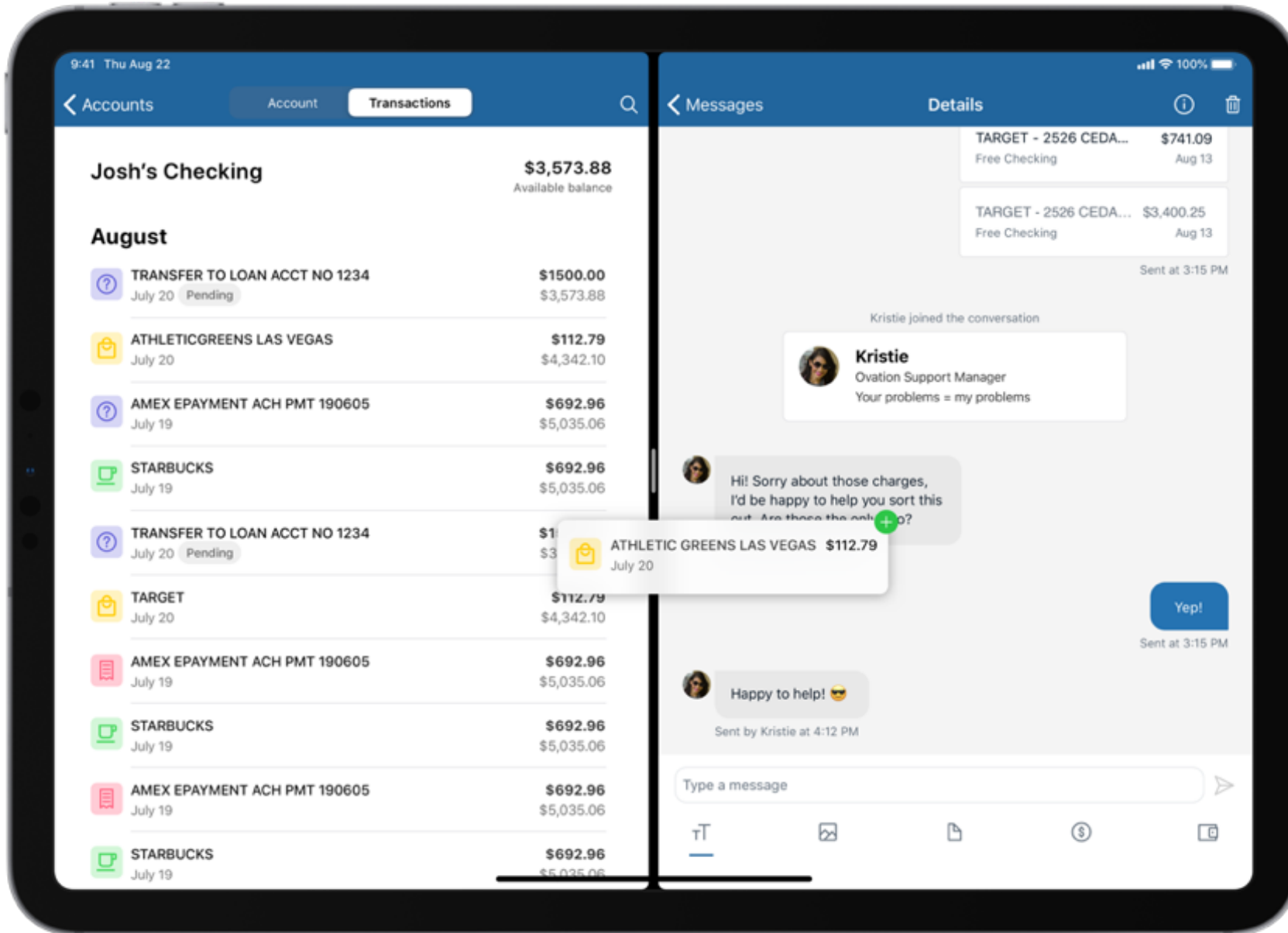


More



Type a message

Send



Attach  
context

Less typing,  
more helping

Dragging and dropping accounts and transactions provides clarity in less time.

MUNDANE PAYMENTS	MEANINGFUL PAYMENTS
Commoditized P2P and POS	Biggest opportunity to <b>strategically differentiate</b> on service in digital
Tablestakes	<b>Target highest stakes transactions:</b> business payments, high-dollar payments, milestone payments, wires and wealth payments
Must <b>match competition (or be top-of-wallet)</b> to remain relevant, win moments of need, and <b>maintain relationship as primary financial institution.</b> (card-enable billpay)	Must offer <b>live, local, personal service at the moment of need</b> by integrating conversational channels in digital banking that are already authenticated and transactionalized (i.e., directly connected to core).
Must <b>enable or have visibility into mundane payments</b> because data is the onramp to not just relevance BUT REVENUE in the future.	Lever meaningful payments to <b>drive sales in the context of service</b> (inside of personal digital interactions), i.e., inside personal service

**Make the most of  
meaningful payments...**



...and make **meaning** of  
**the mundane** payments...



# The end of bolt-on PFM

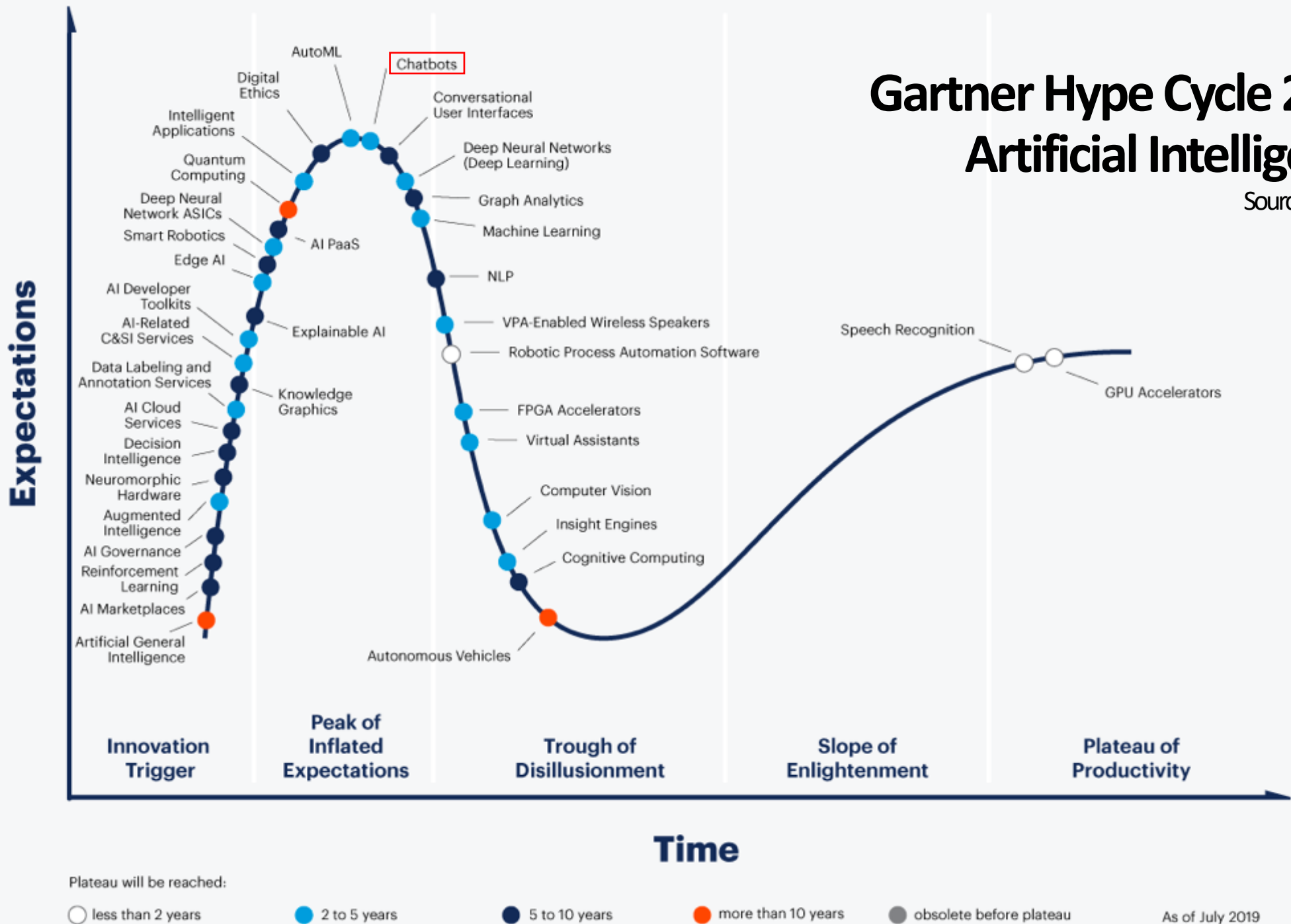
In-line transaction enrichment and financial management should be native to digital banking...because they are integral to making meaning of mundane payments over time.

# Technological disruption...

# Gartner Hype Cycle 2019

## Artificial Intelligence

Source: Gartner



# The Chatbot Continuum

Dedicated Human Concierge



Fully Automated AI Assistant

2

# big trends in digital banking



1

# Commodization of digital banking

2

# Bot-omation

of digital banking

2

# approaches to digital banking

1

**Make technology  
seem more human.**



# FaceMe.®

Intelligent Digital Human Platform



2

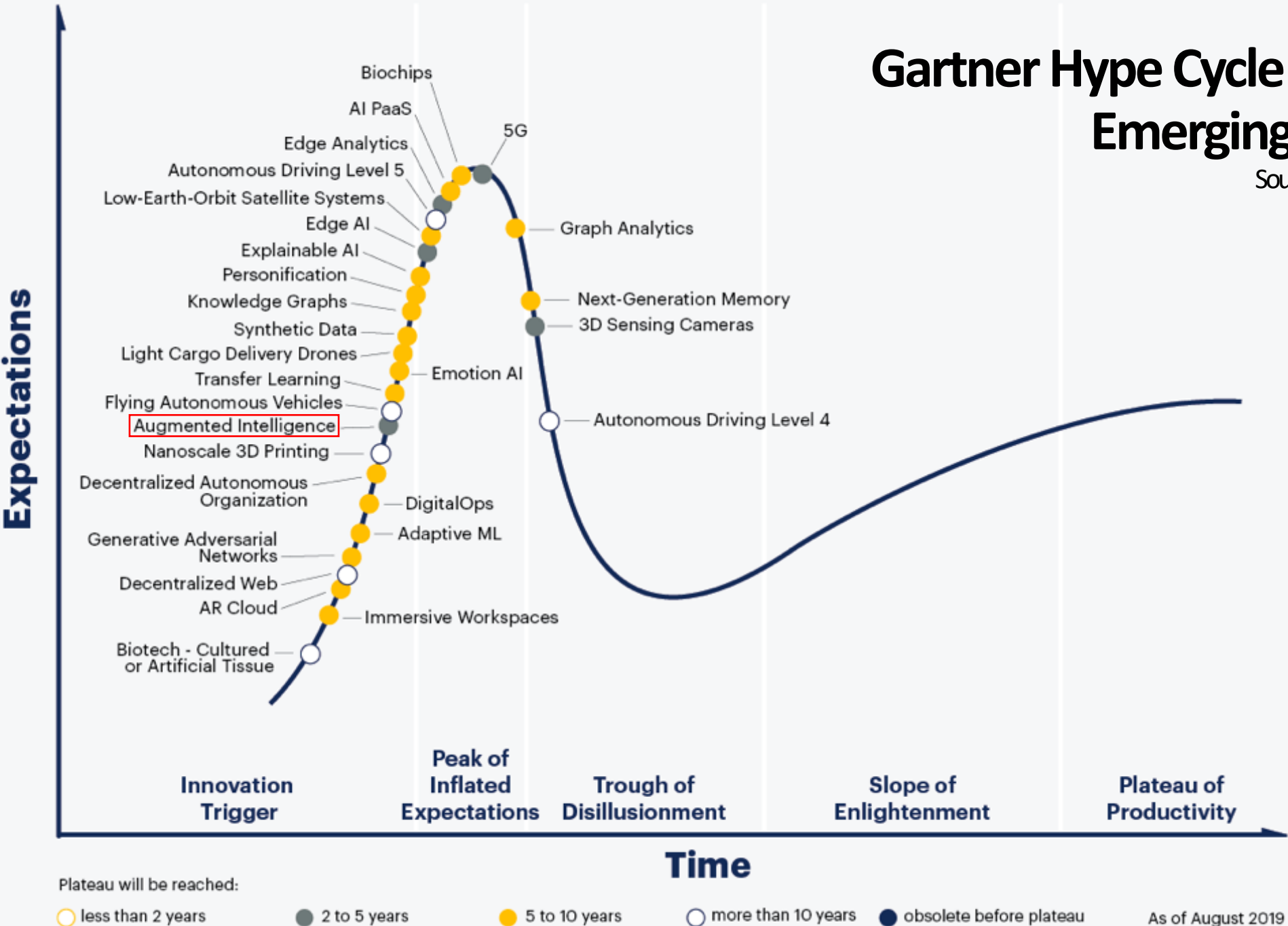
Use technology to  
extend our humanity.

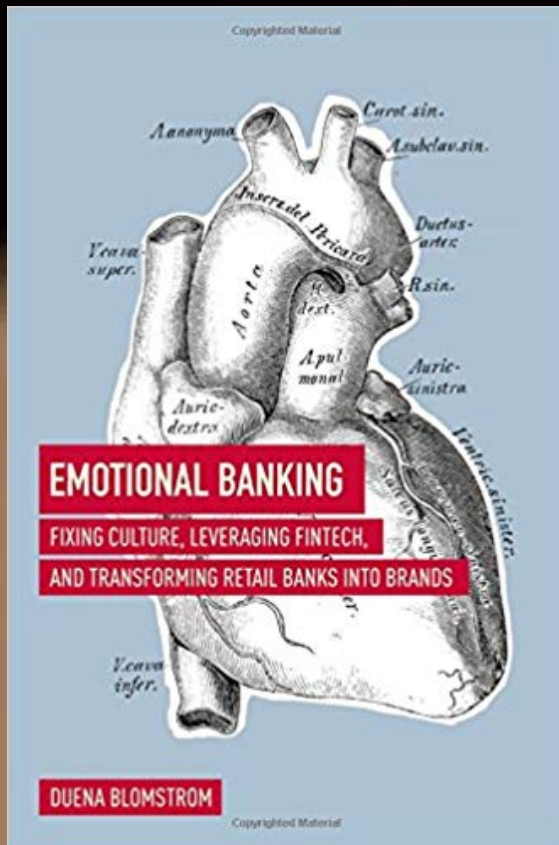


# Gartner Hype Cycle 2019

## Emerging Tech

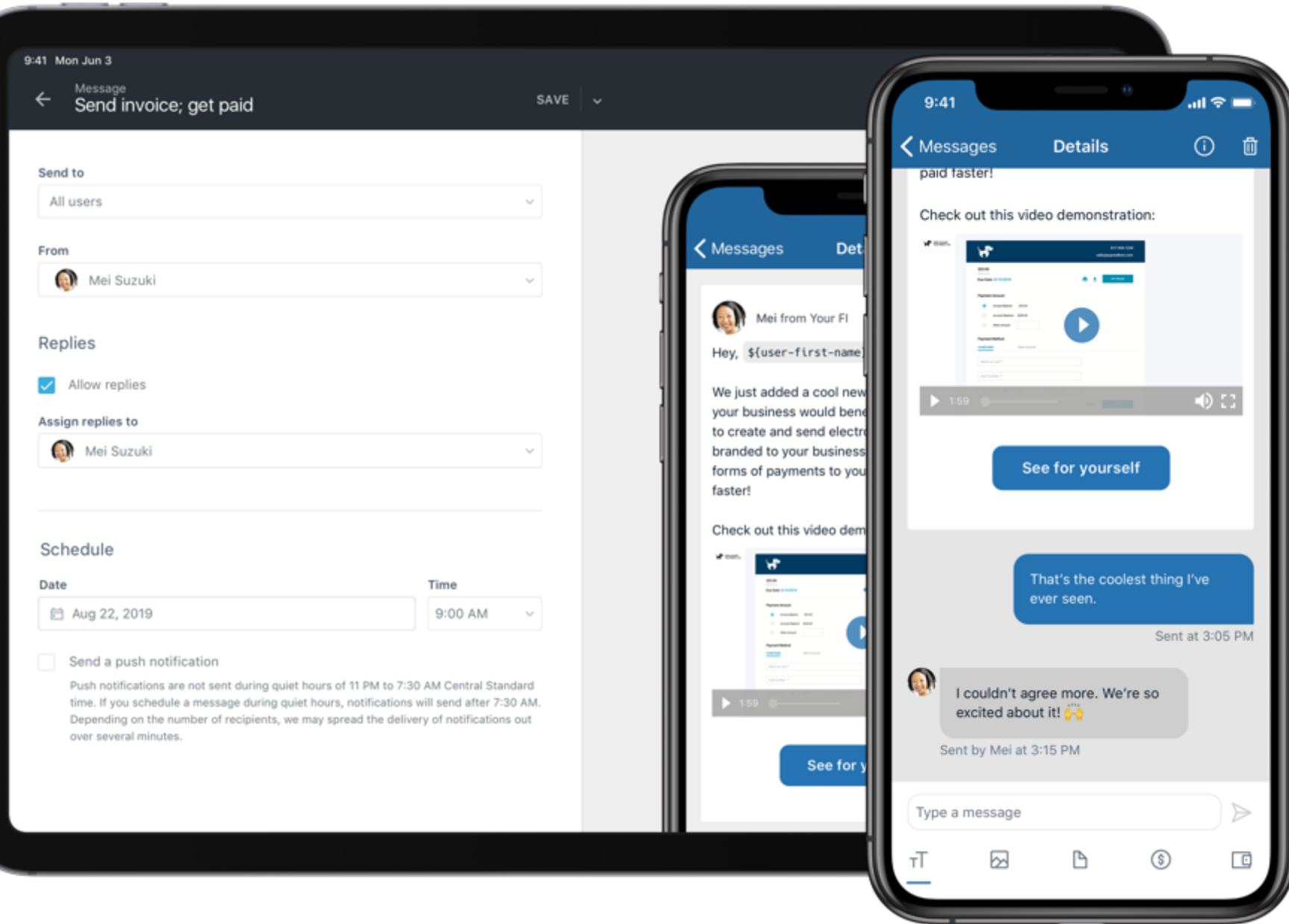
Source: Gartner





“Technology **without the human component** will simply deliver bad experiences faster.”


Duena Blomstrom  
Author, Emotional Banking



## Sales in the context of service

Community banks have always been able to sell in the context of in-person service, so translating in-person service inside digital channels is key to transforming digital banking into a revenue channel instead of a cost channel..



A woman with short blonde hair and blue-rimmed glasses, wearing a blue textured jacket and a gold necklace with circular pendants, is smiling and speaking. Her hands are clasped in front of her. The background is a modern interior with wood-paneled walls and a staircase with a metal railing.

“More and more, **the cost of poor service is huge**. There’s complete zero tolerance for it. And when you do make a mistake, it’s all over social media. **Confident, competent people are the only thing that can deliver flawless execution.**”

**Cathy Bessant**

Chief Operations & Technology Officer  
Bank of America



# Lee Wetherington

**lwetherington@jackhenry.com**

**<http://discover.jackhenry.com/lee-wetherington>**



**<http://www.linkedin.com/in/leewetherington>**



**@leewetherington**