



International Actuarial Association
Association Actuarielle Internationale



Institute of Actuaries of India
Statutory body established under an Act of Parliament



**21st Global
Conference
of Actuaries**

17th - 19th February 2020 | Mumbai, India

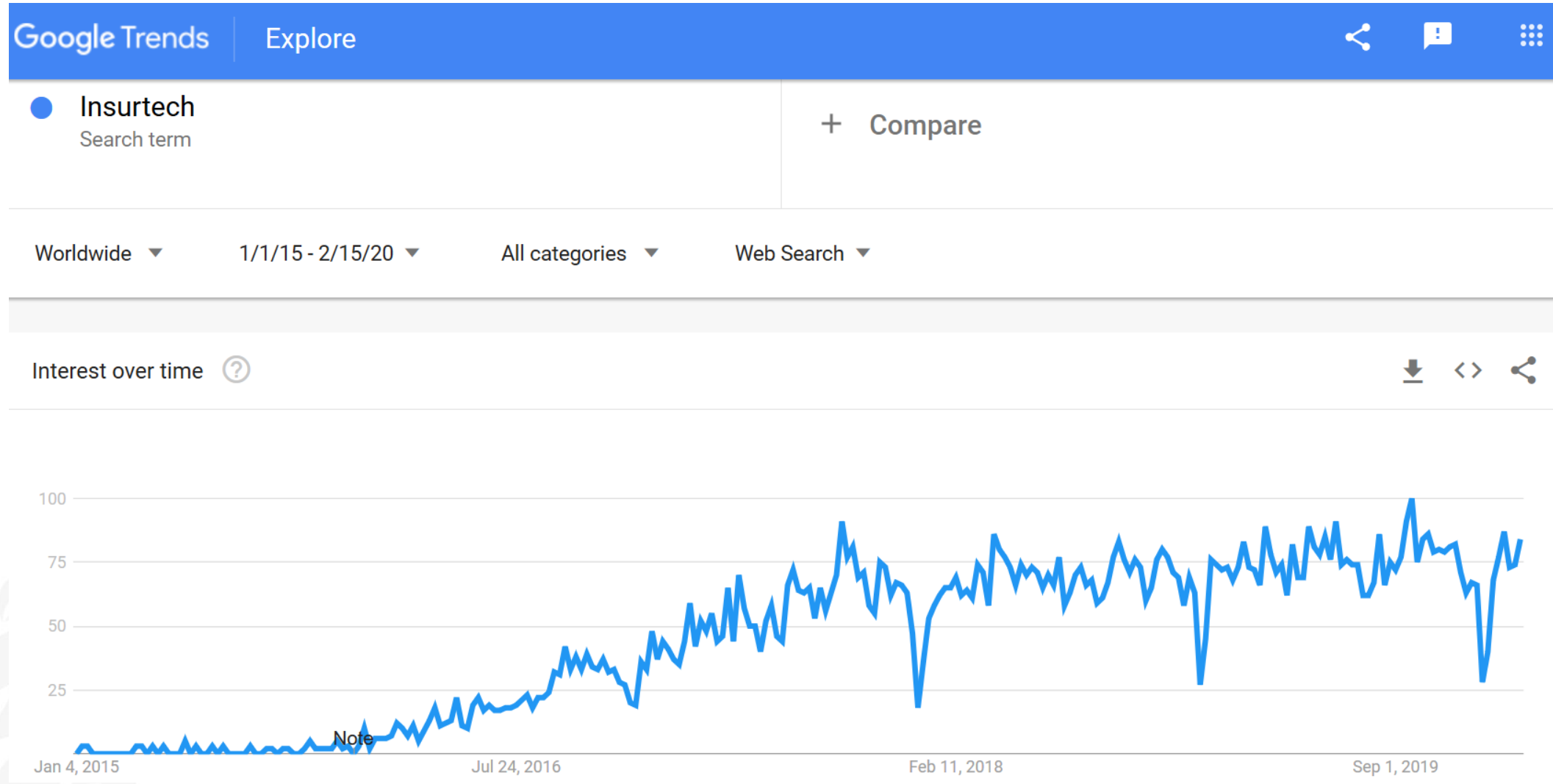
Insurtech – Bridging the Industry's Trust Gap

Karunanidhi M

Chief Actuary, RGA Middle East

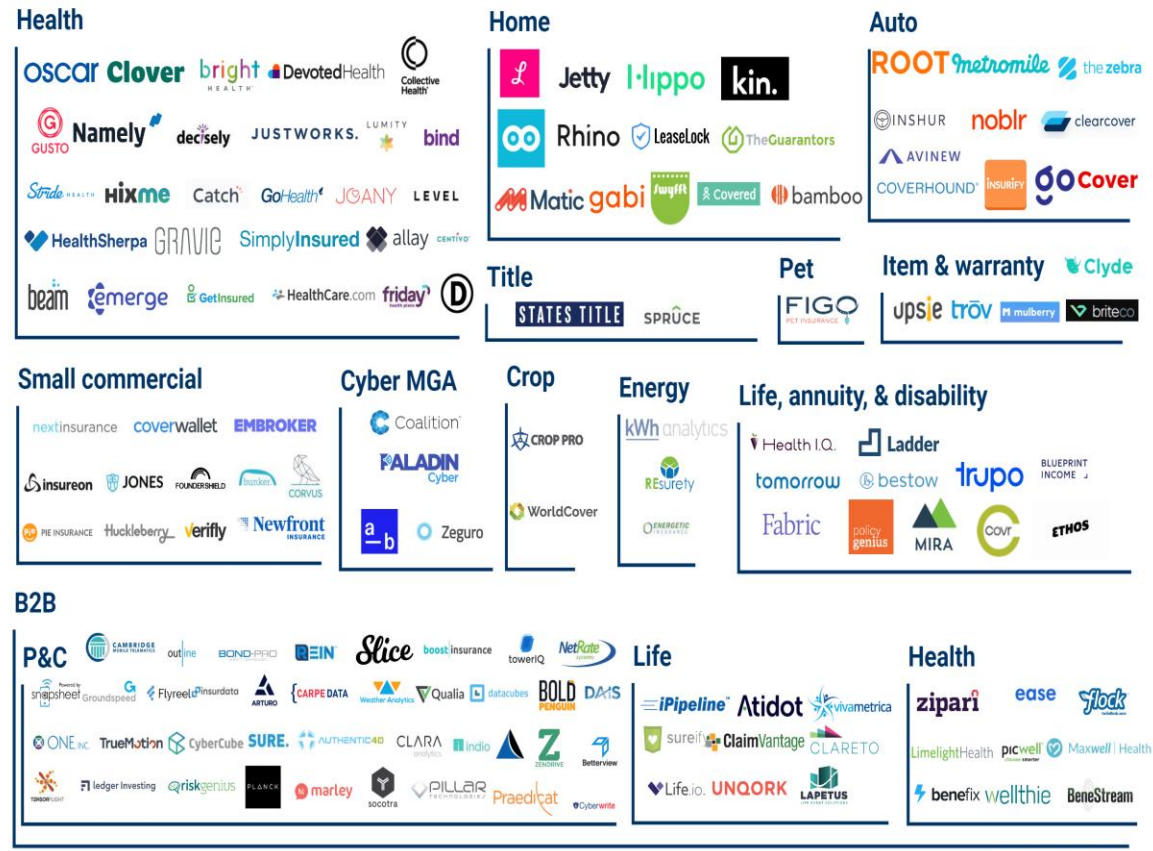
Date: 19 Feb
2020

PROLOGUE: RIDING THE INSURTECH WAVE

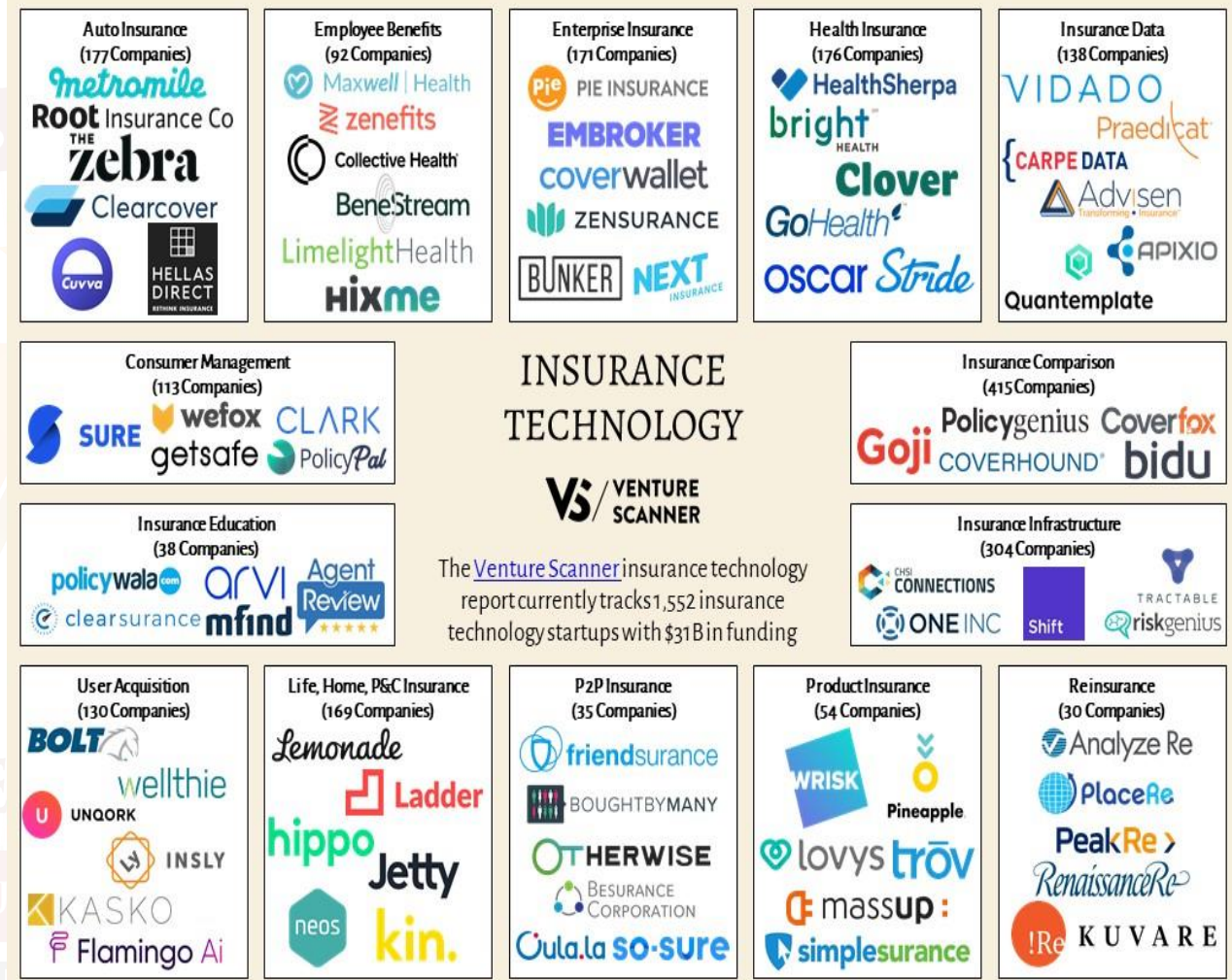


PROLOGUE: RIDING THE INSURTECH WAVE

US Insurance Tech Market Map



Created by You. Powered by CBINSIGHTS

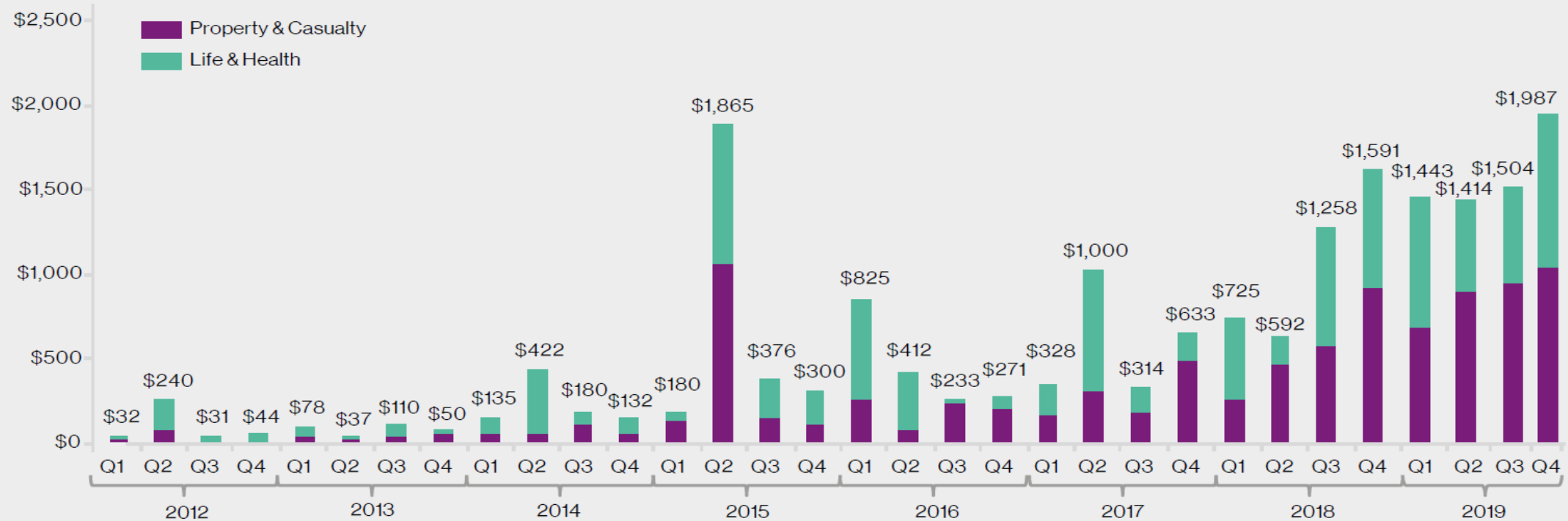


The graphic above shows only a sampling of companies in each category. Data cumulative through September 2019

PROLOGUE: RIDING THE INSURTECH WAVE

Quarterly InsurTech funding volume – all stages

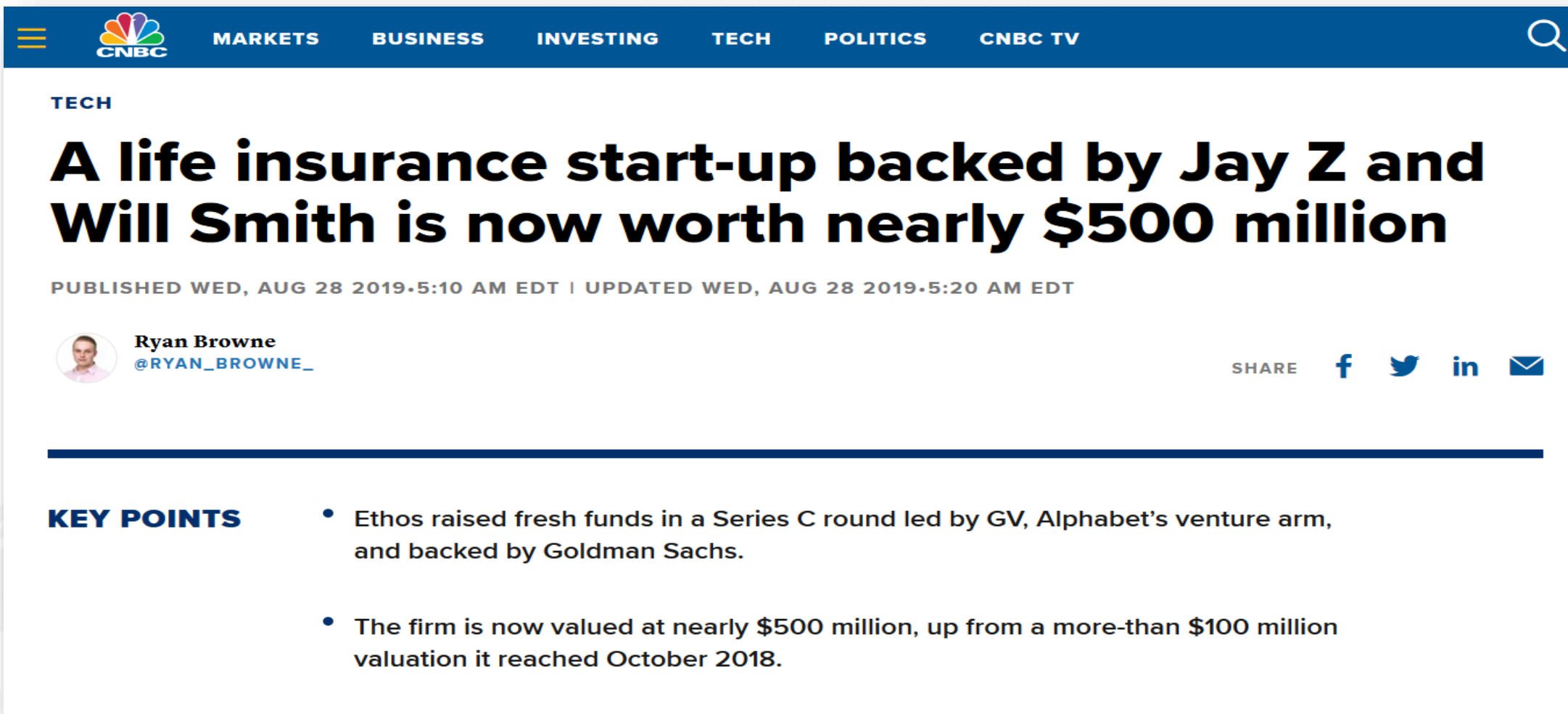
(\$ in millions)



Deal count

P&C:	5	3	4	4	5	4	12	9	10	7	16	8	17	13	16	21	44	18	33	29	26	37	29	45	45	46	40	41	58	49	52	40
L&H:	8	6	7	9	15	8	9	4	9	15	14	15	11	19	15	20	16	17	6	13	17	32	21	11	24	27	17	23	29	20	31	35

PROLOGUE: RIDING THE INSURTECH WAVE




The image is a screenshot of a CNBC news article. At the top, there is a blue navigation bar with the CNBC logo on the left and menu items: MARKETS, BUSINESS, INVESTING, TECH, POLITICS, and CNBC TV. A search icon is on the right. Below the navigation bar, the word "TECH" is displayed in blue. The main headline is "A life insurance start-up backed by Jay Z and Will Smith is now worth nearly \$500 million" in large, bold black font. Below the headline, it says "PUBLISHED WED, AUG 28 2019-5:10 AM EDT | UPDATED WED, AUG 28 2019-5:20 AM EDT". To the left of the article text is a profile picture of Ryan Browne and his name and Twitter handle "@RYAN_BROWNE_". To the right are social media share icons for Facebook, Twitter, LinkedIn, and Email, with the word "SHARE" to the left. Below the article text, there is a section titled "KEY POINTS" in bold blue font, followed by two bullet points. The background of the screenshot has a light gray leaf pattern on the right side.





MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV

TECH

A life insurance start-up backed by Jay Z and Will Smith is now worth nearly \$500 million

PUBLISHED WED, AUG 28 2019-5:10 AM EDT | UPDATED WED, AUG 28 2019-5:20 AM EDT

 **Ryan Browne**
@RYAN_BROWNE_

SHARE    

KEY POINTS

- Ethos raised fresh funds in a Series C round led by GV, Alphabet's venture arm, and backed by Goldman Sachs.
- The firm is now valued at nearly \$500 million, up from a more-than \$100 million valuation it reached October 2018.

PROLOGUE: RIDING THE INSURTECH WAVE



INSURETECH
CONNECT

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2019 COMPANIES ATTENDING

Over 7,000 delegates from 60+ countries attended ITC 2019.

WHAT DO I BELIEVE ABOUT THE INSURANCE INDUSTRY?

Insurance serves an **honorable purpose** and changes the lives of customers and their beneficiaries.

There is an **enormous gap** between the amount of insurance that is owned and the amount that is needed.

Trust and **transparency** are the cornerstones of a sustainable insurance industry.

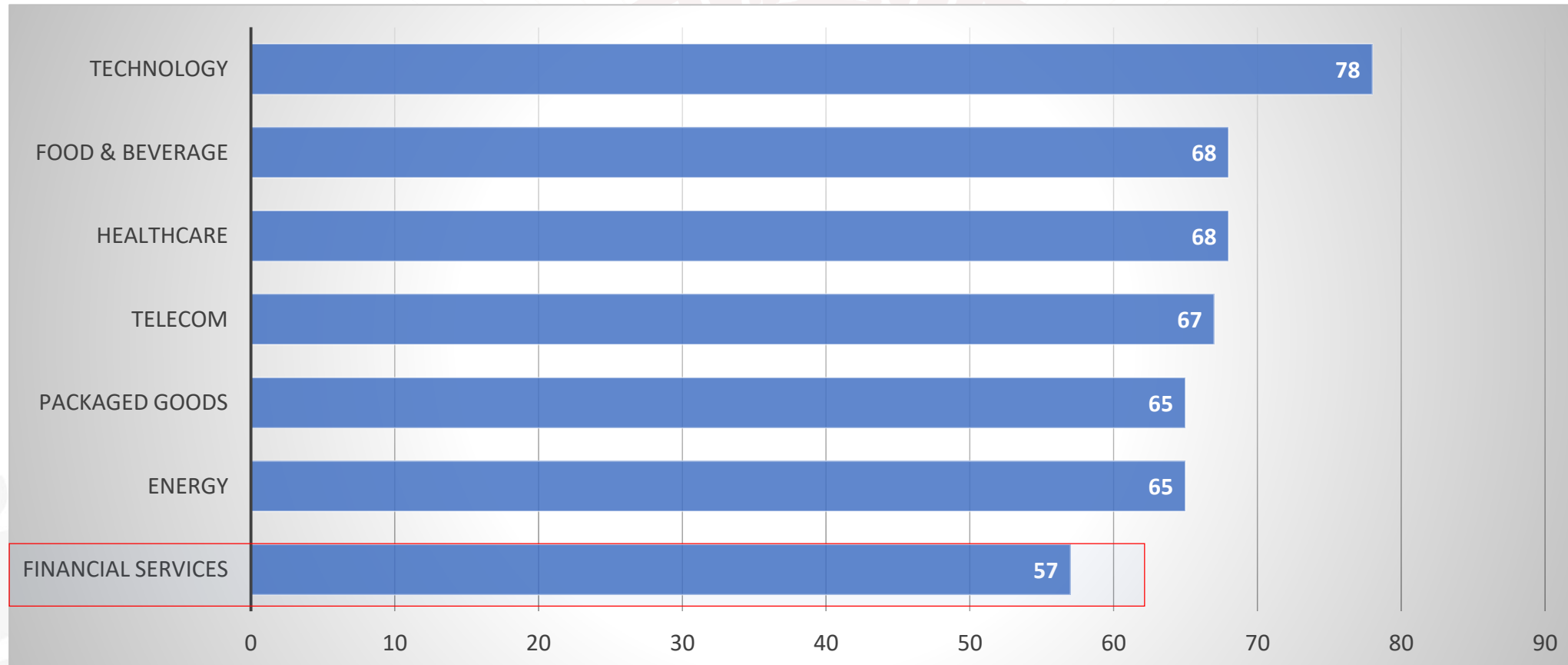
**HONORABLE
PURPOSE**

**ENORMOUS
GAP**

**TRUST &
TRANSPARENCY**

...YET FINANCIAL SERVICES IS STILL AMONG THE LEAST TRUSTED INDUSTRIES

Edelman Trust Barometer: How much do you trust businesses in these industries?

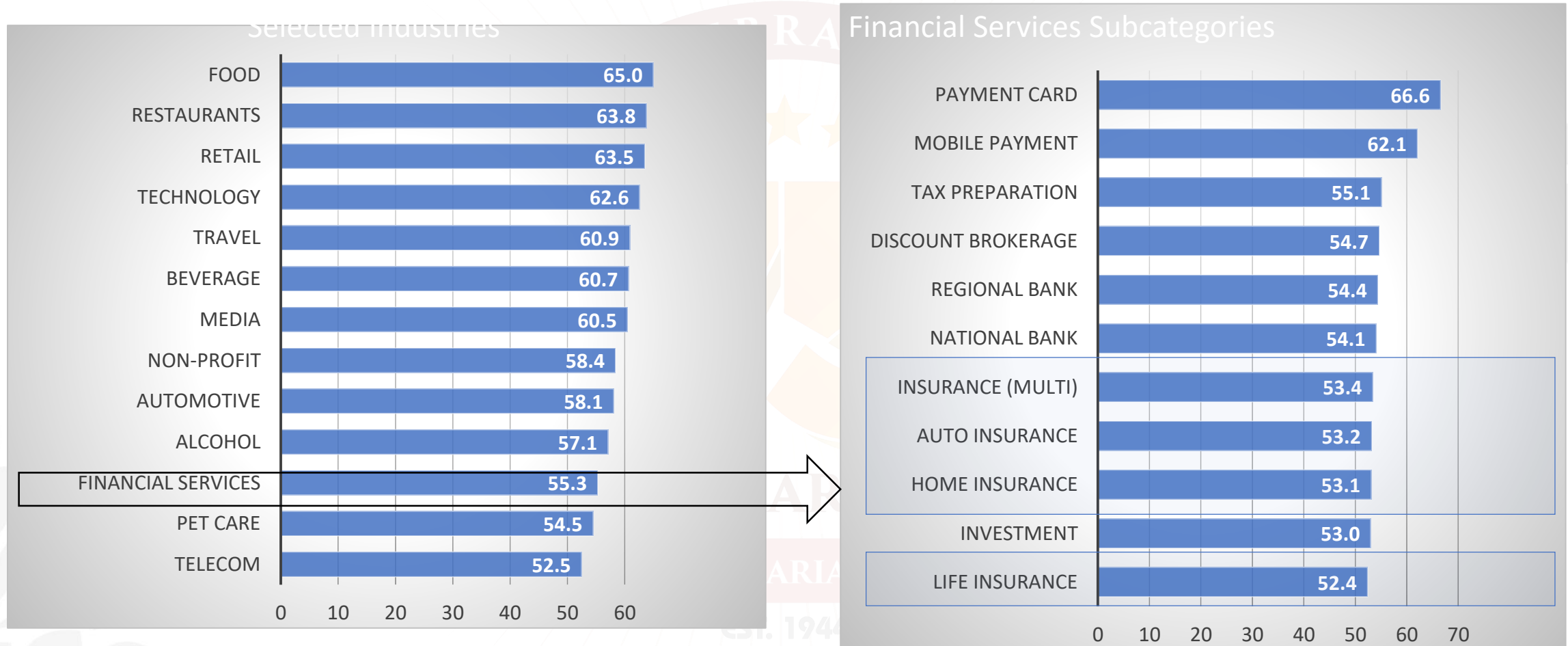


Source: 2019 Edelman Trust Barometer.

https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019_Edelman_Trust_Barometer_Global_Report.pdf

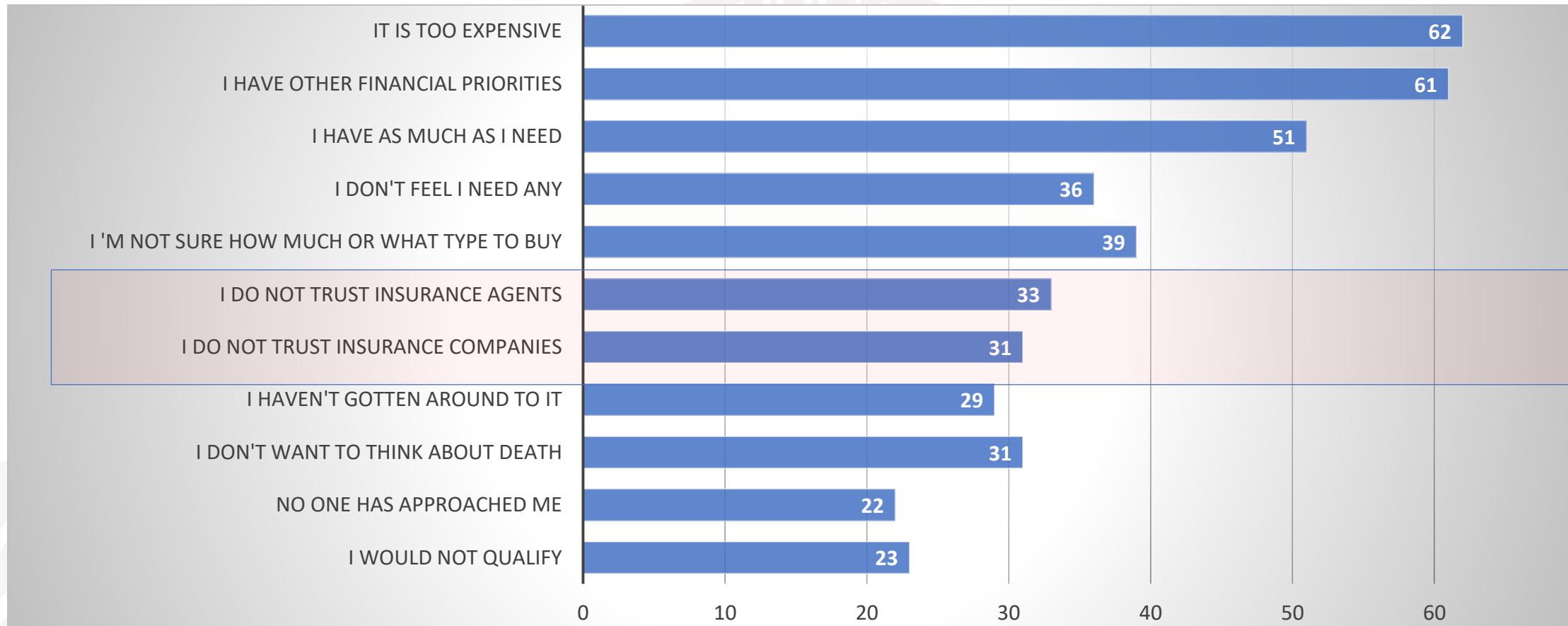
AND BRAND EQUITY OF INSURANCE COMPANIES IS NEAR THE BOTTOM

Harris Poll: “EquiTrend” Rankings

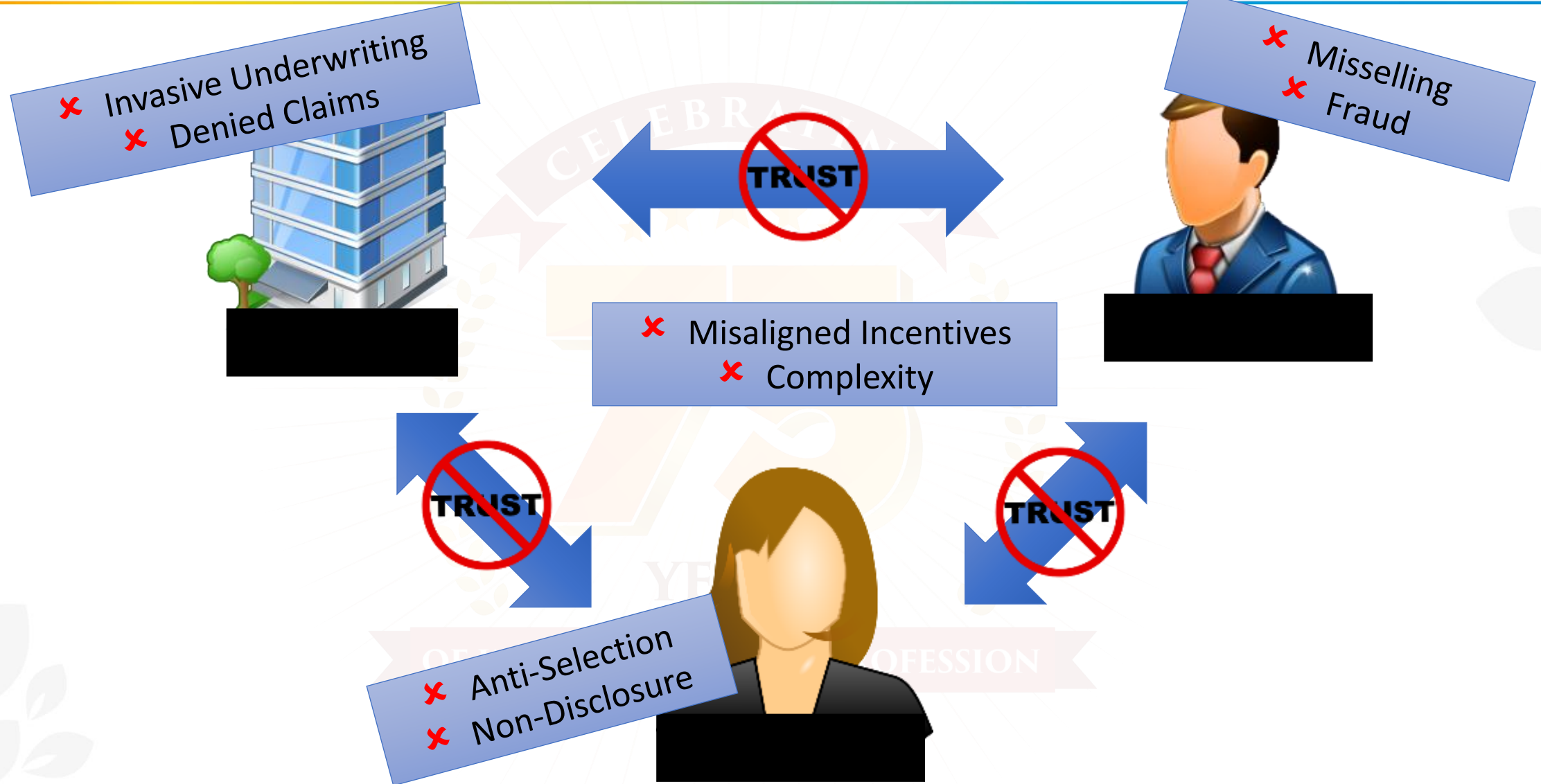


MISTRUST IS A TOP REASON FOR THE INSURANCE PROTECTION GAP

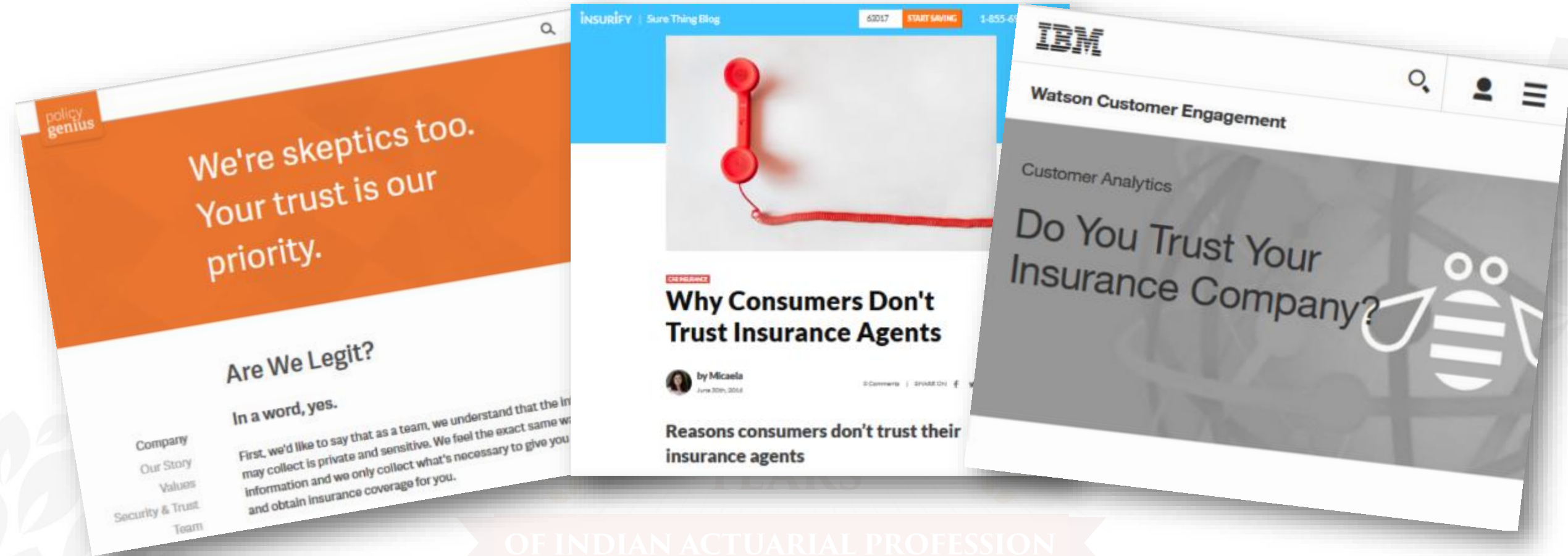
LIMRA Research: Reasons People Don't Purchase Life Insurance



A VICIOUS CYCLE OF MISTRUST



THE FIRST STEP IS ADMITTING THERE IS A PROBLEM



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<https://www.policygenius.com/about/trust>

<https://www.ibm.com/blogs/watson-customer-engagement/2015/09/22/do-you-trust-your-insurance-company/>

<https://insurify.com/sure/car-insurance/why-consumers-dont-trust-insurance-agents/>

AND THEN WE HAVE TO SOLVE IT

Trust and transparency are the cornerstones of a sustainable insurance industry.

TRUST & TRANSPARENCY

Build Trust

- 1) Provide Trusted Advice
- 2) Deliver a Modern Experience
- 3) Make it Easy

Borrow Trust

- 4) Leverage a Trusted Brand
- 5) Connect People Together

Increase Transparency

- 6) Deliver Price/Value Transparency
- 7) Align Incentives
- 8) Utilize Data & Analytics

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EST. 1944

Build Trust

Borrow Trust

Increase Transparency



1) PROVIDE TRUSTED ADVICE

“I trust that these guys know what they are talking about”

Leveraging the power of customized content, brands build trust with consumers and guide them toward a purchase decision.



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Build Trust

Borrow Trust

Increase Transparency

1) PROVIDE TRUSTED ADVICE

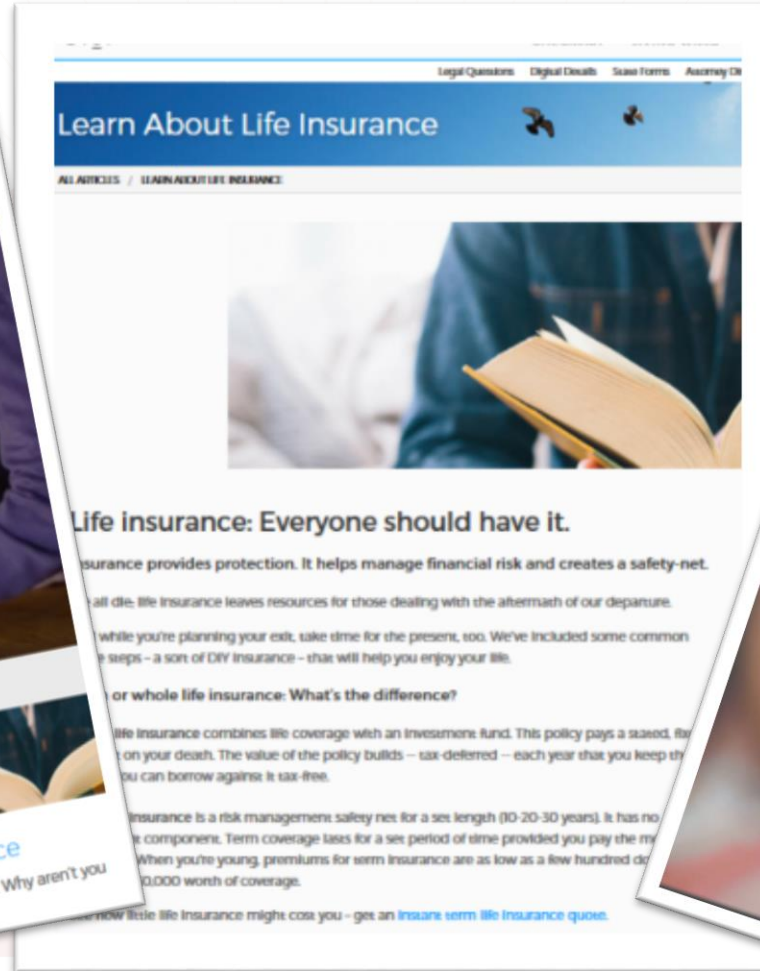


GYST
Your Planner for Life's Most Important Things
Get Started
Already a member? Sign In

Living Wills
Take control of your exit strategy.

Wills
You can't take it with you. Where do you want it to go?

Life Insurance
Everyone needs it. Why aren't you insured?



Learn About Life Insurance

Life insurance: Everyone should have it.

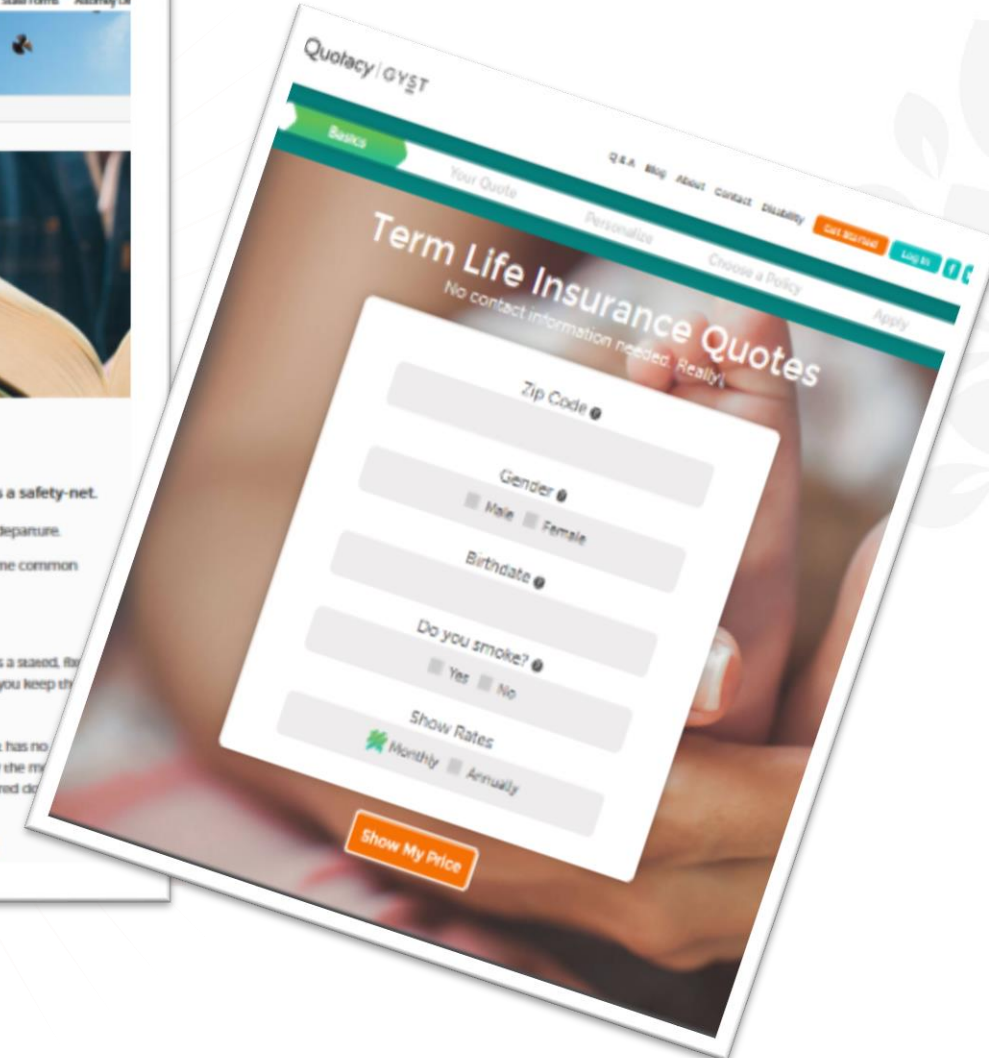
Life insurance provides protection. It helps manage financial risk and creates a safety-net. If you die, life insurance leaves resources for those dealing with the aftermath of our departure. While you're planning your exit, take time for the present, too. We've included some common steps - a sort of DIY insurance - that will help you enjoy your life.

Term or whole life insurance: What's the difference?

Term life insurance combines life coverage with an investment fund. This policy pays a stated benefit on your death. The value of the policy builds - tax-deferred - each year that you keep the policy. You can borrow against it tax-free.

Life insurance is a risk management safety net for a set length (10-20-30 years). It has no cash value component. Term coverage lasts for a set period of time provided you pay the premiums. When you're young, premiums for term insurance are as low as a few hundred dollars per year for \$100,000 worth of coverage.

Now that you know a little life insurance might cost you - get an [insure term life insurance quotes](#).



Term Life Insurance Quotes

No contact information needed. Really!

Zip Code

Gender
 Male Female

Birthdate

Do you smoke?
 Yes No

Show Rates
 Monthly Annually

Show My Price

Build Trust

Borrow Trust

Increase Transparency

2) DELIVER A MODERN EXPERIENCE

“I trust it because it looks cool and works the way I expect it should work”

New brands are bringing modern digital design approaches to better meet customers expectations around user experience.



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OF INDIAN ACTUARIAL PROFESSION

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Build Trust

Borrow Trust

Increase Transparency

2) DELIVER A MODERN EXPERIENCE

Fabric



Fabric

"I am a AGE year-old

GENDER living in STATE

I DO / DO NOT USE tobacco."

Fabric Instant accidental death insurance is guaranteed issue for anyone 15 to 50 years old. Gender and tobacco questions are used to generate a quote for Fabric Premium only.

Next

Haven Life



HAVENlife

If Life Insurance Could Start Over, This Is What It Would Be
Coverage that's easy, affordable and online

I am a man born on 4/11/1982

I currently live in the 01111 ZIP. I am in excellent health and I do not smoke.

I want to protect my family by providing a \$500,000 policy lasting 20 years.

\$21.00/mo

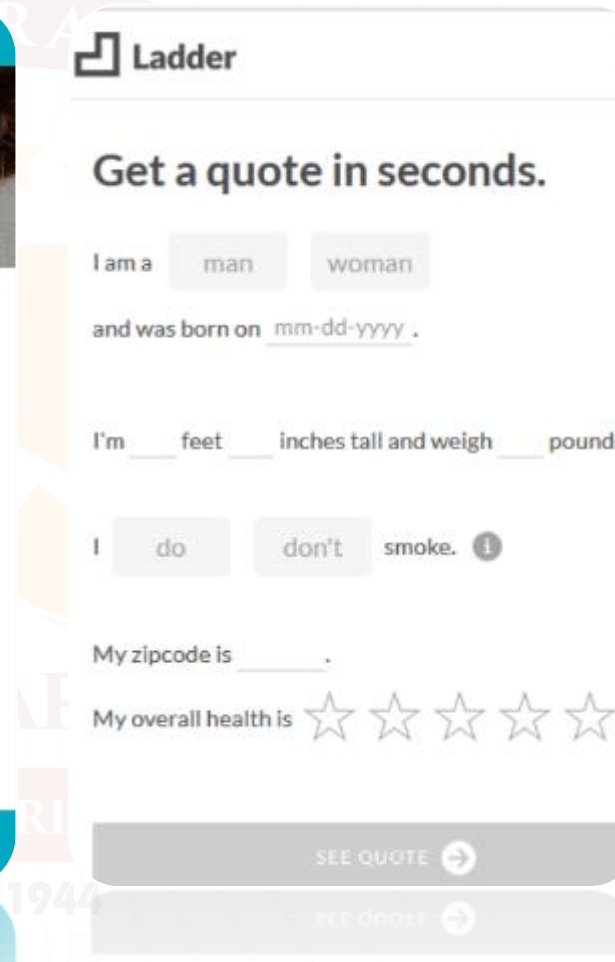
GET STARTED >

Still thinking? Save your progress.

Not sure how much coverage you need? [Calculate.](#)

you enter your which considers how using [Compare](#)

Ladder Life



Ladder

Get a quote in seconds.

I am a man woman

and was born on mm-dd-yyyy

I'm feet inches tall and weigh pounds.

I do don't smoke. ⓘ

My zipcode is

My overall health is ☆☆☆☆

SEE QUOTE ↻

SEE QUOTE ↻

Oscar Health



oscar

My zipcode is 10001

I'd like to cover me, my spouse and my kids

I'm 42 years old, my spouse is 45 and my 2 kids are 12 and 15

My family makes \$ yearly with 4 people in my tax household.

Valid income value is required to get a quote

<https://love.meetfabric.com/get-started>, <https://havenlife.com/quick-quote.html>
<https://www.ladderlife.com/get-quote>, <https://www.hioscar.com/get-quote/>

3) MAKE IT EASY

“I’m cautious, but this seems like an easy, low-risk way to get started”

Some brands are offering starter products and simplifying the customer journey to overcome consumer inertia and build trust.

CHOOSE:

EASY

HARD



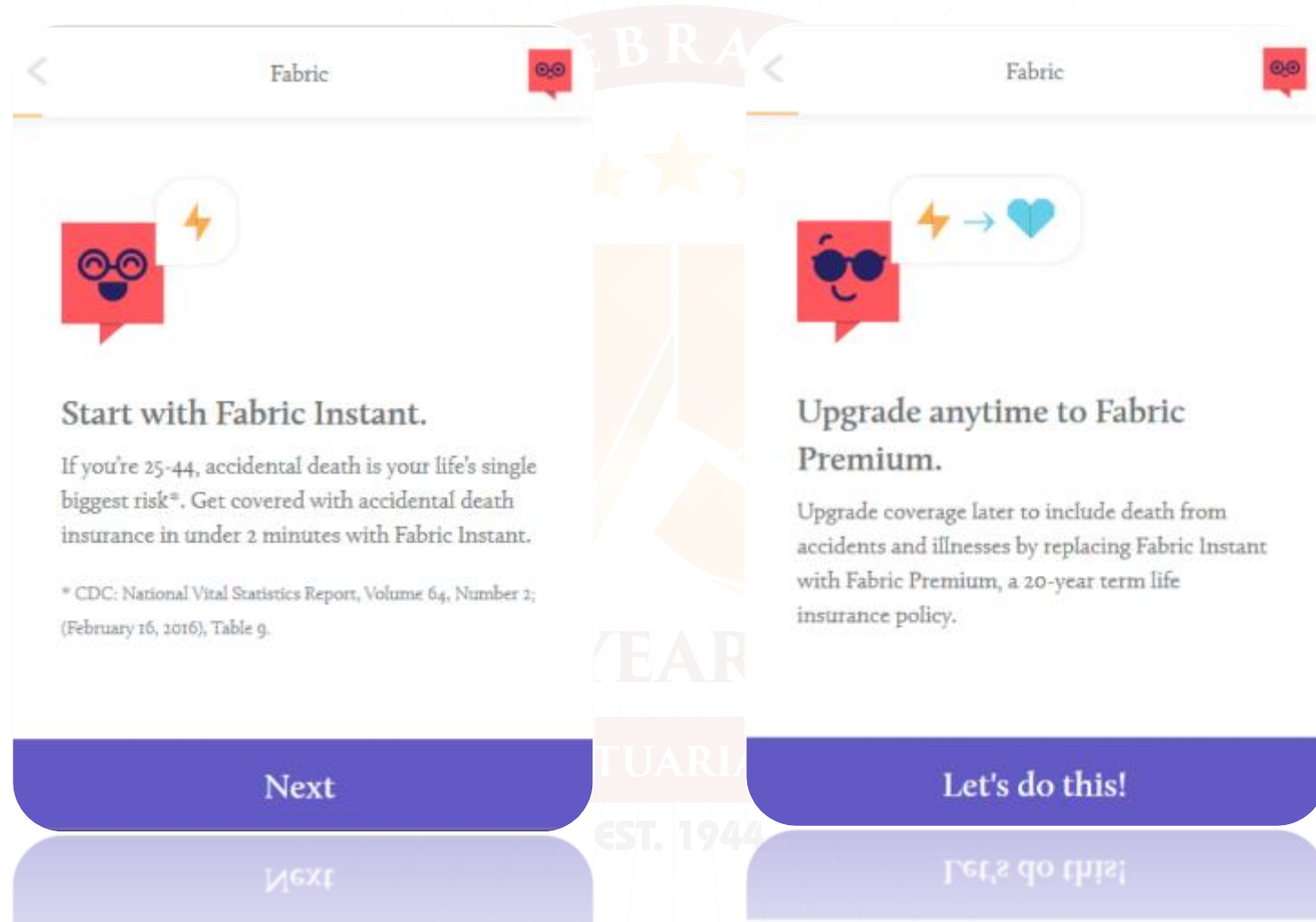
Build Trust

Borrow Trust

Increase Transparency

3) MAKE IT EASY

Fabric Instant




3) MAKE IT EASY

Free Parent Life Cover (UK/Ireland)

AVIVA Insurance Investments Retirement Health Log in

Homepage > Insurance > Life cover > Free Parent Life Cover

Free Parent Life Cover



£15,000 free life insurance for 1 year - for each parent with a child under 4

[Apply now >](#)

That's £15,000 each for mums and dads

At Aviva, we're here to help protect what matters most to you. And what could matter more than your family? We're giving each parent £15,000 free life insurance as a first step towards protecting your family. There's no purchase necessary and there are absolutely no strings attached.


A free life insurance policy – easy to set up, and protect what matters most today.

- ✓ Cover lasts for 12 months from acceptance and pays out £15,000 if a parent covered dies during this time.
- ✓ It takes just a few minutes to apply and cover will start as soon as you've completed the short application process.
- ✓ You can take out the plan once your child has been born and before they are four years old.
- ✓ No payment is needed and we won't request bank account or credit card details.
- ✓ Rest assured any personal information included on your Free Parent Life Cover application will not be sold onto a third

Irish Life Search

€25,000 Free Parent Life Insurance

Protecting your family's future is one of the most important things to plan for. Yet, with so many other financial commitments it can sometimes be hard to follow through. So, we're giving you a helping hand, by giving parents €25,000 life cover for 12 months absolutely FREE!



Eligibility Questions

Getting your €25,000 Free Life Insurance is easy, once you meet the following criteria

- Your youngest child is aged 13 or younger when you apply
- You are aged 55 or younger
- You are resident of the Republic of Ireland
- You are named on the Birth Certificate or Adoption Certificate of your child
- You consent to being kept informed in writing, by post, email or telephone about products, services or additional benefits that Irish Life believe might be of interest to you
- You have not had or do not currently have any form of malignant cancer, brain tumour, heart condition or heart surgery, stroke, multiple sclerosis, motor neurone disease, transplant, disorder of the kidney, liver or pancreas, you have not been an in-patient in the last 12 months (excluding child birth) on any waiting list

This offer is closed

- Free life Insurance of €25,000 for each parent for 12 months.
- No payment needed, and cover begins instantly.

[Download the Plan Booklet with Terms & Conditions](#)

3) MAKE IT EASY



Cardiogram Launches Insurance Program for Wearable Technology Users

PR Web

SAN FRANCISCO (PRWEB) September 27, 2018

Health app developer Cardiogram today announced that it has partnered with Amica Life Insurance Company (Amica Life) and the recently established Greenhouse Life Insurance Company (Greenhouse Insurance) to offer Accidental Death (AD) insurance coverage for wearable technology users. The program offers Apple Watch, Android Wear, or Garmin wearers the opportunity to qualify for \$1,000 of AD coverage at no cost for 12 months. Qualified Cardiogram users will also have the option to purchase up to \$500,000 of additional AD insurance coverage through the app in as little as three minutes.

PROFESSION

EST. 1944

Build Trust

Borrow Trust

Increase Transparency

4) LEVERAGE A TRUSTED BRAND

“I trust these guys, so I’ll give this other thing a try”

Partnerships with other non-insurance companies or influencers provide insurers with access to new customers with the implied endorsement of a trusted brand.



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4) LEVERAGE A TRUSTED BRAND

Partner Programs

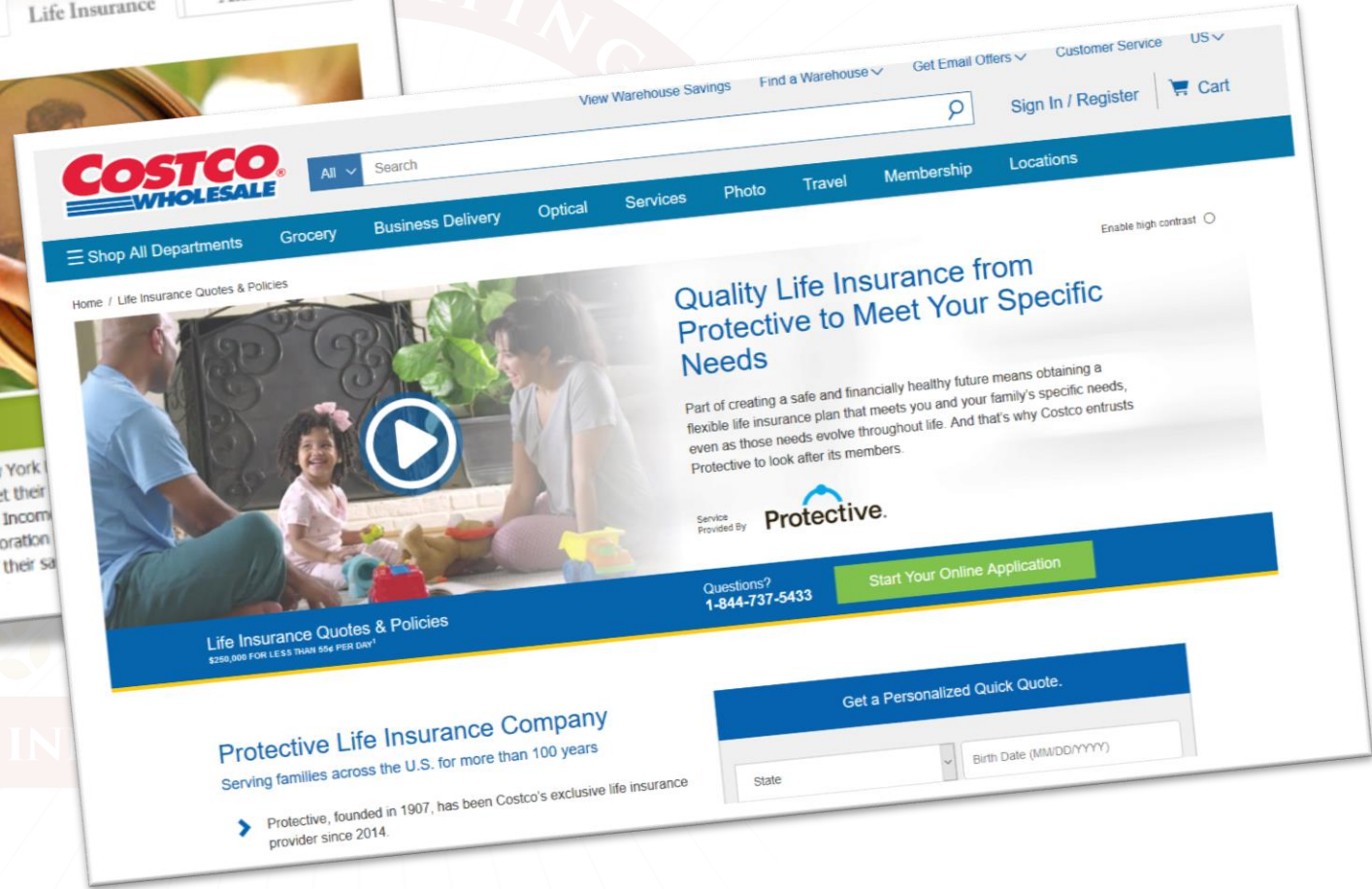


AARP Life Insurance and Annuity Program from **NEW YORK LIFE**

Who Are You Planning to Protect?

Your spouse, your family, yourself and your retirement: the AARP Life Insurance and Annuity Programs from New York Life offer simple, secure choices just for AARP members. Decide which is right for you:

- Life Insurance »**
The AARP Life Insurance Program from New York Life Insurance Company offers members both term and permanent coverage. No physical exam is required. For most products, acceptance is based on your health information. Find out which coverage is right for you.
- Annuities »**
Annuities from New York help members meet their needs. The AARP Lifetime Income and Annuity Corporation that turns part of their savings into a steady stream of income.



COSTCO WHOLESALE

Home / Life Insurance Quotes & Policies

Quality Life Insurance from Protective to Meet Your Specific Needs

Part of creating a safe and financially healthy future means obtaining a flexible life insurance plan that meets you and your family's specific needs, even as those needs evolve throughout life. And that's why Costco entrusts Protective to look after its members.

Service Provided By **Protective.**

Questions? 1-844-737-5433 [Start Your Online Application](#)

Protective Life Insurance Company
Serving families across the U.S. for more than 100 years

Protective, founded in 1907, has been Costco's exclusive life insurance provider since 2014.

Get a Personalized Quick Quote.

State: Birth Date (MM/DD/YYYY):

Build Trust

Borrow Trust

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5) CONNECT PEOPLE TOGETHER

“I trust that what my friends (or people like me) do will be good enough for me”

Affinity platforms and peer-to-peer insurance marketplaces allow consumers to leverage the trust of their peers to feel more confident and engaged with their insurance choices.



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5) CONNECT PEOPLE TOGETHER

Percent who rank each spokesperson as extremely or very credible

Peers are deemed as nearly as credible as experts



Build Trust

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Increase Transparency

5) CONNECT PEOPLE TOGETHER

Customized affinity programs

FitLifeCovered

PEOPLE LIKE YOU.

For the young and active, term life insurance rates can be significantly less expensive.



MY LIFE COVERED™ **FIND OUT MORE**

YOUNG. FIT. HEALTHY.

TERM LIFE INSURANCE can cost you significantly less!



MY LIFE COVERED™ **LET US PROVE IT**

HealthIQ


Health I.Q. Research Mission Blog Quiz (800) 540-2004

SPECIAL RATE LIFE INSURANCE FOR Tennis Players

Get Free Quote

How we get special rates

Partnered With Top Rated Carriers



COVERAGE SECURED

\$ 2 8 9 1 5 9 8 7 2 7

as of 4/13/2017 10:01

BoughtByMany

BOUGHT BY MANY

137 Members

By joining the group you agree to our terms of use

Car Insurance for Musicians

Join other Musicians to demand a fairer deal on Car Insurance

About this group

Our research suggests musicians are being penalised by insurance companies. Please join this group if you agree and want to see this change.

How does the cost of car insurance for musicians compare to other professions?

We based our research on quotes to insure an experienced driver living in a low-risk area (see note below). This suggested musicians are paying **between 40% and 90% more** for car insurance than drivers with professions.

5) CONNECT PEOPLE TOGETHER

Peer-to-Peer Models

*“30% of consumers would be likely to purchase life insurance via a peer-to-peer platform if available”**

Guevara (UK)



GUEVARA

Old insurance is rubbish.
Use Guevara.
(It's new. And 100% non-rubbish.)

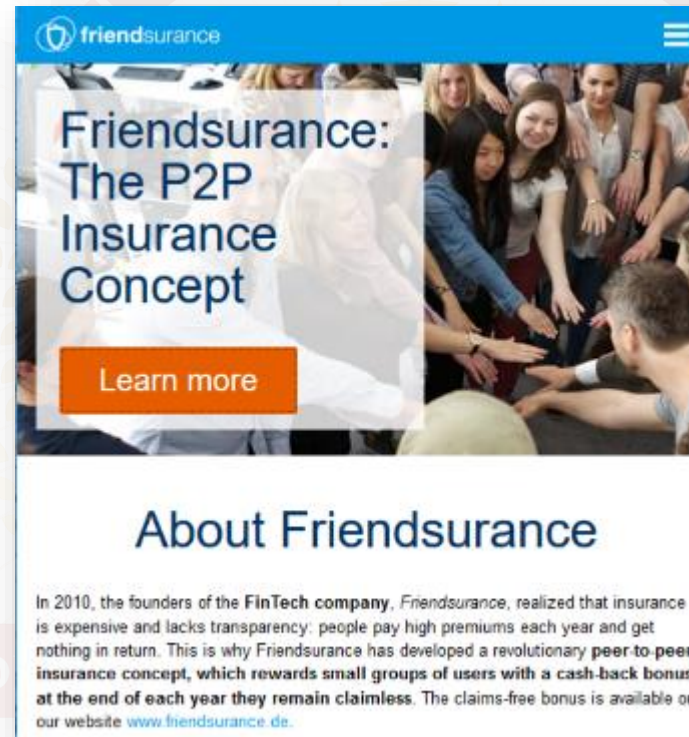
Get your quote

See how it works

Want a renewal reminder?

<https://heyguevara.com/#what-it-is>

Friendsurance (DE)



friendsurance

Friendsurance:
The P2P
Insurance
Concept

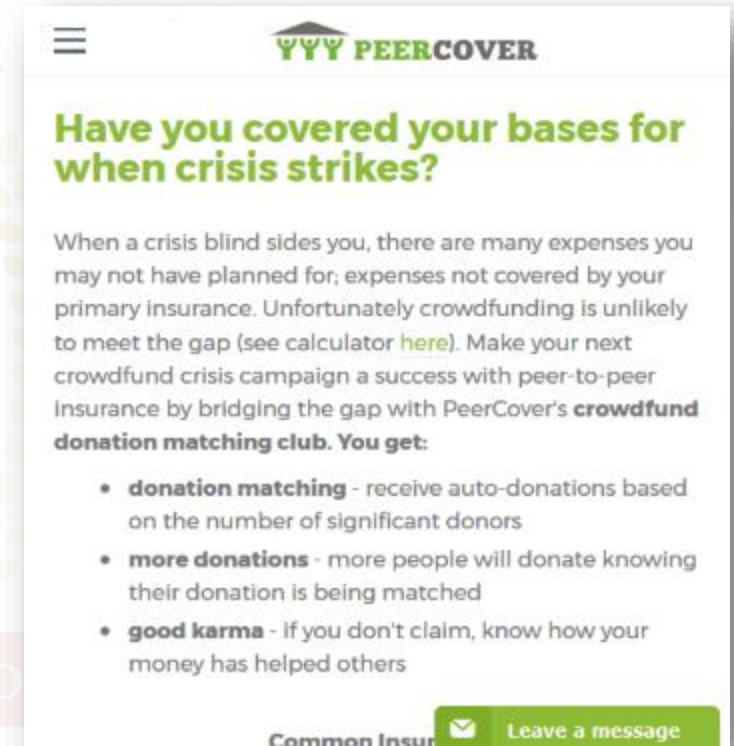
Learn more

About Friendsurance

In 2010, the founders of the FinTech company, Friendsurance, realized that insurance is expensive and lacks transparency: people pay high premiums each year and get nothing in return. This is why Friendsurance has developed a revolutionary peer-to-peer insurance concept, which rewards small groups of users with a cash-back bonus at the end of each year they remain claimless. The claims-free bonus is available on our website www.friendsurance.de.

<http://www.friendsurance.com/> <http://www.peercover.co.nz/>

Peer Cover (NZ)



YYY PEERCOVER

Have you covered your bases for when crisis strikes?

When a crisis blind sides you, there are many expenses you may not have planned for; expenses not covered by your primary insurance. Unfortunately crowdfunding is unlikely to meet the gap (see calculator [here](#)). Make your next crowdfunding crisis campaign a success with peer-to-peer insurance by bridging the gap with PeerCover's **crowdfund donation matching club**. You get:

- **donation matching** - receive auto-donations based on the number of significant donors
- **more donations** - more people will donate knowing their donation is being matched
- **good karma** - if you don't claim, know how your money has helped others

Common Insur [Leave a message](#)

Build Trust

Borrow Trust

Increase Transparency

6) DELIVER PRICE/VALUE TRANSPARENCY

“I want to know that I’m paying a fair price for what I’m getting”

Digital marketplaces create a one-stop shop for consumers to research, select and purchase insurance products.



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50
YEARS
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Increase Transparency



6) DELIVER PRICE/VALUE TRANSPARENCY

Online Aggregators

The screenshot shows the homepage of payingtoomuch.com. The header includes the company logo, a phone number (01243 7...), and a navigation menu with options like Insurance, Holidays, Your Home, Magazine, Careers, and Contact Us. Below the header, there is a prominent "Life insurance" banner with a family image and the text "Instant Quotes" and "Online comparison". A "Compare Life Insurance Quotes" form is visible, with fields for "How much cover do you need?" (with a "DON'T KNOW?" link), "What is your date of birth?" (with dropdowns for dd, mm, yyyy), and "What do you need the cover for?" (with a "Please select..." dropdown). A blue badge in the top right corner of the form says "INSTANT QUOTES".

The screenshot shows the "Term Life Insurance" page on policybazaar.com. The page features a dark blue header with the site logo and navigation. The main content area includes a "Term Life Insurance" heading, a sub-heading "Compare 34 plans from 16 insurers & save upto 50%", and a list of bullet points: "Awarded India's #1 financial website*", "Over 12,12,535 families secured", "FREE 365 day support", and "1500+ Advisors helping you Compare & Buy". A "GET FREE QUOTES" button is at the bottom. On the right side, there is a form with fields for "COVER" (1,00,00,000), "DOB" (DD), "SMOKE" (Yes), and "ANNUAL INCOME" (with radio buttons for Upto 3, 5-7 Lac, 7-10 Lac, 10-15 Lac, and 15 Lac+). A "CELEBRATING" watermark is visible in the background.

The screenshot shows the "Life insurance" page on Confused.com. The page has a blue header with the site logo and navigation. A large blue banner with a family image contains the text "Life insurance" and "Compare life insurance from trusted companies with Confused.com", along with a "GET A QUOTE ONLINE" button (noting "Takes about 3 mins") and a link to "Read our life insurance guide". Below the banner, there is a section titled "A selection of the life insurance providers we compare" with logos for Legal & General, AVIVA, ZURICH, EGNON, Vitality, LVE, AIG, Beagle, and ROYAL LONDON.

YEARS
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6) DELIVER PRICE/VALUE TRANSPARENCY

Online Aggregators

TERM4SALE
TERM LIFE INSURANCE QUOTES

Home News & Reviews Life Insurance 101 Calculators Trends For Life Agents About Us

Gender: Male Birthdate: June 15th, 1976 Health Class: Preferred Non-Smoker Actual Age: 41 Nearest Age: 41 State: Missouri Amount of Insurance: \$500,000

[Modify Your Quote](#)

Can you qualify for these premiums?
If you will tell us more about your health and lifestyle, we can tell you more about whether the products you see here are available to you.

[Health Analyzer](#)

[Spreadsheet Results](#)

LIFE INSURANCE NEEDS CALCULATOR

[How Much Life Insurance Do I Need?](#)

20 Year Level Term Guaranteed A.M. Best Ratings as of Sep 22 2017

Company	Product	A.M. Best Rating	Price	Action
American General Life Insurance Company	Select-a-Term - 20 Year Preferred Non-Tobacco Pf	A	\$474.00 /yr or \$41.00 /mo	Select and Continue
Protective Life Insurance Company	Protective Classic Choice Term 20 Preferred Non-Tobacco Pf	A+	\$475.00 /yr or \$40.85 /mo	Select and Continue
Lincoln National Life Insurance Company	TermAccel (R) Level Term 20 (eApp ONLY) Preferred Non-tobacco Pf	A+	\$479.00 /yr or \$41.92 /mo	Select and Continue
Protective Life Insurance Company	Custom Choice No Lapse UL - 20 Year Preferred Non-Tobacco Pf	A+	\$481.08 /yr or \$41.37 /mo	Select and Continue
Pacific Life Insurance Company	Pacific PRIME Term 20 Preferred Plus NonTobacco Pf	A+	\$485.00 /yr or \$40.43 /mo	Select and Continue
Ohio National Life Assurance Corporation	FlexTerm Series X - 20 Year Preferred Non-Smoker Pf	A+	\$485.00 /yr or \$41.95 /mo	Select and Continue

policygenius Insurance Quotes & Guides Insurance Checkup™ Magazine About

Contact Account

Life Insurance Health Insurance Renters Insurance Pet Insurance Disability Insurance Auto Insurance More

Compare and save on life insurance

Get the protection you need—and save over 40%

Coverage: \$500,000 Term: 20 years

[Get Quotes](#)

[Not sure how much you need?](#)

Sam's Quotes

- \$15 /month
- \$19 /month
- \$25 /month

[Get Covered](#)

BBB Rating WSJ BusinessWeek The New York Times Protective Prudential Principal & many more!

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Increase Transparency

7) ALIGN INCENTIVES

“I trust that they have the same interests as me”

Incentivized wellness programs and other consumer engagement platforms can help align the interests of the consumer and insurance company.



7) ALIGN INCENTIVES

LIMRA: Sharing Health/Activity Information With a Life Insurance Company



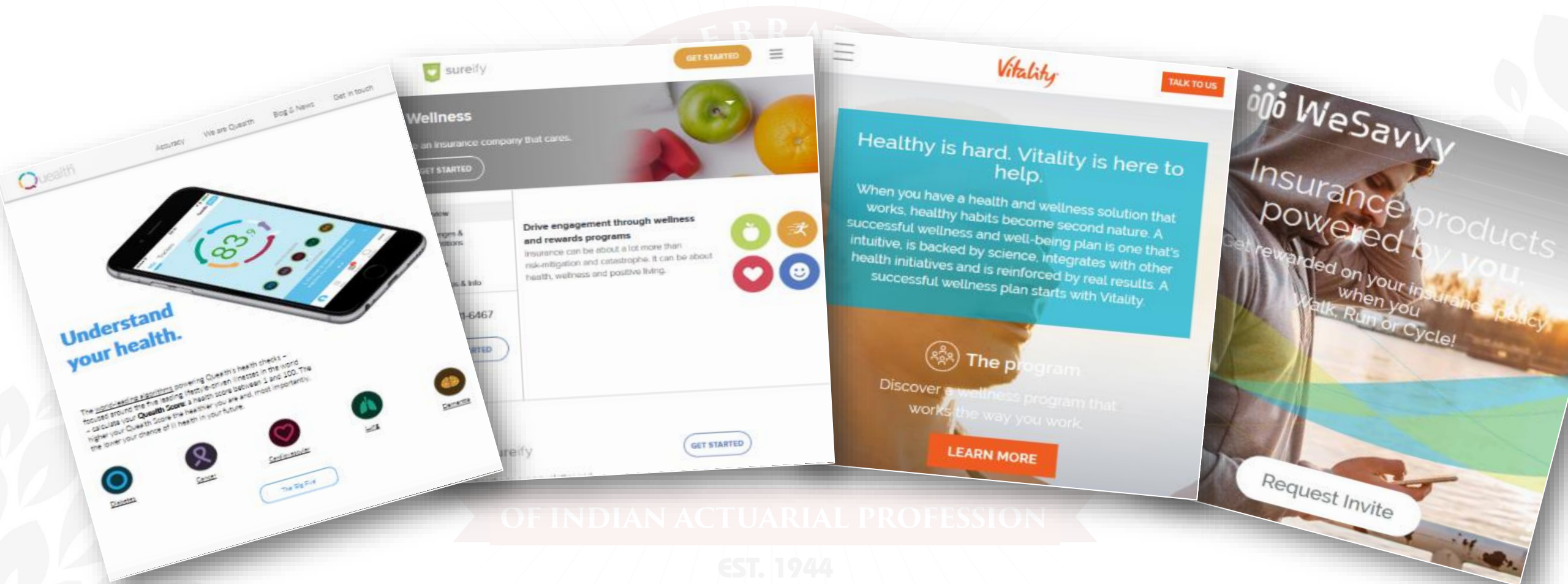
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7) ALIGN INCENTIVES

Wellness programs



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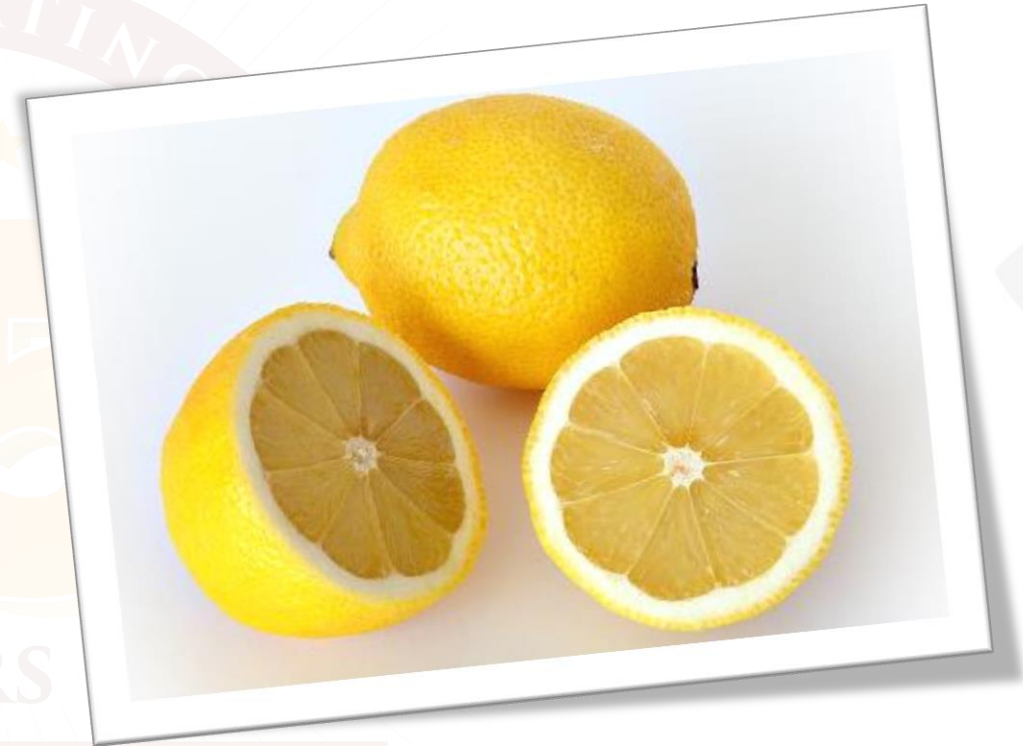
Build Trust

Borrow Trust

Increase Transparency

8) UTILIZE DATA & ANALYTICS

An increase in the availability of health, financial and behavioral data is helping simplify the application and underwriting process for consumers and control fraud and anti-selection*.



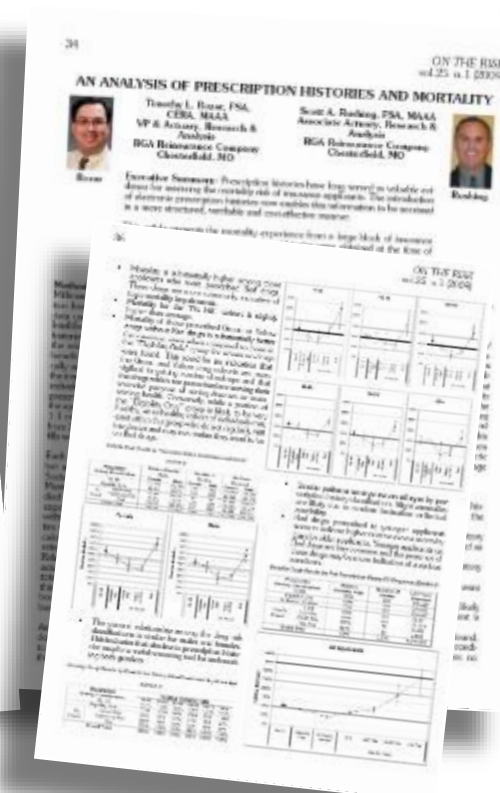
CELEBRATING
60 YEARS
OF INDIAN ACTUARIAL PROFESSION

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8) UTILIZE DATA & ANALYTICS

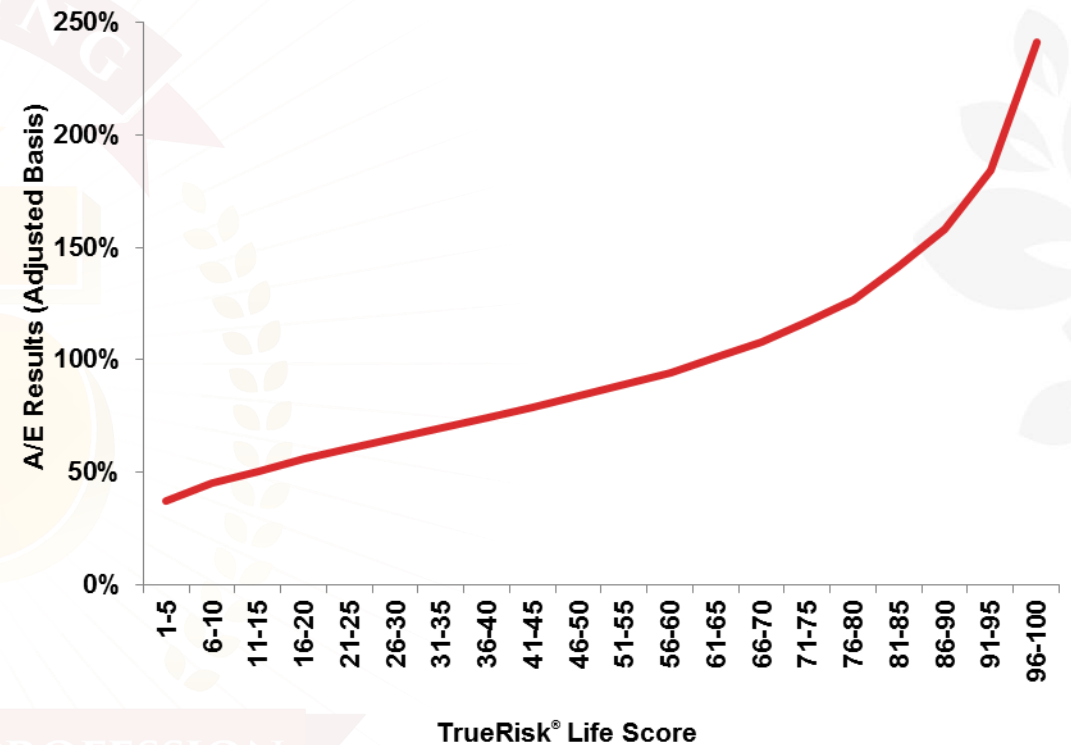
Data-driven evidence is now routinely gathered to streamline the risk-selection process

- Over 80% of companies now query the MIB and prescription databases on simplified-issue products*.
- Motor vehicle records, criminal histories and many other sources are routinely collected.
- Advanced analytics approaches are being deployed to improve the predictive value of the data being used.



8) UTILIZE DATA & ANALYTICS

- Financial credit data has proven to be very predictive of mortality and persistency and is now being used in life insurance underwriting.
 - New medical data sources are seeking to supplement prescription histories and reduce attending physician statements.
- Other third-party sources are being actively explored as predictors of lifestyle or other behavioral risks.



*TransUnion TrueRisk[®] Life:

<http://www.rgare.com/knowledge-center/media/videos/predictive-nature-credit-data>

Build Trust

Borrow Trust

Increase Transparency

8) UTILIZE DATA & ANALYTICS



STOP

YEARS

This one is a little trickier...

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8) UTILIZE DATA & ANALYTICS

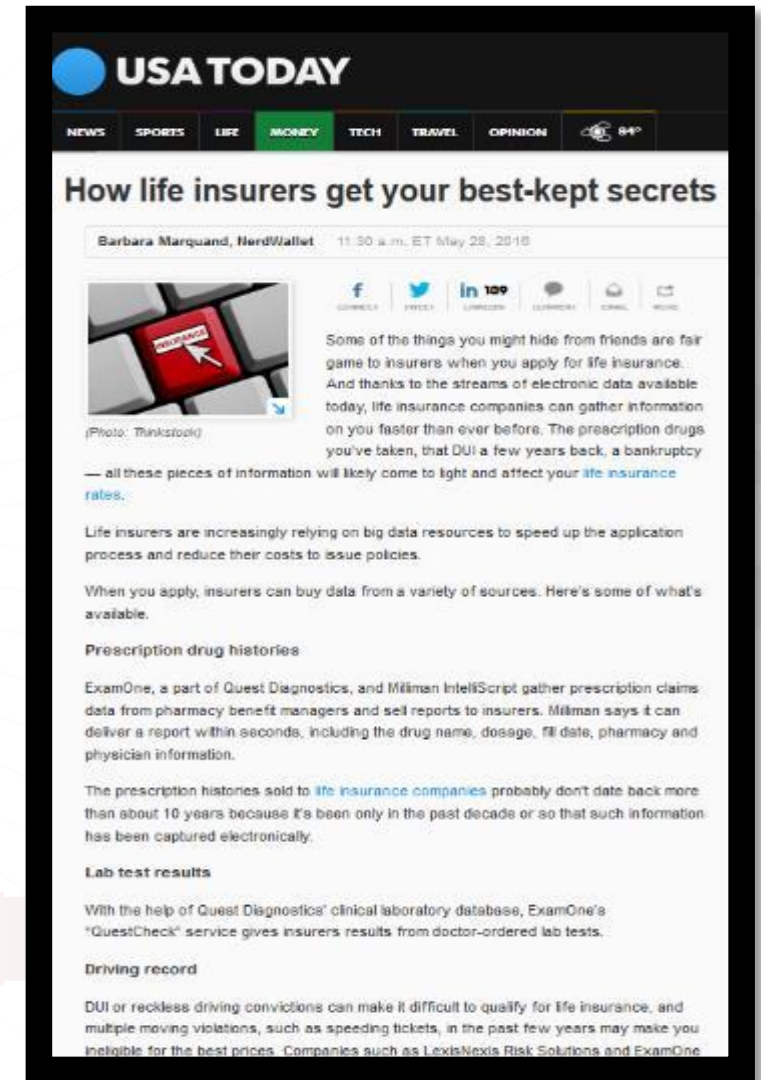
Are you using appropriate data?



- Inappropriate use of data will be rightly opposed by consumer advocates and regulators and will put at risk the industry's right to underwrite.
- Despite increased availability of data, insurers must be careful to safeguard the interests of consumers.
- Transparency is critical to building trust

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USA TODAY

NEWS SPORTS LIFE MONEY TECH TRAVEL OPINION

How life insurers get your best-kept secrets

Barbara Marquand, HerdWallet | 11:30 a.m. ET May 28, 2016

(Photo: Thinkstock)

Some of the things you might hide from friends are fair game to insurers when you apply for life insurance. And thanks to the streams of electronic data available today, life insurance companies can gather information on you faster than ever before. The prescription drugs you've taken, that DUI a few years back, a bankruptcy — all these pieces of information will likely come to light and affect your [life insurance rates](#).

Life insurers are increasingly relying on big data resources to speed up the application process and reduce their costs to issue policies.

When you apply, insurers can buy data from a variety of sources. Here's some of what's available.

Prescription drug histories

ExamOne, a part of Quest Diagnostics, and Millman IntelliScript gather prescription claims data from pharmacy benefit managers and sell reports to insurers. Millman says it can deliver a report within seconds, including the drug name, dosage, fill date, pharmacy and physician information.

The prescription histories sold to [life insurance companies](#) probably don't date back more than about 10 years because it's been only in the past decade or so that such information has been captured electronically.

Lab test results

With the help of Quest Diagnostics' clinical laboratory database, ExamOne's "QuestCheck" service gives insurers results from doctor-ordered lab tests.

Driving record

DUI or reckless driving convictions can make it difficult to qualify for life insurance, and multiple moving violations, such as speeding tickets, in the past few years may make you ineligible for the best prices. Companies such as LexisNexis Risk Solutions and ExamOne

8) UTILIZE DATA & ANALYTICS

Do you have the right to use the data?

Nov 2, 2016 1:00 AM BST



Nov 2, 2016 9:00 PM BST



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Borrow Trust

Increase Transparency

8) UTILIZE DATA & ANALYTICS

Is your data secure?



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Borrow Trust

Increase Transparency



8) UTILIZE DATA & ANALYTICS

Are you sure?

2004 AOL	92,000,000	2010 Gawker.com	1,500,000	2013 NMBS	1,460,000	2015 US Office of Personnel Management (2nd Breach)	21,500,000	2017 KM.ru	1,500,000
2005 Cardsystems Solutions Inc.	40,000,000	2010 Betfair	2,300,000	2013 Facebook	6,000,000	2015 AshleyMadison.com	37,000,000	2017 Swedish Transport Agency	3,000,000
2005 Citigroup	3,900,000	2010 New York City Health & Hospitals Corp.	1,700,000	2013 Ubuntu	2,000,000	2015 Securus Technologies	70,000,000	2017 Spambot	711,000,000
2006 AOL	20,000,000	2010 JP Morgan Chase	2,600,000	2013 ssndob.ms	4,000,000	2015 Sanrio	3,300,000	2017 Viacom	3,000,000
2006 KDDI	4,000,000	2010 Educational Credit Management Corp	3,300,000	2013 SnapChat	4,700,000	2015 Deep Root Analytics	198,000,000	2017 TIO Networks	1,600,000
2006 Countrywide Financial Corp	2,600,000	2011 State of Texas	3,500,000	2013 Yahoo Japan	22,000,000	2016 Privatization Agency of the Republic of Serbia	5,190,396	2017 Al.type	31,000,000
2006 T-Mobile, Deutsche Telecom	17,000,000	2011 Epsilon	3,000,000	2013 Adobe	36,000,000	2016 Minecraft	7,000,000	2017 Malaysian telcos & MVNOs	46,200,000
2006 US Dept of Vet Affairs	26,500,000	2011 Sega	1,290,755	2013 Evernote	50,000,000	2016 Mossack Fonseca	11,500,000	2018 IBM Company	1,300,000
2007 Monster.com	1,600,000	2011 Washington Post	1,270,000	2013 Living Social	50,000,000	2016 Mail.ru	25,000,000	2018 Aadhaar	1,100,000,000
2007 Hannaford Brothers Supermarket Chain	4,200,000	2011 China Software Developer Network	6,000,000	2013 Yahoo	1,000,000,000	2016 Fling	40,000,000	2018 Saks and Lord & Taylor	5,000,000
2007 TD Ameritrade	6,300,000	2011 Nexon Korea Corp	10,000,000	2013 Tumblr	65,000,000	2016 Turkish citizenship database	49,611,709	2018 Panerabread	37,000,000
2007 TK / T J Maxx	94,000,000	2011 Sony Online Entertainment	24,600,000	2013 National Security Agency	1,500,000	2016 Philippines' Commission on Elections	55,000,000	2018 MyFitnessPal	150,000,000
2007 Fidelity National Information Services	8,500,000	2011 Tianya	28,000,000	2013 Kissinger Cables	1,700,000	2016 Anthem	80,000,000	2018 Twitter	330,000,000
2007 Dai Nippon Printing	8,637,405	2011 Steam	35,000,000	2013 Vodafone	2,000,000	2016 VK	100,544,934	2018 Firebase	100,000,000
2007 Driving Standards Agency	3,000,000	2011 Sony PSN	77,000,000	2013 Advocate Medical Group	4,000,000	2016 MySpace	164,000,000	2018 Nametests	120,000,000
2007 Driving Standards Agency,	3,000,000	2011 Neiman Marcus	1,100,000	2014 Linux Ubuntu forums	2,000,000	2016 Careem	14,000,000	2018 Career	14,000,000
2007 UK Revenue & Customs	25,000,000	2011 Sutter Medical Foundation	1,035,459	2014 European Central Bank	4,000,000	2016 Texas voter records	14,800,000	2018 T-Mobile	2,000,000
2008 Jefferson County	1,600,000	2011 Health Net - IBM	1,900,000	2014 UPS	4,000,000	2016 Uber	570,000,000	2018 Newegg	45,000,000
2008 Norwegian Tax Authorities	3,950,000	2011 Sutter Medical Foundation	4,243,434	2014 Community Health Systems	4,500,000	2017 RiverCity Media	1,370,000,000	2018 Grindr	3,000,000
2008 RBS Worldpay	1,500,000	2011 T ricare	4,901,432	2014 "Gmail"	5,000,000	2017 Snapchat	1,700,000	2018 Health South East	3,000,000
2008 Data Processors International	5,000,000	2011 NHS	8,300,000	2014 Sony Pictures	10,000,000	2017 Bell	1,900,000	2018 TicketFly	27,000,000
2008 Chile Ministry Of Education	6,000,000	2012 Office of the Texas Attorney General	6,500,000	2014 Twitch.tv	10,000,000	2017 Cellebrite	3,000,000	2018 LocalBlox	48,000,000
2008 Auction.co.kr	18,000,000	2012 "Apple"	12,367,232	2014 AOL	2,400,000	2017 Clinton campaign	5,000,000	2018 Facebook	2,200,000,000
2008 GS Caltex	11,100,000	2012 Global Payments	7,000,000	2014 Home Depot	56,000,000	2017 ClixSense	6,600,000		
2008 UK Ministry of Defence	1,700,000	2012 Three Iranian banks	3,000,000	2014 Target	70,000,000	2017 Lynda.com	9,500,000		
2008 University of Miami	2,100,000	2012 LinkedIn, eHarmony, Last.fm	8,000,000	2014 JP Morgan Chase	76,000,000	2017 Interpark	10,000,000		
2008 University of Utah Hospitals & Clinics	2,200,000	2012 Gamigo	8,000,000	2014 Ebay	145,000,000	2017 Zomato	17,000,000		
2008 BNY Mellon Shareowner Services	12,500,000	2012 KT Corp.	8,700,000	2014 Yahoo	500,000,000	2017 Yahoo	32,000,000		
2009 CheckFree Corporation	5,000,000	2012 Greek government	9,000,000	2014 HSBC Turkey	2,700,000	2017 Weebly	43,000,000		
2009 Virginia Dept. Of Health	8,257,378	2012 Blizzard	14,000,000	2014 Korea Credit Bureau	20,000,000	2017 Dailymotion	85,200,000		
2009 RockYou!	32,000,000	2012 Zappos	24,000,000	2014 Imgur	170,000	2017 Friend Finder Network	412,000,000		
2009 Heartland	130,000,000	2012 Last.fm	43,500,000	2014 Facebook	500,000,000	2017 Telegram	15,000,000		
2009 Blue Cross Blue Shield of Tennessee	1,023,209	2012 Dropbox	68,700,000	2015 Carefirst	1,100,000	2017 Hong Kong Registration & Electoral Office	3,700,000		
2009 AvMed, Inc.	1,220,000	2012 Massive American business hack	160,000,000	2015 CarPhone Warehouse	2,700,000	2017 MyHeritage	92,283,889		
2009 Health Net	1,500,000	2012 LinkedIn	117,000,000	2015 Adult Friend Finder	3,900,000	2017 Dixons Carphone	10,000,000		
2009 US Military	76,000,000	2012 South Carolina State Dept. of Revenue	3,600,000	2015 US Office of Personnel Management	4,000,000	2017 Aadhaar	1,000,000,000		
		2012 South Carolina Government	6,400,000	2015 VTech	6,400,000	2017 CEX	2,000,000		
		2012 New York State Electric & Gas	1,800,000	2015 Premera	11,000,000	2017 Instagram	6,000,000		
		2012 Court Ventures	20,000,000	2015 Kromtech	13,000,000	2017 Equifax	143,000,000		
		2012 Disqus	17,500,000	2015 Experian / T-mobile	15,000,000	2017 Nival	1,500,000		

2004-2018 Data Breaches With More Than 1,000,000 Records Stolen



Source: databreaches.net data at https://docs.google.com/spreadsheets/d/1Je-YUdnhjQJO_13r8iTeRxpU2pBKuV6RVRHoYCgiMfg/edit#gid=322165570

Build Trust

Borrow Trust

Increase Transparency

8) UTILIZE DATA & ANALYTICS ... **BUT**

KEEP DATA SECURE



AND...

DON'T BE CREEPY

75

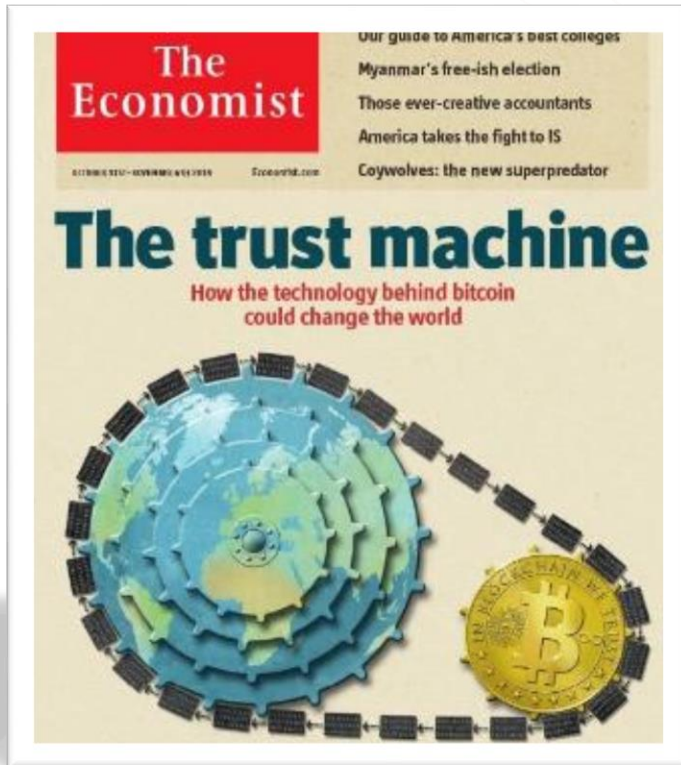
YEARS

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9) BONUS: IT IS ALL ABOUT THE BLOCKCHAIN

Blockchain protocols may transform how information, value and trust are distributed.



KPMG: Blockchain Accelerates Insurance Transformation

“Most observers therefore believe the system to be immensely more trustworthy and transparent than traditional approaches...”

TechCrunch: Blockchain is Empowering the Future of Insurance

“Digital trust is now an ever reasonable possibility”

Accenture: Blockchain: Industrializing Trust in Insurance

“Blockchain has the potential to provide a secure, transparent and verifiable mechanism to execute transactions in a manner that replaces the traditional notion of utmost good faith with provable trust.”

Deloitte: Blockchain: Trust Economy

“The emerging trust economy depends on each transacting party’s reputation and digital identity—and that’s where blockchain comes in.”

<https://home.kpmg.com/content/dam/kpmg/xx/pdf/2017/01/blockchain-accelerates-insurance-transformation-fs.pdf>

<https://www.accenture.com/us-en/insight-highlights-insurance-blockchain-industrializing-trust>

<https://dupress.deloitte.com/dup-us-en/focus/tech-trends/2017/blockchain-trust-economy.html>

<https://techcrunch.com/2016/10/29/blockchain-is-empowering-the-future-of-insurance/>

SUMMARY

Trust and **transparency** are the cornerstones of a sustainable insurance industry.

TRUST & TRANSPARENCY

Build Trust

- 1) Provide Trusted Advice
- 2) Deliver a Modern Experience
- 3) Make it Easy

Borrow Trust

- 4) Leverage a Trusted Brand
- 5) Connect People Together

Increase Transparency

- 6) Deliver Price/Value Transparency
- 7) Align Incentives
- 8) Utilize Data & Analytics

YEARS

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9) Block Chain

**BUT NONE OF THESE MEAN ANYTHING UNLESS YOU
DO WHAT YOU SAID YOU WERE GOING TO DO**



Mark Carney,
Governor of the Bank of England

**“Trust arrives by
foot and leaves
by Ferrari”**



21st Global Conference of Actuaries

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Thank You