The Future of Fintech
ABOUT CB INSIGHTS
WE TELL YOU WHERE THE TECHNOLOGY IS GOING

CB Insights organizes massive amounts of information so that our clients can discover, predict, and communicate coming technology trends.

www.cbinsights.com
TRUSTED BY THE INDUSTRY’S SMARTEST TEAMS
The most publicly reference-able customers of anyone in the industry

“CB Insights’ intuitive user interface, analytical capabilities, and detailed investment information create a very powerful tool for our team’s research needs.”
Nate D’Anna
Corporate Development
Cisco

“CB Insights provides our team with a holistic and thematic approach that really captures market activity….we’ve found CBI to have the best access for the most accurate market view.”
Jack Leeney
Portfolio Manager
Telefonica Ventures

“We have been looking for a tool that could give us the ability to track, research and identify investment opportunities. CB Insights provides this simply and in a simple, easy to use interface. The depth of information that we get is exactly what we need. Great product.”
Jonathan Tudor
Ventures Director
Castrol innoVentures

“We’re using CB Insights at Salesforce Ventures to analyze industry trends that are relevant to our strategy. It’s helped improve our efficiency.”
Matt Garratt
Sr. Director, Corporate Development
Salesforce Ventures

“Designed by a VC insider who truly knows the space and understands end-user needs.”
Greg Bae
Investments & Biz Dev
Comcast Ventures

“We’re using CB Insights at Salesforce Ventures to analyze industry trends that are relevant to our strategy. It’s helped improve our efficiency.”
Matt Garratt
Sr. Director, Corporate Development
Salesforce Ventures

“Designed by a VC insider who truly knows the space and understands end-user needs.”
Greg Bae
Investments & Biz Dev
Comcast Ventures

“CB Insights perfectly illustrates what I expect today from such online services to stay tuned to our fast-changing Tech Landscape. Accurate and up-to-date data mash-ups, intuitive UIs, smart data visualization capabilities and direct API access… all packaged together with straightforward pricing.”
Simon Mencarelli
Senior Manager, Strategic Planning
Dassault Systems

See what other customers have to say at
http://www.cbinsights.com/customer-love

#FutureFintech
WITHOUT DATA
YOU'RE JUST ANOTHER PERSON
WITH AN OPINION

W. EDWARDS DEMING
THE FASTER PACE OF DISRUPTION
Some perspective on how fast things are moving
FOMO
(fear of missing out)
WHAT MOTIVATES YOUR ORGANIZATION?

FOGS

(fear of getting screwed)
See How Our Data Can Work For You
“A startup is a temporary organization used to search for a repeatable and scalable business model.”

Steve Blank
“A startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty.”

Eric Ries
WHAT IS A STARTUP?

STARTUPS ARE EXPERIMENTS
In the last 5 years, there have been 38,135 early-stage startup financings to these “experiments” (Seed, Series A only according to CB Insights)
TODAY’S EMERGING BUSINESS MODELS & STARTUPS BECOME TOMORROW’S PROBLEMS

Source: Clay Christensen Framework

#FutureFintech
IT’S HARDER THAN EVER TO STAY ON TOP....

Average company lifespan on S&P 500 Index (in years)

Year (each data point represents a rolling 7-year average of average lifespan)

Data: INNOSIGHT/Richard N. Foster/Standard & Poor’s

Projections based on current data
...AND THE THREATS ARE MULTIPLYING

Cost to Launch a Tech Startup

- 2000: $5,000,000
- 2005: $500,000 (Open source and horizontal scaling)
- 2009: $50,000 (Cloud and AWS)
- 2011: $5,000

Source: Upfront Ventures
TECHNOLOGY ADOPTION IS QUicker THAN EVER
WHATSAPP USER GROWTH?
THIS IS NOT A ‘TECH INDUSTRY’ THING

AirBnB vs. Public Competitors: Valuations Over Time ($B)

Source: https://www.cbinsights.com/blog/airbnb-hospitality-industry-valuation-breakdown/
UNBUNDLING P&G

Unbundling Procter & Gamble

[Diagram showing various brands and companies connected to P&G]

#FutureFintech
UNBUNDLING FEDEX
UNBUNDLING THE HOTEL

Startups That Are Unbundling The Hotel

Created by CB INSIGHTS
www.cbinsights.com

Budget Hotel Networks
- Treebo
- WUDSTAY
- Oyo Rooms
- ZEN Rooms
- Zo Rooms

Weddings
- NUREN
- wedding spot
- wedding id

Events/Meetings
- Breather
- groupize
- PEERSPACE
- EVENTOP
- Venues
- Venuemob
- Eventbrite

Alternative Lodging
- tripping
- Homestay
- WIMDU
- TRIP

Concierge Services
- Magic
- GOOD SERVICE
- headout
- Operator
- HOTEL CLOUD
See How Our Data Can Work For You

START MY TRIAL
BANK UNBUNDLING TAKES HOLD (USA)
UNBUNDLING A EUROPEAN BANK
THE STRUGGLE IS REAL
IT’S NOT GODZILLA VS KING KONG

Incumbents often spend time worried about basis points traded among large peers
A NEW ENEMY?
DEATH BY A THOUSAND CUTS

A number of hyper-targeted offerings are coming and what we’ve seen in history is when startups succeed, they don’t take basis points from you, they take commas away.
“They don’t have our balance sheet….”

“Our brand is trusted…”

“Supply chain is complex…”

“This is a highly regulated industry….”

“We’ve been doing this for 140 years….”

“Clients trust us. They won’t trust some startup….”

“We have a cost advantage….”

“Our risk management capabilities are proven….”
THE END STATE FOR MOST STARTUPS IS FAILURE

Source: https://www.cbinsights.com/blog/venture-capital-funnel

#FutureFintech
TONS OF STARTUPS THAT MIGHT IMPACT YOUR INDUSTRY WILL FAIL
IT’S THE ONES THAT SURVIVE THAT BECOME THE PROBLEM
YOUR RESPONSE TO DISRUPTIVE, EMERGING THREATS WILL BE DRIVEN BY YOUR ORGANIZATION’S PERSONALITY

Are you focused on defense…

…or offense?

FOGS

FOMO
THE HOT & CROWDED FINTECH SPACE
State of the union
FINANCIAL SERVICES IS A MASSIVE PART OF THE US AND GLOBAL ECONOMIES

Figure 1: Financial Sector as Percentage of U.S. GDP: 1850–2009

THAT’S A BIG MARKET YOU GOT THERE

THE FINTECH BOOM

Over the last decade, this massive market opportunity coupled with shifts in technology, demographics, and consumer expectations has made the idea of disrupting financial services more feasible in the minds of investors and startups.
TECHNOLOGY: THE MULTI-TRILLION DOLLAR FINANCIAL SERVICES MARKET STILL LARGELY OFFLINE

Source: Ribbit Capital

#FutureFintech
See How Our Data Can Work For You
TECHNOLOGY: MOBILE DISTRIBUTION ALLOWS UPSTART FINTECH COMPANIES TO GO DIRECT TO CONSUMER

App Store Breakdown of Top 100 “Finance” Apps

Private VC-backed Apps in Top 100 in 2011

Private VC-backed Apps in Top 100 in 2013

Private VC-backed Apps in Top 100 in 2016

Source: App Store analysis
DEMOGRAPHICS: WHEN IT COMES TO FINANCIAL SERVICES, MILLENNIALS THINK DIFFERENTLY

18% Switched from their primary bank in the past 12 months

40% Would consider banking with Google

59% Think financial products are not targeted at them

79% View relationship with their bank as “transactional”

Source: Accenture, BNY Mellon
SERVICE: INCUMBENT FINANCIAL SERVICES FIRMS VIEWED UNFAVORABLY VERSUS MANY OF THE NEW BREED

Net Promoter Score (NPS)

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Banks</td>
<td>3</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>9</td>
</tr>
<tr>
<td>Regional Banks</td>
<td>21</td>
</tr>
<tr>
<td>Community Banks</td>
<td>48</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: Bain, Lending Club, Nubank

#FutureFintech
“Silicon Valley is coming. There are hundreds of startups with a lot of brains and money working on various alternatives to traditional banking. They are very good at reducing the ‘pain points’…”

Jamie Dimon
JPMorgan Chase & Co.
Chairman & Chief Executive Officer
April 2015

Source: 2015 JPMorgan Annual Letter
BANKING’S UBER MOMENT: WILL PHYSICAL BANKING GO THE WAY OF TRAVEL, MUSIC AND VIDEO?

Source: Citi Research
## Exhibit 1: Profit pools at risk

<table>
<thead>
<tr>
<th>Type</th>
<th>Total market size</th>
<th>Market size type</th>
<th>% inside banking system</th>
<th>Amount in banking system</th>
<th>% in banking system at risk of leaving</th>
<th>Amount at banks at risk of leaving</th>
<th>Total banking profit pool at risk</th>
<th>Select disruptors / new entrants</th>
<th>Competitive advantage?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured personal lending</td>
<td>$843bn</td>
<td>Loans O/S</td>
<td>61%</td>
<td>$683bn</td>
<td>31%</td>
<td>$209bn</td>
<td>$4.6bn</td>
<td>Lending Club, Prosper, OnDeck, Kabbage</td>
<td>Lower capital requirement, technology (drives time, convenience)</td>
</tr>
<tr>
<td>Small business loans</td>
<td>$186bn</td>
<td>Loans O/S</td>
<td>33%</td>
<td>$177bn</td>
<td>100%</td>
<td>$177bn</td>
<td>$1.6bn</td>
<td>Alternative AM, BDCs, SoFi, Earnest, CommonBond</td>
<td>Regulatory, technology, convenience</td>
</tr>
<tr>
<td>Leveraged lending</td>
<td>$832bn</td>
<td>Loans O/S</td>
<td>7%</td>
<td>$57bn</td>
<td>34%</td>
<td>$19bn</td>
<td>$0.9bn</td>
<td>Quicker, PFSI, Freedom, OCN, NSM, WAC, Comm. mREITS, alt. lenders</td>
<td>Regulatory, cost, market dislocation</td>
</tr>
<tr>
<td>Student lending</td>
<td>$1,222bn</td>
<td>Loans O/S</td>
<td>5%</td>
<td>$65bn</td>
<td>100%</td>
<td>$65bn</td>
<td>$0.7bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortgage origination</td>
<td>$1,169bn</td>
<td>Ann’l volume</td>
<td>58%</td>
<td>$678bn</td>
<td>100%</td>
<td>$678bn</td>
<td>$2.1bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortgage servicing</td>
<td>$6,589bn</td>
<td>Loans O/S</td>
<td>73%</td>
<td>$4,810bn</td>
<td>6%</td>
<td>$300bn</td>
<td>$0.1bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRE lending</td>
<td>$2,354bn</td>
<td>Loans O/S</td>
<td>56%</td>
<td>$1,322bn</td>
<td>9%</td>
<td>$118bn</td>
<td>$0.8bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,195bn</strong></td>
<td></td>
<td><strong>69%</strong></td>
<td><strong>$7,792bn</strong></td>
<td><strong>20%</strong></td>
<td><strong>$1,566bn</strong></td>
<td><strong>$10.9bn</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Goldman Sachs Global Investment Research estimates.
Since 2011, VC-backed fintech companies raised $34.4B across 3,006 deals.
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
Q4’15 saw a huge dip in fintech investment, but funding and deals rebounded in 2016 YTD.
NORTH AMERICA SAW FINTECH FUNDING AND DEALS BOUNCE BACK IN Q1’16

North American Quarterly Financing Trends to VC-Backed Fintech Companies

Q1’15 – Q1’16

- Q1'15: 116, $1.8 billion
- Q2'15: 131, $2.5 billion
- Q3'15: 110, $2.7 billion
- Q4'15: 103, $1.0 billion
- Q1'16: 128, $1.8 billion


#FutureFintech
ASIA FINTECH FUNDING HITS ALL TIME QUARTERLY HIGH IN Q1’16

Asian Quarterly Financing Trends to VC-Backed Companies

Q1’15 – Q1’16


#FutureFintech
EUROPEAN FINTECH STARTUPS HAVE NOT SEEN THE SAME ENTHUSIASM AS USA AND ASIAN PEERS

European Annual Financing Trends to VC-Backed Fintech Companies
Q1’15 – Q1’16

DEAL ACTIVITY IS STRONG BUT SO ARE MAJOR FINANCING ROUNDS TO FINTECH COMPANIES

$50M+ Financings to VC-Backed Fintech Companies
North America vs. Asia vs. Europe, Q1’15 – Q1’16

CORPORATES PARTICIPATE IN 1 OF EVERY 4 FINTECH DEALS

Corporate Participation in Global Deals to VC-backed Fintech Companies

Q1’15 – Q1’16

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Other Investors</th>
<th>Corp / CVC Deal Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1’15</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>Q2’15</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>Q3’15</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td>Q4’15</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Q1’16</td>
<td>74%</td>
<td>26%</td>
</tr>
</tbody>
</table>

GOLDMAN SACHS, Citi, SANTANDER LEAD PACK OF BANKS IN FINTECH INVESTING

Major Bank Investments to VC-backed Fintech Companies

Q1’15 – Q1’16

14 NEW GLOBAL FINTECH UNICORNS BIRTHED IN 2015; BUT 2016 HAS SEEN BIRTHRATE GOTO ZERO

New Global Fintech Unicorns By Year
2011 – 2016 YTD

*Data does not include Alibaba and JD affiliates Ant Financial and JD Finance

#FutureFintech
20 FINTECH UNICORNS TODAY VALUED AT $68B; 15 IN PAYMENTS OR LENDING…INSURANCE FOLLOWS BEHIND

Global Fintech Unicorns By Category

$B

*Data does not include Alibaba and JD affiliates Ant Financial and JD Finance*
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
FINTECH COMPANY PERFORMANCE POST-IPO HAS BEEN LACKLUSTER

Fintech IPO Performance
Lending Club, OnDeck Capital, Square
OVERALL EXIT NUMBERS FOR VC-BACKED FINTECH STARTUPS HAS ALSO REMAINED RANGE-BOUND

VC-Backed Fintech Exit Trend
Q1’11 – Q1’16

#FutureFintech
THE SMART MONEY VCs STILL MAKING BETS IN FINTECH AND ARE ON TRACK FOR 2014 HIGH

Smart Money VC Fintech Deal Activity
2011 - 2016 YTD (Q1'16)


2016 run-rate

Source: CB Insights
WHERE IS THE ‘SMART MONEY’ INVESTING IN FINTECH?

PoS Credit/Alternative Lending

Real Estate

Insurance Tech

Institutional Investing Tools/Data

Source: CB Insights
BREAKING DOWN FINTECH INVESTMENT
BITCOIN & BLOCKCHAIN
**PRICE OF BITCOIN PASSED $570 FOR FIRST TIME SINCE AUGUST 2014**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>577.48 USD</td>
<td>-7.01 USD</td>
<td>-1.20%</td>
<td>577.48 - 577.48 USD</td>
<td>577.48 USD</td>
<td>6702 BTC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Cap:</th>
<th>Total BTC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,027,152,923.00 USD</td>
<td>15,631,975 BTC</td>
</tr>
</tbody>
</table>

Source: BitStamp
HOWEVER, INTEREST HAS SHIFTED FROM BITCOIN TO BLOCKCHAIN BASED ON MEDIA CHATTER

Source: CB Insights Trends mining of media chatter

#FutureFintech
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
AND INVESTMENT/DEALS HAVE ALSO SHIFTED AWAY FROM WALLETS, MINING AND EXCHANGES TO BLOCKCHAIN

**Unblocked**
Venture-capital funding for:
$m

- Bitcoin startups
- Blockchain startups

Source: CB Insights

Economist.com
STRATEGIC INVESTMENT BOOM BUOYING THE BLOCKCHAIN SPACE

Funding to Top 5 Largest Blockchain/Bitcoin Deals
By Corporate Involvement, 2013 - 2016 YTD

2013: $54.0
2014: $161.5
2015: $298.0
2016 YTD: $131.0

Funding Not Involving Corporates
Funding Involving Corporates
INCREDIBLE DIVERSITY OF FINANCIAL SERVICES PLAYERS INVESTING IN BLOCKCHAIN AND BITCOIN

The Financial Services and Strategic Investors in Blockchain and Bitcoin Startups
WEALTH MANAGEMENT & PERSONAL SAVINGS
AUTOMATED WEALTH MANAGEMENT: RAPID GROWTH, BUT STILL A FRACTION OF THE TOTAL MARKET

Source: Wealthfront
US ROBO-ADVISOR AUM TO SURPASS $2 TRILLION BY 2020

Source: A.T. Kearney

#FutureFintech
MONEY CONTINUES TO FLOW INTO THE ROBO SPACE

Robo-Adviser Betterment Sees $700 Million Valuation After New Round of Funding

Personal Capital scores $75M boost despite escalating competition

Hedgeable

motifINVESTING

KAPITALL

Aspiration

CASHBOARD

STASH

bloom

scalable

capital

PayPal leads $30 million round in Acorns investing app

Acquired

LV LEARNVEST

TradeKing

FutureAdvisor

covestor

#FutureFintech
WEALTHFRONT, BETTERMENT: FROM $0 AUM TO $3B+ AUM IN 2016…

Source: FP Pad, Company filings
...BUT AUM GROWTH IS SLOWING

Bit disappointing
Assets under management
% increase on previous month*

Sources: Company reports; SEC; The Economist
†Based on latest estimate of $2.9bn AUM

Economist.com
INCUMBENTS HAVE BEEN QUICK TO TAKE ACTION
(Doing vs Just Knowing)

2015 Q4 2015 Q3 2015 Q2 2015 Q1 2014 Q4

#1 Vanguard
$31B $26B $21B $17B N/A

#2 Schwab
5.3 4.1 3 0.8 N/A

#3 Betterment
3.3 2.6 2.3 1.7 1.1

#4 Wealthfront
2.8 2.5 2.4 2.1 1.7

Source: Investment News

#FutureFintech
AUTOMATED SAVINGS APPS BRING MOBILE-ONLY APPROACH TO ROBO SPACE

Acorns Growth of Automated Investment Accounts

AUM Comparison

$150 Million  $4 Billion

App Store launch

10,000
August 2014

300,000
April 2015

850,000
April 2016

Source: Media citations, *WSJ*
“Stand-alone firms will need $16 billion to $40 billion of net assets to break even. Moreover, [Morningstar] estimates … a $1,000 cost to add a new account, after factoring in attrition, and up to a decade to recoup marketing costs. It will be hard for robo-firms to self-finance their growth.”

Joe Mansueto
CEO, Morningstar

Source: LinkedIn Pulse
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
GIVEN SCALE REQUIREMENTS, SOME PLAYERS ARE BEING PICKED UP BY INCUMBENTS FOR TECHNOLOGY

Jan 2015

- Northwestern Mutual acquires
- LearnVest

June 2015

- Fidelity acquires
- FutureAdvisor
- BlackRock acquires
- John Hancock acquires

Jan 2016

- eMoney acquires
- guide
- Invesco acquires
- Honest Dollar acquires
- ally acquires
- Jemstep
- TradeKing

June 2016

Jan 2015

- Interactive Brokers acquires
- Covestor

June 2015

- FutureAdvisor

Jan 2016

- BlackRock
- John Hancock

June 2016

- Fidelity
- Northwestern Mutual
- LearnVest

#FutureFintech
2016: PAYPAL ENTERS THE FORTUNE 500

PILLARS OF A NEW PAYPAL

PayPal is still dominant in website-based e-commerce, but its future may hinge on services like these:

**PROCESSING**
In 2013, PayPal bought Braintree, which processed $50 billion worth of mobile and digital payments last year for the likes of Airbnb, Uber, and StubHub.
**COMPETITORS:** Stripe, Ayden, ChasePaymentech

**REMITTANCES**
The money-transfer app Xoom, which PayPal bought in 2015, lets people in the U.S. send money easily to family members and others in 53 countries.
**COMPETITORS:** Western Union, Ria Financial

**PEER-TO-PEER**
If a millennial has recently urged you to Venmo her some money, you’ve been interacting with the PayPal empire. Venmo, which PayPal obtained in the Braintree acquisition, lets users send money quickly to each other; PayPal is extending the service into consumer-to-merchant payments.
**COMPETITORS:** Square Cash, Facebook Messenger, Google Wallet

**CREDIT LINES**
PayPal Credit lets shoppers postpone payment and carry a balance, interest-free; after six months, a 19% interest rate kicks in.
**COMPETITORS:** Mastercard, Visa, American Express, Affirm

Source: Fortune
VENMO PAYMENT VOLUME: FROM $1.25B IN Q1’15 TO $3.2B IN Q1’16

Source: re/code
ADYEN PROCESSES $50B IN 2015; FLIES UNDER THE RADAR AMONG PAYMENT UNICORNS

Payments processor Adyen says it doubled revenues to $350M in 2015, now handling $50B in transactions

Source: re/code
EARLY STAGE DEAL ACTIVITY REMAINS STRONG IN PAYMENTS

VC-Backed Payments Tech Early-Stage Financing Trend
Q1’11 – Q4’15

Funding Amount ($)  Number of Deals

<table>
<thead>
<tr>
<th>Year</th>
<th>Funding Amount ($)</th>
<th>Number of Deals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$116.5M</td>
<td>45</td>
</tr>
<tr>
<td>2012</td>
<td>$246M</td>
<td>77</td>
</tr>
<tr>
<td>2013</td>
<td>$249.4M</td>
<td>90</td>
</tr>
<tr>
<td>2014</td>
<td>$412M</td>
<td>97</td>
</tr>
<tr>
<td>2015</td>
<td>$289.8M</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: CB Insights / cbinsights.com

#FutureFintech
VENTURE FUNDING TO MONEY TRANSFER STARTUPS HITS HIGH IN 2015

Money Transfer Funding and Deal Trend
2011 – 2015

Source: CB Insights / cbinsights.com

#FutureFintech
WILL A VENTURE-BACKED WINNER EMERGE IN THE MONEY TRANSFER RACE?

Source: SaveOnSend, May 2016
WHERE VISA IS ACQUIRING AND INVESTING?

Blockchain
- Chain
- Better Than Cash
- DocuSign

Payments Processing
- PlaySpan
- Fundamo
- Stripe
- Square
- SecureKey Technologies
- LoopPay
- Yub
- Trialpay
WHERE IS MASTERCARD IS ACQUIRING AND INVESTING

- Blockchain
- Mobile commerce
WHERE AMERICAN EXPRESS IS ACQUIRING AND INVESTING

Verification
Blockchain
eCommerce
Payments
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
INSURANCE TECH
“Insurance is an industry that has been lagging behind every other industry – it has been paralyzed. Either you understand it and you move towards the forefront of change...or this industry will disappear.”

Mario Greco
Zurich Insurance Group
Chief Executive Officer
May 2015

Source: FT
Global life insurance premiums: $2.7 TRILLION

Global non-life insurance premiums: $1.4 TRILLION

Source: McKinsey
MAJOR SHIFTS IN
Consumer expectations
Digital buying options
Product relevance
SERVICE EXPECTATIONS: CUSTOMERS ARE DISSATISFIED WITH THE ONLINE EXPERIENCE OF THEIR INSURERS

Source: BCG/Morgan Stanley
TECHNOLOGY: GROWING MARKET FOR INSURANCE TO BE SOLD ONLINE

Digital Underwriting in the US Small Business Insurance Market

- 2014: 96% (4%) through traditional channels, 4% through digital channels
- 2015: 96% (4%) through traditional channels, 4% through digital channels
- 2016E: 92% (8%) through traditional channels, 8% through digital channels
- 2017E: 87% (13%) through traditional channels, 13% through digital channels
- 2018E: 83% (17%) through traditional channels, 17% through digital channels

Source: BCG
PRODUCT: HAVE INSURANCE PRODUCTS EVOLVED WITH CURRENT DEMOGRAPHIC AND PSYCHOGRAPHIC PREFERENCES?

The Long Decline of Life Insurance
Individual life insurance policies purchased in the U.S.

American Council of Life Insurers Fact Book 2015

#FutureFintech
INSURANCE TECH INVESTMENT: FROM $131M IN 2011 TO $2.7B IN 2015
INSURANCE TECH TAKES THREE OF TOP FIVE LARGEST US FINTECH FINANCINGS IN 2016 YTD…

### Largest US Fintech Deals 2016 YTD

<table>
<thead>
<tr>
<th>Co.</th>
<th>Amount ($M)</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oscar</strong></td>
<td>$400</td>
<td>Insurance</td>
</tr>
<tr>
<td><strong>Clover</strong></td>
<td>$165</td>
<td>Insurance</td>
</tr>
<tr>
<td><strong>Betterment</strong></td>
<td>$100</td>
<td>Wealth Management</td>
</tr>
<tr>
<td><strong>Affirm</strong></td>
<td>$100</td>
<td>Lending</td>
</tr>
<tr>
<td><strong>bright health</strong></td>
<td>$80</td>
<td>Insurance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co.</th>
<th>Amount ($M)</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stone Eagle</strong></td>
<td>$76</td>
<td>Payments</td>
</tr>
<tr>
<td><strong>Digital Asset Holdings</strong></td>
<td>$60</td>
<td>Blockchain</td>
</tr>
<tr>
<td><strong>ARIA</strong></td>
<td>$50</td>
<td>Payments</td>
</tr>
<tr>
<td><strong>LendUp</strong></td>
<td>$50</td>
<td>Lending</td>
</tr>
<tr>
<td><strong>Personal Capital</strong></td>
<td>$50</td>
<td>Wealth Management</td>
</tr>
</tbody>
</table>
...AND OVER HALF OF Q1’16 INSURANCE TECH DEALS WERE AT THE SEED-STAGE
THE INSURANCE TECH LANDSCAPE TODAY: STARTUPS DEVELOPING DISTRIBUTION OR NEW PRODUCTS
See How Our Data Can Work For You

START MY TRIAL

#FutureFintech
INSURANCE COMPANIES HAVE PURSUED A RECORD NUMBER OF TECH INVESTMENTS

![Insurance Companies and Tech Investments Chart]

- **2010**: 2 Corporate Insurance Deals, 2 Investment Run Rate
- **2011**: 0 Corporate Insurance Deals, 4 Investment Run Rate
- **2012**: 0 Corporate Insurance Deals
- **2013**: 4 Corporate Insurance Deals
- **2014**: 24 Corporate Insurance Deals, 55 Investment Run Rate
- **2015**: 55 Investment Run Rate, 18 Corporate Insurance Deals
- **2016 YTD**: 72 Investment Run Rate, 18 Corporate Insurance Deals

#FutureFintech
CONNECTION COVERED MAKES IOT STARTUPS A HOT AREA FOR INSURERS – UNDERWRITING AND CLAIMS PREVENTION

The Insurers Investing in Internet of Things Startups

<table>
<thead>
<tr>
<th>Insurer</th>
<th>Internet of Things Startup Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIG</td>
<td>human:condition, safety</td>
</tr>
<tr>
<td>AMERICAN FAMILY VENTURES</td>
<td>ring, keen, wireless registry, revolu, convient, snupi</td>
</tr>
<tr>
<td>AXA Strategic Ventures</td>
<td>artizm, neura, biobeats</td>
</tr>
<tr>
<td>AVIVA</td>
<td>coconon</td>
</tr>
<tr>
<td>intact</td>
<td>metromile</td>
</tr>
<tr>
<td>Liberty Mutual</td>
<td>helium, arcurry, waygum</td>
</tr>
<tr>
<td>USAA</td>
<td>precisionpark, roost, automatic</td>
</tr>
<tr>
<td>August</td>
<td>notion</td>
</tr>
<tr>
<td>MassMutual Ventures</td>
<td>ClinCloud</td>
</tr>
<tr>
<td>Ping An Ventures</td>
<td>notion</td>
</tr>
</tbody>
</table>

#FutureFintech
REINSURANCE GIANTS GETTING MORE INVOLVED

Startup and Accelerator Moves By Swiss Re & Munich Re

- January 2015
- June 2015
- December 2015
- June 2016
9 TRENDS WE’RE WATCHING IN FINTECH
CHAT BOT CRAZE HITS FINANCE

B of A’s New Customer Reps: ‘Chat Bots’ on Facebook Messenger

Penny raises $1.2M in seed funding for its personal finance bot

Earny nabs $1 million for a bot that gets you money back on purchases

DBS Bank becomes India’s first mobile-only bank, uses AI-based virtual assistant

Source: CB Insights Trends mining of media chatter
NEW PEER-TO-PEER MODELS GAIN ATTENTION IN INSURANCE...WILL CONSUMERS EMBRACE THEM?

Source: CB Insights Trends mining of media chatter
CROSS-BORDER INVESTORS ARE BUYING INTO US FINTECH COMPANIES

Number of Europe and Asia-based Investors in US Fintech Startups
2011 - 2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>46</td>
</tr>
<tr>
<td>2012</td>
<td>50</td>
</tr>
<tr>
<td>2013</td>
<td>55</td>
</tr>
<tr>
<td>2014</td>
<td>64</td>
</tr>
<tr>
<td>2015</td>
<td>83</td>
</tr>
</tbody>
</table>
THE IMPACT OF AI ON INSTITUTIONAL INVESTING: THE RISE OF AI-DRIVEN HEDGE FUND STARTUPS

Source: CB Insights Trends mining of media chatter
THE GLOBAL UNDERBANKED OPPORTUNITY

Lending & Credit Access

Payments & Money Transfers

Financial Mgmt. & Education

Online/Mobile Banking

#FutureFintech
See How Our Data Can Work For You

#FutureFintech
TECH’S BIG BOYS COMING FOR PAYMENTS

Source: CB Insights Trends mining of media chatter
REAL ESTATE CROWDFUNDING: WILL A VENTURE-BACKED WINNER EMERGE?
THE RISE OF DIGITAL CHALLENGER BANKS

Digital Challenger Banks
By total disclosed funding

- Atom Bank: $167.2
- Starling: $70.0
- Tandem: $35.1
- Mondo: $11.8
- Fidor: $5.0

#FutureFintech
EXCITEMENT AROUND BLOCKCHAIN EXTENDS TO APPLICATIONS IN MAJOR INDUSTRIES BEYOND BANKING
ABOUT CB INSIGHTS
WE TELL YOU WHERE THE TECHNOLOGY IS GOING

CB Insights organizes massive amounts of information so that our clients can discover, predict, and communicate coming technology trends.

www.cbinsights.com