

DECEMBER 2017

FT PARTNERS FINTECH INDUSTRY RESEARCH



**AUTO FINTECH**

*The Emerging FinTech Ecosystem  
Surrounding the Auto Industry*

FINANCIAL  
TECHNOLOGY  
PARTNERS

*The Only Investment Bank Focused Exclusively on FinTech*

San Francisco • New York • London

# Auto FinTech: The Emerging FinTech Ecosystem

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AUTO FINTECH



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### Financial Technology Partners

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*Click section to jump ahead*



# Auto FinTech: The Emerging FinTech Ecosystem

AUTO FINTECH



## Table of Contents (cont.)

### CEO Interviews



Tim Russi & Peter Greene  
**ally**



Gary Hallgren  
**arity**



Andreas Hinrichs  
**AUTOGRAVITY**



Cody Green  
**canadadrives**



Sergio Furio  
**creditas**



Stephanie Alsbrooks  
**defi SOLUTIONS**



Peter Sayer  
**FlexPath Capital**



Chase Fraser  
**FMC**  
Fraser McCombs Capital



Peter Breitstone  
**Goji**



Stefan Heck  
**nauto**



Tim Grace  
**POINT PREDICTIVE**



Alex Timm  
**ROOT**



Marc Weiser  
**RPM VENTURES**



Brad Weisberg  
**snapsheet**



Jim Landy  
**SPRINGBOARDAUTO**



Aldo Monteforte  
**THE FLOW**



Shawn Smith & Todd Hodnett  
**DRN** **VQS**



Jonathan Matus  
**Zendrive**

### Selected Auto FinTech Company Profiles

<b>Airbiquity</b>	<b>AutoFi</b>	<b>AUTOGRAVITY</b>	<b>AUTOPAY</b>	<b>BY_MILES</b>
<b>CAMBRIDGE MOBILE TELEMATICS</b>	<b>canadadrives</b>	<b>canvas</b>	<b>cellcontrol</b>	<b>clearcover</b>
<b>CFS</b> CONFIDENT FINANCIAL SOLUTIONS	<b>COVERHOUND</b>	<b>creditas</b>	<b>Cuvva</b>	<b>defi SOLUTIONS</b>
<b>DRIVERUP</b>	<b>DRN</b>	<b>edriving</b>	<b>EVERQUOTE</b>	<b>fair</b>
<b>FINOVA financial</b>	<b>FIRST ASSOCIATES</b>	<b>forevercar</b>	<b>Goji</b>	<b>Grab</b>
<b>Honcker</b>	<b>IAS</b>	<b>INSURIFY</b>	<b>marmalade</b>	<b>Metromile</b>
<b>nauto</b>	<b>OCTO</b>	<b>openbay</b>	<b>P97</b>	<b>POINT PREDICTIVE</b>
<b>rateGenius</b>	<b>REPAIR PAL</b>	<b>ROOT</b>	<b>RouteOne</b>	<b>scoop</b>
<b>Scope Technologies</b>	<b>snapsheet</b>	<b>Spireon</b>	<b>SPRINGBOARDAUTO</b>	<b>TAIL LIGHT</b>
<b>THE FLOW</b>	<b>the zebra</b>	<b>TrueMotion</b>	<b>Zendrive</b>	<b>Zobie</b>

### Selected Auto FinTech Financing and M&A Transaction Profiles

<b>COVERHOUND</b> Raises \$33 mm	<b>chedai</b> Raises \$52 mm	<b>Goji</b> Raises \$15 mm	<b>Metromile</b> Raises \$192 mm	<b>Advent International</b> <b>CCC INFORMATION SERVICES INC.</b> Acquisition	<b>ally</b> <b>BlueYield</b> Acquisition	<b>ASSURANT</b> the warranty group \$2.5 bn Acquisition
<b>radius</b> Raises \$201 mm	<b>微贷网</b> weidai.com.cn Raises \$153 mm	<b>易鑫集团</b> YIXIN GROUP Raises \$579 mm	<b>易鑫集团</b> YIXIN GROUP \$867 mm IPO	<b>COX AUTOMOTIVE</b> <b>Dealertrack</b> \$4 bn Acquisition	<b>SiriusXM</b> <b>AUTOMATIC</b> \$115 mm Acquisition	<b>VISTA</b> EQUITY PARTNERS <b>Solera</b> \$6.5 bn Acquisition



# I. Introducing FT Partners

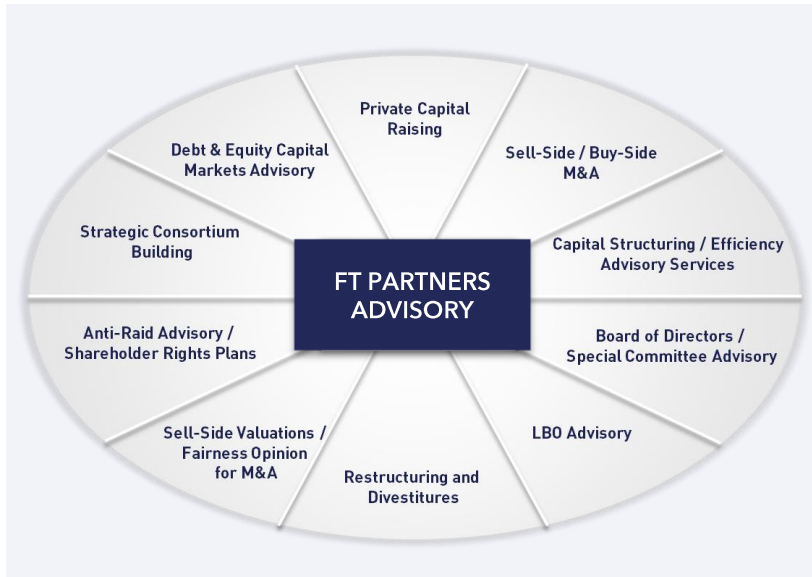
# Auto FinTech: The Emerging FinTech Ecosystem



## Overview of FT Partners

- Financial Technology Partners ("FT Partners") was founded in 2001 and is the only investment banking firm focused exclusively on FinTech
- FT Partners regularly publishes research highlighting the most important transactions, trends and insights impacting the global Financial Technology landscape. Our unique insight into FinTech is a direct result of executing hundreds of transactions in the sector combined with over 15 years of exclusive focus on Financial Technology

### FT Partners' Advisory Capabilities



### FT Partners' FinTech Industry Research

**FINTECH RESEARCH & INSIGHTS**

- In-Depth Industry Research Reports
- Proprietary FinTech Infographics
- Monthly FinTech Market Analysis
- FinTech M&A / Financing Transaction Profiles



Named Silicon Valley's #1 FinTech Banker (2016) and ranked #2 Overall by *The Information*



Ranked #1 Most Influential Person in all of FinTech in *Institutional Investors* "FinTech Finance 35"



Numerous Awards for Transaction Excellence including "Deal of the Decade"





# Auto FinTech: The Emerging FinTech Ecosystem

## Selected FT Partners Transaction Experience



Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



*for total consideration of approximately*

**\$ 115,000,000**



*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Provider of a data-driven platform that enables vehicle owners to be safer and drive smarter
- The acquisition deepens and expands SiriusXM's connected vehicle offerings for drivers nationwide and the industry's leading carmakers

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its acquisition of*



*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Operator of a direct auto lending platform with unique technology that brings efficiency to the direct auto finance marketplace
- Ally rebranded the platform to Clearlane in April 2017; this online multi-lender marketplace for auto finance and refinance will position the company extraordinarily well and further its leadership position in the auto finance space

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Ford's acquisition of Breeze, which was subsequently re-launched as Canvas, provides Ford Credit with an online platform along with short-term leasing technology and expertise
- Canvas provides an online platform for month-to-month car subscriptions as an alternative to traditional vehicle ownership

# Auto FinTech: The Emerging FinTech Ecosystem

## Selected FT Partners Transaction Experience

AUTO FINTECH



### Financial Technology Partners LP FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to



in its cash sale to



for total consideration of approximately

**\$ 369,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

- Leading provider of fuel cards and fleet management services available at more than 60,000 fuel and maintenance locations throughout the U.S.
- High-profile transaction with significant interest from leading strategic partners and private equity firms
- Expands WEX's offering with the addition of Fleet One's industry-leading Over-the-Road and Local platforms

### Financial Technology Partners LP FTP Securities LLC

is pleased to announce its exclusive  
role as financial advisor to



in its acquisition of select assets of



for total consideration of approximately

**\$ 137,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

- Provider of aviation, marine and land fuel products and related services worldwide
- Multi Service is a global transaction management company specializing in fleet, government and commercial payment programs
- Enables World Fuel to benefit from Multi Service's technology-enabled fuel card / corporate payments platform and other commercial services

### Financial Technology Partners LP FTP Securities LLC

is pleased to announce its role as  
strategic and financial advisor to

**SAFE-GUARD**

on its sale to an Affiliate of



The Only Investment Bank  
Focused Exclusively on Financial Technology

- Provider of finance and insurance ("F&I") solutions to the automotive industry
- Blue chip client base including:
  - Five of the world's leading auto OEMs
  - Two of the world's largest motorcycle manufacturers
  - The nation's largest new and used vehicle retailers

# Auto FinTech: The Emerging FinTech Ecosystem

## Selected FT Partners Transaction Experience



Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*

**FLEETCOR®**

*for total consideration of*

**C \$900,000,000**



*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- One of the largest privately-owned, non-bank international payment specialists worldwide
- FLEETCOR is a leading global provider of fuel cards and workforce payment products to businesses
- Acquisition enables FLEETCOR to enter the B2B cross-border payments market and enhances its global corporate payment capabilities

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its role as  
exclusive strategic and financial advisor to*



*in its sale to*



*for total consideration of*

**\$ 1,400,000,000**



*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Largest independent warranty provider for consumer electronics and major appliances
- The acquisition represents the largest venture-backed InsurTech exit to date
- FT Partners previously represented SquareTrade in its \$238 mm strategic growth investment with Bain Capital and Bain Capital Ventures

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*

**enservio**

*in its sale to*

**Solera**



*The Only Investment Bank  
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- Largest U.S. provider of SaaS-based solutions and services to the property contents insurance marketplace
- This combination will allow Solera, a global technology leader in intelligent data and software systems for the vehicle and home, to leverage Enservio's proprietary database and grow its Digital Home platform



# Auto FinTech: The Emerging FinTech Ecosystem

## Selected FT Partners Transaction Experience

AUTO FINTECH



Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*

**Goji**

*in its financing led by*

**H S C M** **HSCM BERMUDA**  
MANAGEMENT COMPANY

*for total consideration of*

**\$ 15,000,000**

**FINANCIAL  
TECHNOLOGY  
PARTNERS**

*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Leading independent online personal lines insurance agency
- Strategic investment which allows Goji to benefit from HSCM Bermuda's sophisticated knowledge of insurance and its strong access to the insurance and reinsurance markets

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role  
as sole strategic and financial advisor to*

**insureon**

*in its equity capital raise led by*

**OAK  
HC/FT**

*for total consideration of*

**\$ 31,000,000**

**FINANCIAL  
TECHNOLOGY  
PARTNERS**

*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Leading online insurance marketplace for small businesses
- Serves retail clients directly and also supports banks, brokerages and insurance companies through a wholesale offering
- Coverage provided for 175,000+ small businesses

Financial Technology Partners LP  
FTP Securities LLC

*is pleased to announce its exclusive role as  
financial advisor to*

**taulia**

*in its Series E financing led by*

**zouk**

*for total consideration of approximately*

**\$ 46,000,000**

**FINANCIAL  
TECHNOLOGY  
PARTNERS**

*The Only Investment Bank  
Focused Exclusively on Financial Technology*

- Provides cloud-based invoicing, payment, dynamic discounting and supplier finance solutions to corporations and their suppliers
- Automotive is a key industry vertical, along with food & beverage, healthcare, retail and utilities

# Auto FinTech: The Emerging FinTech Ecosystem

## Proven Track Record of Success Across FinTech

AUTO FINTECH





## II. Executive Summary





*As the auto industry continues to innovate, consumers and businesses will expect the financial services and processes surrounding this massive industry to modernize and adapt as well.*

*Similarly, as new advances change the way consumers and businesses use cars, both traditional financial services and FinTech companies can distinguish themselves by offering new, innovative solutions.*

- The automotive industry, a cornerstone industry in many countries and economies, is undergoing a profound transformation as the industry attempts to adapt to new technologies and disruptive business models
- Since the success of the auto industry is highly dependent on a number of key financial services, the transformation of the auto industry is creating both challenges and opportunities for financial service firms across all aspects including lending, insurance and even payments
- Similar to other areas of financial services, technology is only becoming more important to the delivery of financial services related to the automotive industry – resulting in the emergence of an Auto FinTech ecosystem
- While innovative business models are eliminating inefficiencies within the current system, new technologies are introducing never-before-seen advances to the way consumers use cars
- New marketplaces have emerged around ride-sharing and on-demand car services while advances in big data and the Internet of Things have allowed for the “Connected Car,” which enhances features such as driver safety and car diagnostics and enables the delivery of entirely new services
- As a traditional, complex industry with highly ingrained processes, change will not happen overnight; however, as many traditional players in the space are now embracing new opportunities by partnering with or acquiring startups, the pace of innovation is accelerating

*In this report, we ...*

- ➔ Provide a high-level overview of the automotive industry and its key players
- ➔ Discuss seven key trends and innovations in the automotive space:



- ➔ Examine the responses of incumbents to-date, including the innovations, partnerships and acquisitions that have been made to stay ahead of the game
- ➔ Interview 20 industry executives
- ➔ Provide a broad landscape of Auto FinTech companies as well as other key companies involved in the automotive-related financial services ecosystem
- ➔ Profile 50 selected companies
- ➔ Profile 14 recent financing and M&A transactions in the Auto FinTech space



## III. Auto FinTech Industry Overview



# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry

AUTO FINTECH



*The U.S. automotive industry represents a massive market – historically, the industry accounts for approximately **3 to 3.5%** of U.S. gross domestic product.<sup>(1)</sup>*



**12 million**  
vehicles produced

**Manufacturers**



**\$785 billion**  
parts sales\*

**Suppliers**



**\$996 billion**  
total sales

**Dealerships**



**\$1.1 trillion**  
loans outstanding

**Lenders**



**\$247 billion**  
premiums written

**Insurers**



**18 million**  
new vehicles sold

**Consumers**

# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry – Auto Manufacturers

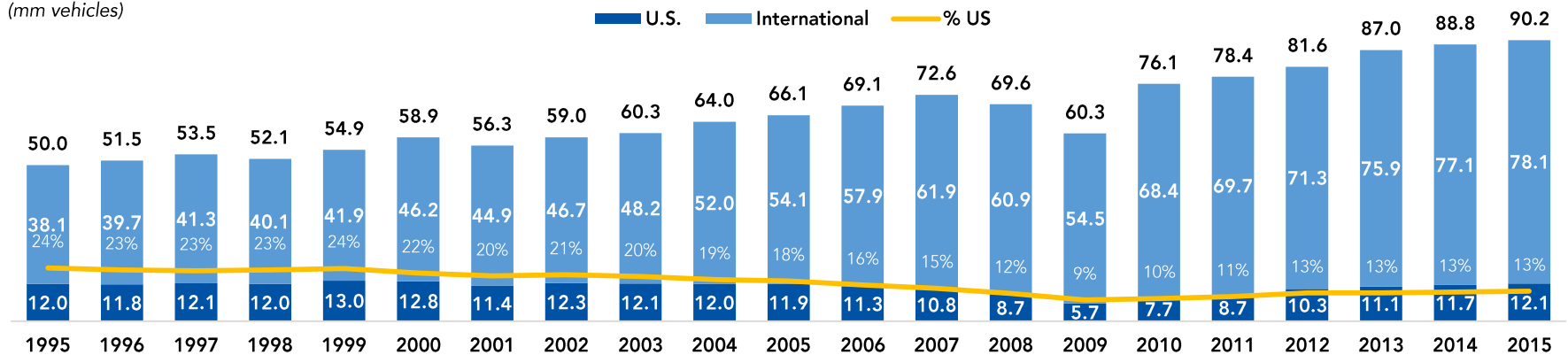
AUTO FINTECH



*Total production of motor vehicles globally has steadily increased over the last two decades, despite temporary decreases in 2008 and 2009 due to the global recession. In 2015, production reached more than 90 million. The United States is the world's second largest producer of motor vehicles, behind China.*

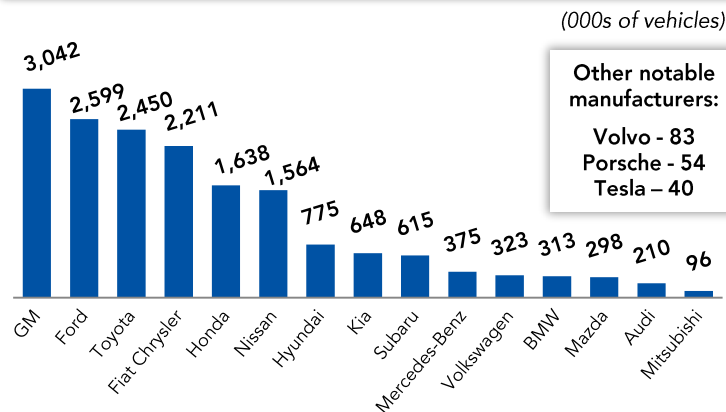
**Global Auto Production (Passenger Cars and Commercial Vehicles) / % U.S. Based – past 20 years <sup>(1)</sup>**

(mm vehicles)

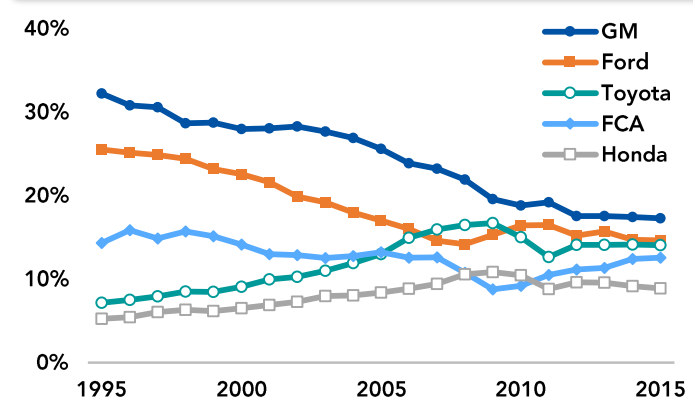


**While General Motors is still the market leader in the U.S., the company is not as dominant as in years past – in 1965, GM had 50% market share, which has since declined to 17% <sup>(3)</sup>**

**Top 15 Auto Manufacturers in the U.S. – 2016 Vehicle Sales <sup>(2)</sup>**



**U.S. Market Share – past 20 years <sup>(3)</sup>**



Source:

(1) Bureau of Transportation Statistics, "Table 1-23: World Motor Vehicle Production, Selected Countries"

(2) Wall Street Journal, "Market Data Center – Auto Sales"

(3) Wards Auto, "US Vehicle Sales Market Share by Company, 1961-2015"

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FT PARTNERS RESEARCH

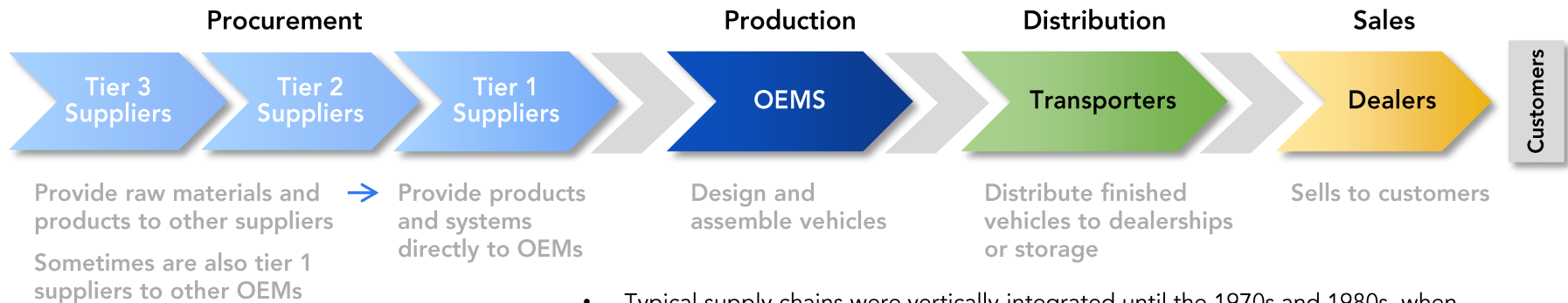
# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry – Suppliers

AUTO FINTECH



*As auto manufacturers increase their outsourced operations, a global ecosystem of parts suppliers and service providers has emerged.*



- Typical supply chains were vertically integrated until the 1970s and 1980s, when firms started to increase their outsourced operations <sup>(3)</sup>
- Considerable R&D costs and benefits from economies of scale have driven industry consolidation, resulting in several “mega-suppliers” that offer a comprehensive portfolio of complete systems <sup>(4)</sup>

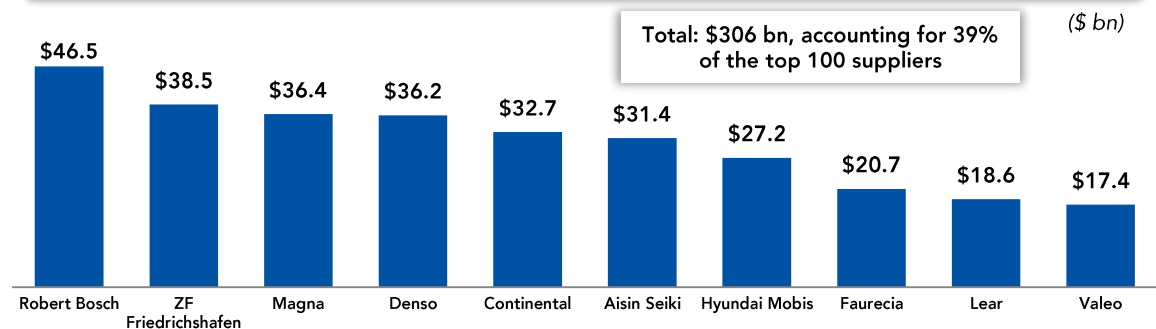
Many suppliers also provide materials and products to competing manufacturers:

*“[The auto industry] is in some significant ways an industry that is uniquely interdependent – particularly with respect to our supply base, with more than 90 percent commonality among our suppliers.” <sup>(1)</sup>*



**Alan Mulally**  
Former President & CEO

### Top 10 Suppliers – 2016 OEM Automotive Parts Sales <sup>(2)</sup>



# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry – Dealers

AUTO FINTECH



*Auto dealerships are entrenched components in the automotive industry as they help facilitate the sales of new and used vehicles and provide buyers with auto-related products and services, both financial and non-financial.*

The automotive industry has been steadily recovering from the 2008 financial crisis, as shown by the ongoing increase in new car sales

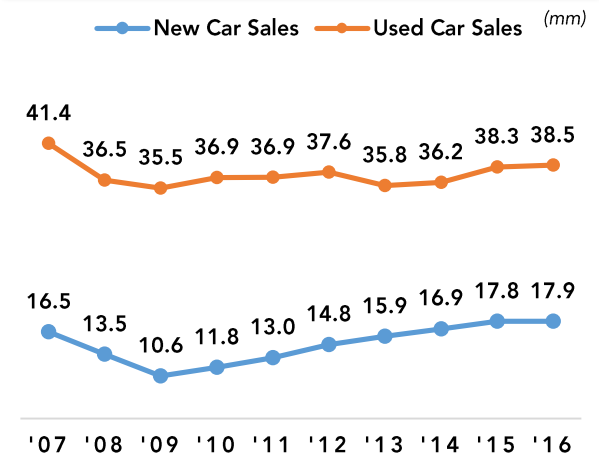
**\$34,449** Average new car price <sup>(1)</sup>

**\$19,866** Average used car price <sup>(1)</sup>

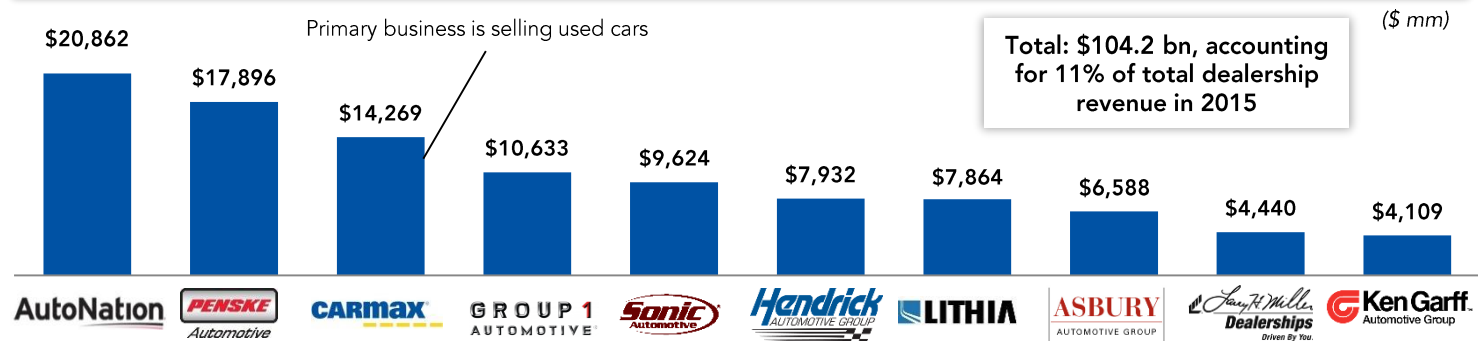
### Overview

- Dealerships generally contract with automakers and generate revenue through selling new and used vehicles, in addition to selling financial products and providing maintenance services
- In a 2016 report, the National Automobile Dealers Association reported that there were approximately **16,708** total new-car dealerships, which: <sup>(1)</sup>
  - Generated approximately **\$996 billion** in total sales
  - Wrote **315 million** repair orders, generating **\$110 billion** in service and parts sales
  - Employed **1.1 million** workers

### US Vehicle Sales – New <sup>(2)</sup> and Used <sup>(3)</sup>



### Top 10 U.S. Dealership Groups – 2015 Total Revenue <sup>(4)</sup>



# Auto FinTech Industry Overview

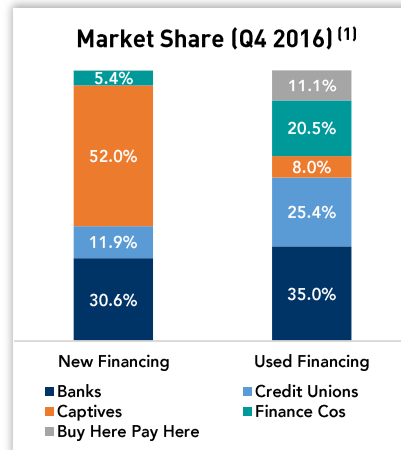
## A Snapshot of the Automotive Industry – Lenders



*Consumers often require financing options to complete an auto purchase, creating demand for loans and leases. As of Q4 2016, **85%** of new vehicles and **54%** of used vehicles were financed. <sup>(1)</sup>*

### Consumer Auto Finance Sources and Market Share

- **Traditional Banks and Credit Unions:** consumers often turn to their existing banking relationships for financing
- **Captive Finance:** companies that are subsidiaries of car manufacturers that provide financing for their customers, typically indirectly through sponsored dealerships
- **Finance Companies:** non-depository companies that lend to consumers
- **Buy Here Pay Here (BHPH):** dealerships that extend credit to car buyers directly, typically at relatively high interest rates



Consumers can choose to finance their auto purchase directly or indirectly, through several sources. **79.2%** of auto loan volume is originated indirectly. <sup>(2)</sup>

#### Direct Lending

- Buyers obtain financing directly from a bank, finance company or credit union, using the loan to pay for the vehicle
- When the buyer goes to the dealership to select a car, he or she already has a financing offer in hand

#### Indirect Lending

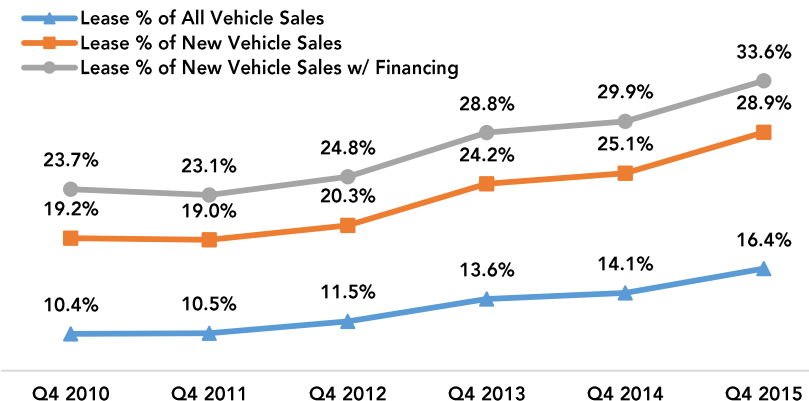
- Consumer applies for financing through the auto dealership, after choosing his/her vehicle
- If accepted, dealership either funds the loan through its captive or transfers the loan to an indirect finance source

### Auto Leases

- A growing population of consumers are choosing to lease their cars instead of buying them
- Leases are typically offered by auto manufacturers, through their captive financing arms
- Leasing often has lower monthly payments compared to an auto loan, but is essentially a long-term rental as the lessee does not own the car at the end of the lease

- **96%** of leases are for new cars
- **36 month** average term, compared to 68 months for a new car loan
- **720** average credit lease credit score, suggesting that lessees are typically prime consumers

### Consumer Auto Lease Penetration <sup>(3)</sup>



# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry – Lenders (cont.)

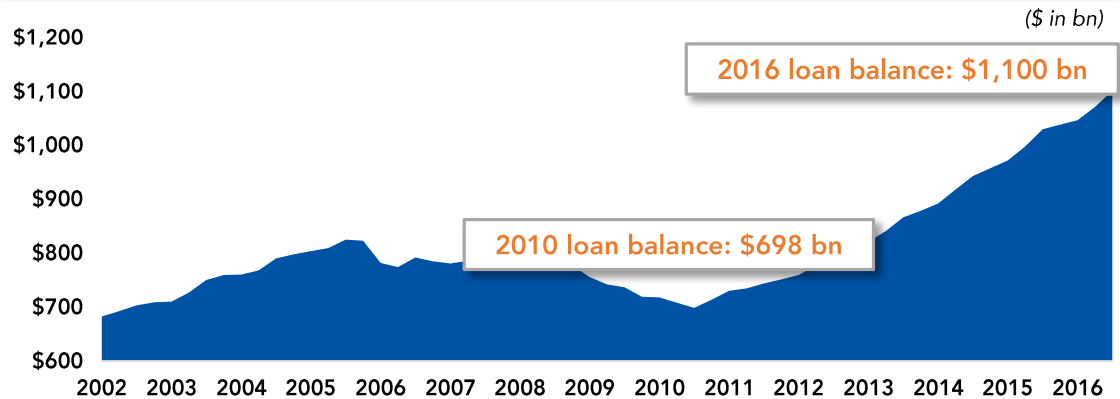


Outstanding auto loans in the U.S. total **\$1.1 trillion**, accounting for **~30%** of non-mortgage consumer credit.

### Overview

- With auto sales falling to a record low in 2009 of 9 million units, auto loans outstanding declined as well
- Post-financial crisis, the steady recovery of auto sales has prompted additional demand for loans and financing options
- Auto lending is the third largest consumer credit segment in the U.S., behind mortgage debt and student loans

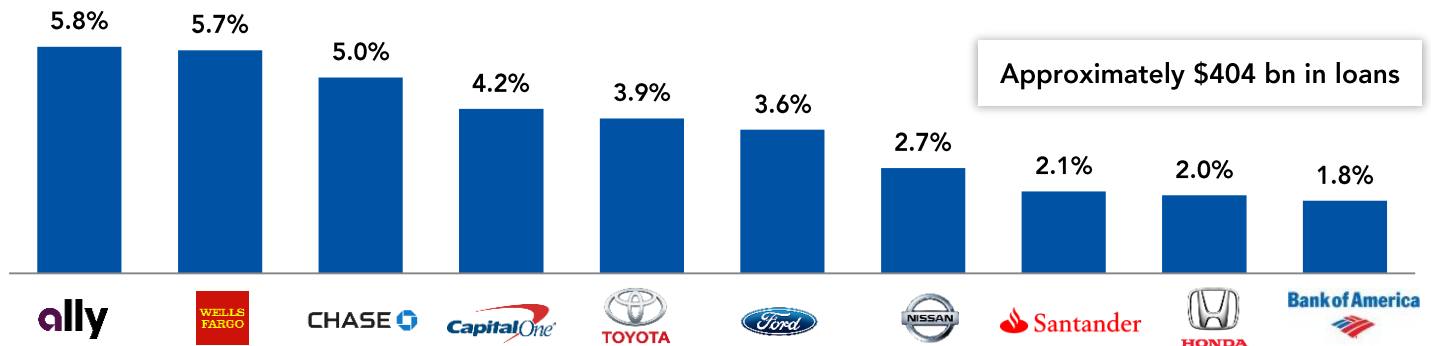
### Motor Vehicle Loans Outstanding <sup>(1)</sup>



The market is highly fragmented, with the top 10 retail lenders making up **36.7%** of the entire market <sup>(2)</sup>

Of the top 10, 6 are banks and 4 are captive finance companies

### Top 10 Retail Lenders – % of Total Motor Vehicle Loans Outstanding <sup>(2)</sup>



Source:

(1) Board of Governors of the Federal Reserve System (US), "Motor Vehicle Loans Owned and Securitized, Outstanding" (note: does not include vehicle leases)

(2) Experian Automotive, "State of the Automotive Finance Market Fourth Quarter 2015"



# Auto FinTech Industry Overview

## A Snapshot of the Automotive Industry – Insurance Providers

AUTO FINTECH



**Auto insurance protects consumers against financial loss in case of accidents, damage or theft – 48 out of 50 states mandate that all drivers must carry insurance, making it an essential financial service for the auto industry.**

### Overview

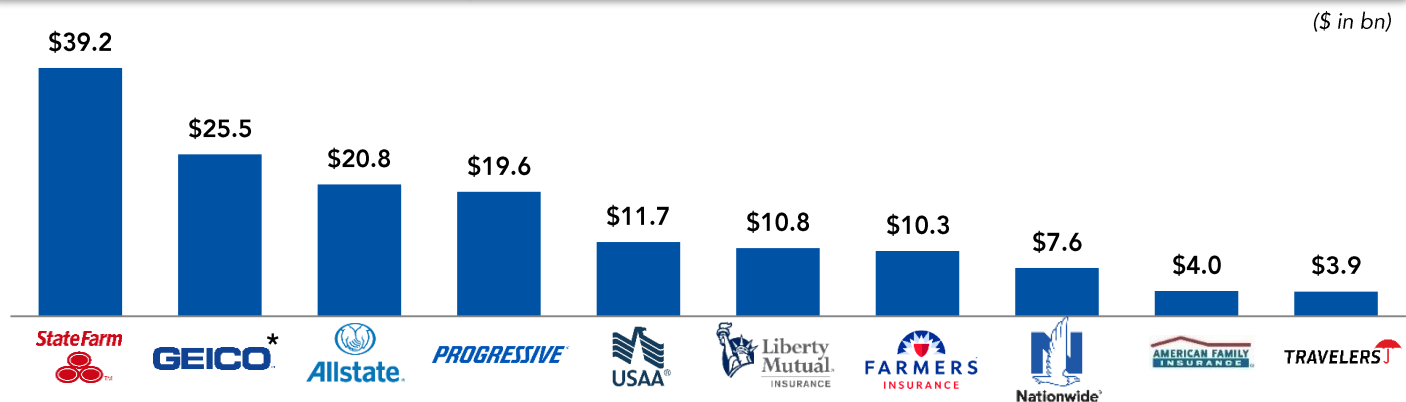
- Most U.S. states and lenders mandate certain policies and coverage, creating ongoing demand for auto insurance products
- Auto insurance is the largest line of business within the \$611 billion property & casualty (P&C) insurance market
  - Auto insurance companies wrote **\$247 billion** in premiums during 2016, accounting for 40% of all P&C premiums <sup>(1)</sup>
- \$1,178** average annual cost for auto insurance in 2017 <sup>(2)</sup>

The top 10 auto insurance companies wrote a total of \$142 billion in premiums, accounting for **62%** of total auto insurance premiums written in 2016 <sup>(3)</sup>

### Premiums Written for Automobile Insurance – 2007-2016 <sup>(1)</sup>



### Top 10 U.S. Private Passenger Auto Insurance Companies – 2016 Direct Premiums Written <sup>(3)</sup>



Source:

(1) National Association of Insurance Commissioners, "State Insurance Regulation: Key Facts and Market Trends"

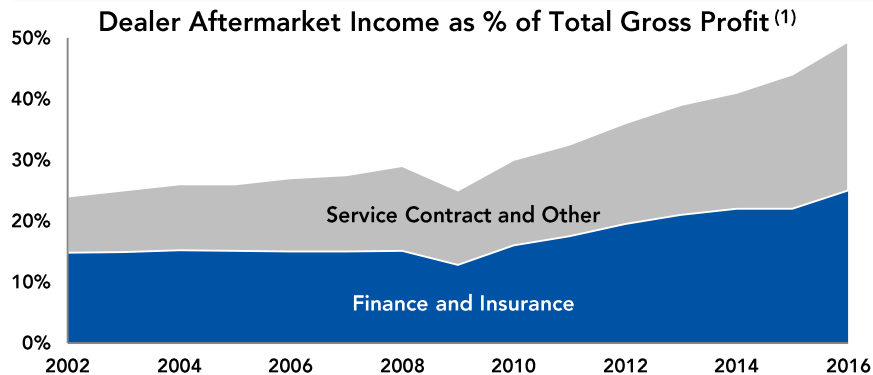
(2) AAA, "Your Driving Costs, 2017 Edition"

(3) Insurance Information Institute, "Facts + Statistics: Insurance company rankings"

\* Note: GEICO's parent, Berkshire Hathaway, owns other insurance subsidiaries including Applied Underwriters, General Re and National Indemnity

*In addition to P&C insurance, vehicle owners can purchase ancillary finance & insurance (F&I) products such as vehicle service contracts and other optional products.*

### Ancillary Finance & Insurance (F&I) Products



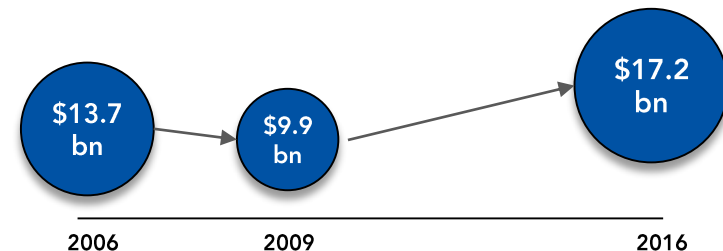
- Most ancillary F&I products are centered around aftermarket maintenance, protection and repair
- These products include, but are not limited to: anti-theft protection, dent and ding protection, environmental protection, gap insurance, key replacement, prepaid maintenance, trade assurance and tire / wheel / windshield replacement or repair
- These products offer a healthy profit margin for dealers and are usually a significant revenue stream
- These products are attractive to customers based on their customizable nature and high degree of specificity, based on the vehicle and driver profile
- While the products typically are standalone offerings, some of them may be bundled together to sell better

### Vehicle Service Contracts

- Vehicles service contracts are promises to perform / pay for certain repairs or services
- These contracts, commonly known as “extended warranties,” supplement existing warranty coverage provided by OEMs
- Vehicle service contracts are underwritten by insurance companies and sold by OEMs, dealers and independent providers
- Service contract pricing is usually based on contract coverage, contract length and car make, model and condition
- In most cases, repairs must meet certain conditions before the vehicle service contract can be applied

According to NADA, **44%** of new vehicles retailed also had service contracts – compared to **24%** in 2000 <sup>(1)</sup>

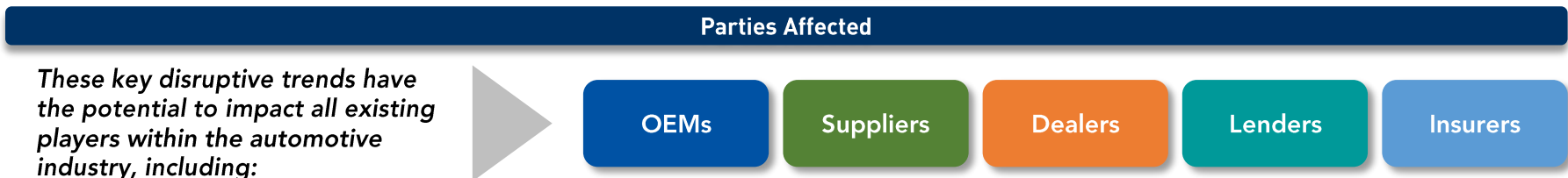
### Consumer Premiums Paid for Auto Service Contracts <sup>(2)</sup>

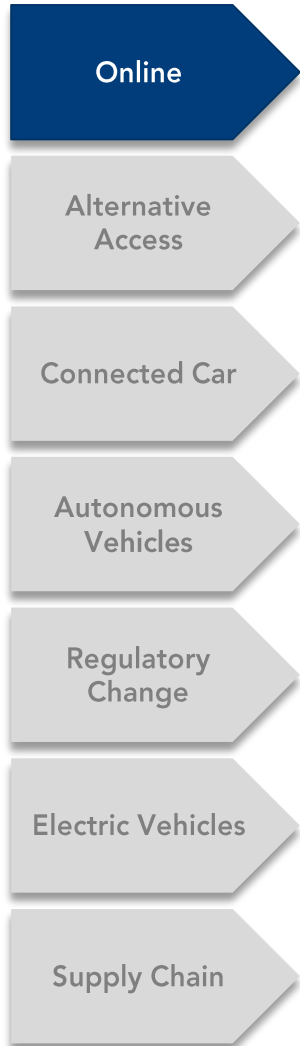




## IV. Auto FinTech Industry Trends

Overview	Trends Include...	
<p>In recent years, several key trends have emerged that are disrupting the automotive industry and its ecosystem of financial services</p> <ul style="list-style-type: none"> <li>Changing consumer habits, along with advances in technological innovations have fueled the growth of newer entrants into the space</li> <li>In the short term, incumbent financial services providers will likely remain dominant while disruptors aim to capitalize on inefficiencies within traditional processes and capture new opportunities presented through new, disruptive business models</li> <li>In the long term, we may see other technological innovations cause a larger, more fundamental shift within the automotive industry and present numerous challenges and opportunities for both new and existing participants in the space</li> </ul>	Online Purchasing Process	Online research, online financing options and next-gen, digital-first dealerships OEMs Dealers Lenders Insurers
	Alternative Access to Vehicles	On-demand transportation, ride-sharing platforms and next-gen rental companies OEMs Dealers Lenders
	Connected Cars	Increased connectivity in and around the car OEMs Suppliers Dealers Insurers
	Autonomous Vehicles	Self-driving cars OEMs Suppliers Dealers Insurers
	Regulatory Change	Changing landscape of dealership rules and regulations OEMs Dealers Lenders Insurers
	Electric Vehicles	Innovative technologies around electric vehicles OEMs Suppliers Dealers Lenders
	Supply Chain	Changes in the automotive manufacturing process OEMs Suppliers





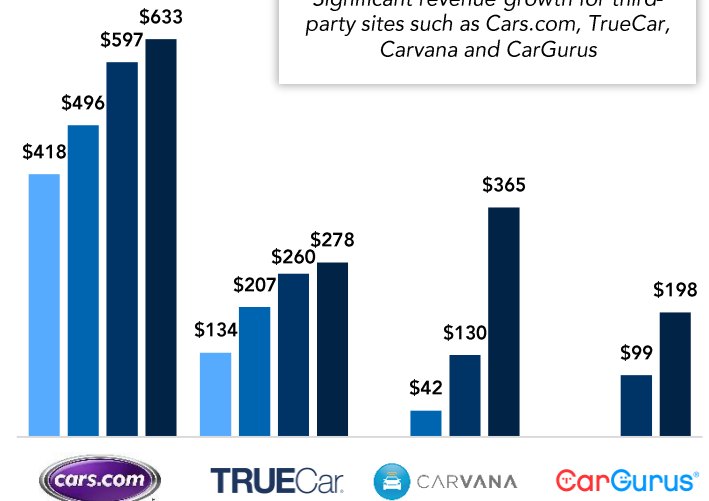
### Car Buying Process Increasingly Spent Online

The Internet (both desktop and mobile) has become a critical resource in all forms of retail purchases as consumers utilize online resources to research products, compare pricing and complete transactions

- This is especially pertinent for the automotive market, enabling consumers to compare makes and models, research inventory, pricing and financing options and estimate trade-in values
- While online, more car buyers use third party, auto specific sites than other site categories (OEM sites, dealer sites and search websites)
  - 56% of car buyers said that third-party sites were the most useful – this amount was three times more than other sites <sup>(1)</sup>
  - The amount of buyers using third party websites increased from 53% in 2011 to 66% in 2015 <sup>(1)</sup>

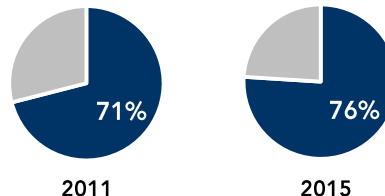
### Selected Third-Party Site Revenues

■ 2013 ■ 2014 ■ 2015 ■ 2016 (\$ in mm)



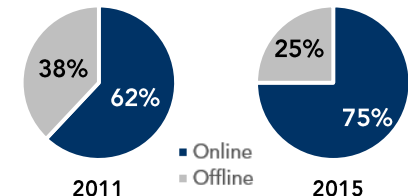
### Car Buyers Using the Internet to Shop <sup>(1)</sup>

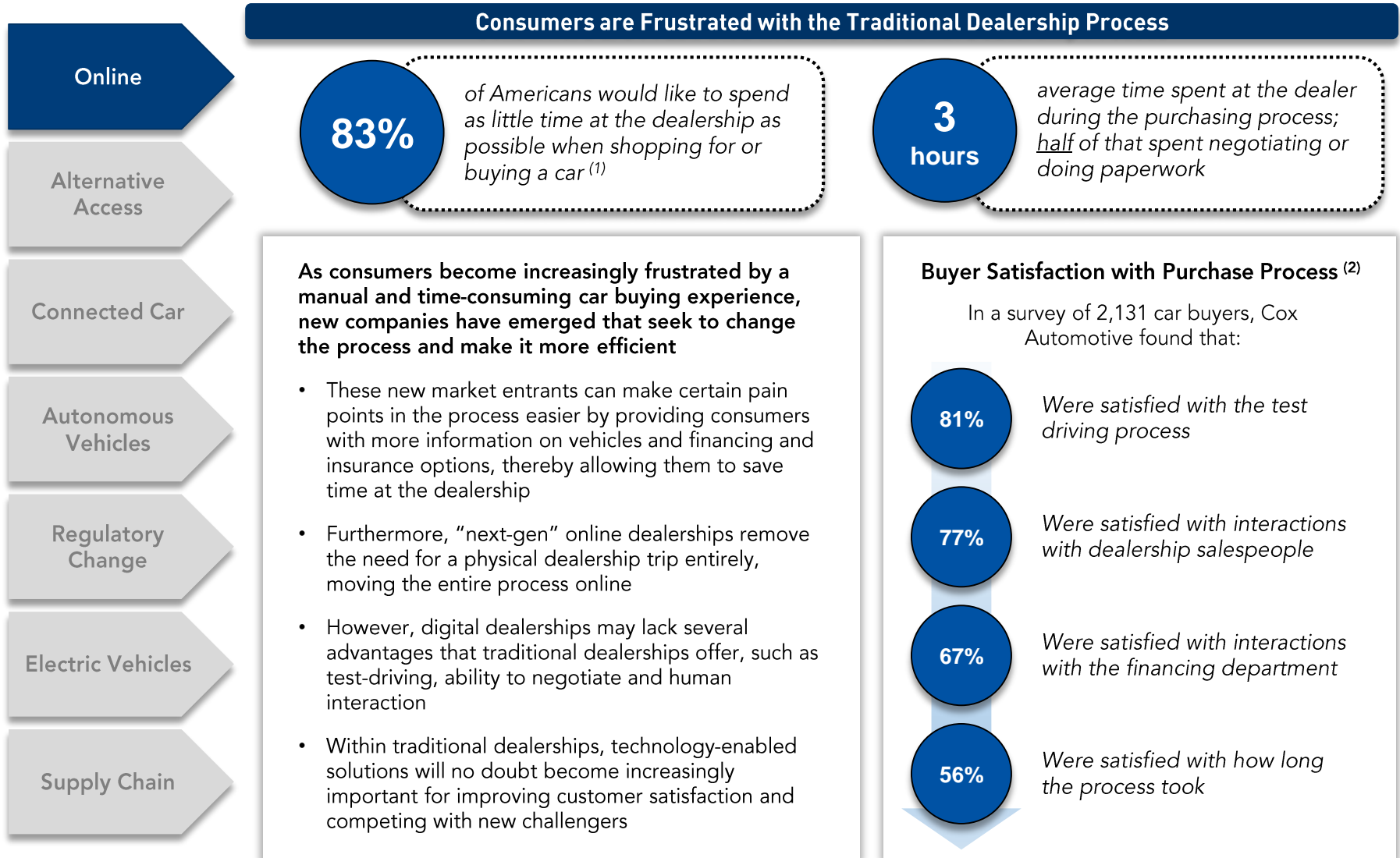
High level of Internet usage amongst buyers (for both new and used vehicles)



### Time Spent Vehicle Shopping – Online / Offline <sup>(1)</sup>

Time spent shopping online for vehicles has increased







# Auto FinTech Industry Trends

## Online Channel – Selected Companies

AUTO FINTECH



### Selected Companies - Online Research, Online Finance Marketplaces / Lenders, Next Gen Dealerships

#### Online

##### Online Research / Listings

**Informational websites and resources** → Consumers access these websites to learn more about their options before purchasing a vehicle



*"Digitally savvy customers are seeking convenience, transparency and empowerment – all in the palm of their hand. Rapid migration to smartphone-based auto financing will be transformational for lenders and dealers who embrace the technology."* <sup>(1)</sup> - Serge Vartanov, CMO AUTOGRAVITY

In Accenture's Automotive Digital Survey, **76%** of U.S. drivers polled said they would consider purchasing a car directly online <sup>(2)</sup>

#### Alternative Access

#### Connected Car

#### Autonomous Vehicles

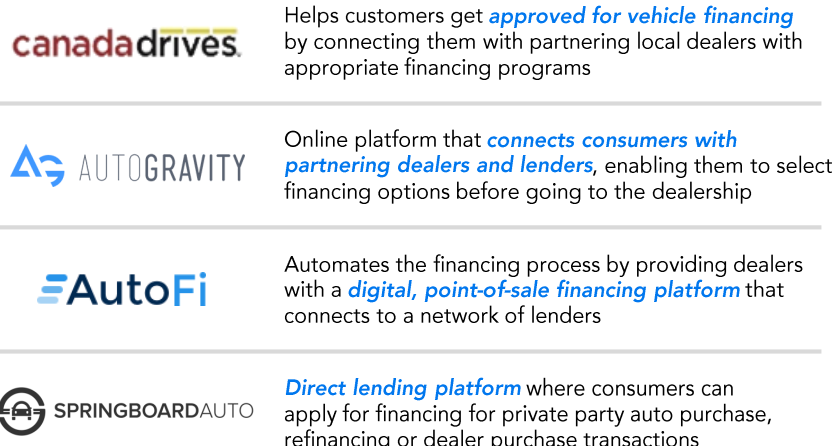
#### Regulatory Change

#### Electric Vehicles

#### Supply Chain

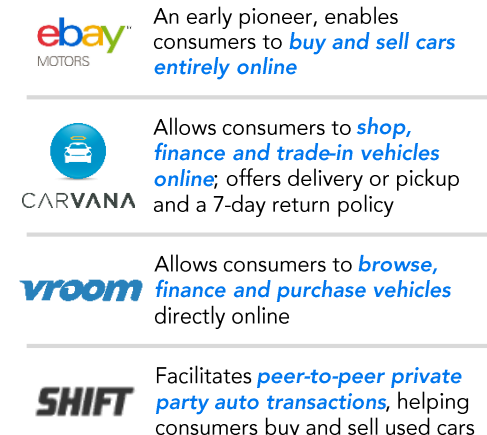
##### Online Finance Marketplaces / Lenders















**Online indirect or direct lending platforms** → Consumers can connect with dealers or lenders to receive financing, standardizing and reducing friction in the process



##### Next Gen Dealerships

**Online used-car marketplaces** → Direct-to-consumer offerings where consumers can view and purchase used cars online



Investments and Partnerships		
<div>Online</div> <div>Alternative Access</div> <div>Connected Car</div> <div>Autonomous Vehicles</div> <div>Regulatory Change</div> <div>Electric Vehicles</div> <div>Supply Chain</div>	<b>Automotive industry incumbents are increasingly partnering with, acquiring and/or investing in online-focused automotive companies</b>	
	Company	Target
	Description	
	ACQUISITIONS	
		  <ul style="list-style-type: none"> <li>In October 2016, Ally Financial acquired BlueYield, an online multi-lender marketplace for auto finance and refinance; in April 2017, Ally launched Clearlane, a rebranded version of the acquired platform</li> <li>Ally plans to offer the technology to its network of dealers to power online sales on their websites</li> </ul>
	INVESTMENTS	
	 	 <ul style="list-style-type: none"> <li>In July 2017, VW Credit announced it had invested \$30 mm in AutoGravity, an indirect financing platform that connects car buyers with nearby dealerships</li> <li>Daimler is also an investor, having invested \$30 mm in February 2017 and \$20 mm in November 2015</li> <li>AutoGravity partners with top banks and captives, including Mercedes-Benz Financial Services, Volkswagen Credit and Hyundai Capital Americas to provide instant loan and lease offers for AutoGravity users</li> </ul>
		 <ul style="list-style-type: none"> <li>In January 2017, Ford Credit announced it had invested in AutoFi and would roll out the technology platform at Ford dealerships</li> </ul>
	PARTNERSHIPS	
		 <ul style="list-style-type: none"> <li>In May 2017, Ally announced it had partnered with TRED, a next-gen dealership that directly connects vehicle buyers and sellers, to offer auto finance and insurance products on the platform</li> </ul>
		 <ul style="list-style-type: none"> <li>In January 2017, Ally Financial announced it had agreed to commit \$600 mm in financing arrangements to Carvana, a next-gen dealership</li> </ul>
		 <ul style="list-style-type: none"> <li>In October 2016, Chase announced it had partnered with TrueCar to launch Chase Auto Direct, a platform that enables consumers to apply for financing online after selecting a car and dealer</li> </ul>

### Online Auto Insurance Resources and Offerings are Proliferating

Online

**Increasing usage of the online channel has also spread to the insurance space, where startups are disrupting how consumers research, purchase and use auto insurance**

Alternative  
Access

**Goji**

Goji provides an [online insurance marketplace](#) where users can compare insurance rates and purchase policies with the help of licensed agents

**metromile**

Metromile offers [pay-per-mile insurance](#), providing users that drive less with cheaper insurance; Metromile's smart driving app also helps track car location, health and road alerts to promote fewer claims

Connected Car

Autonomous  
Vehicles

**COVERHOUND®**

CoverHound provides an [online insurance marketplace](#) where users can search for and compare real-time auto and property insurance rates; CoverHound has direct relationships with insurance carriers and sells policies on their behalf



Cuvva provides [hourly car insurance](#) for borrowing a friend or family member's car; users can easily buy coverage through the mobile app

Regulatory  
Change

Electric Vehicles

**the zebra**

The Zebra operates an [insurance comparison website](#) that compares quotes from over 200 insurance companies, matching users with deals based on their location and needs

**marmalade**

Accessible through an online application, Marmalade provides low cost insurance for [learner / student and young drivers](#); Marmalade's black box telematics technology helps drivers improve their driving skills and keep insurance premiums low

Supply Chain



### Potential Impact of Alternative Access Options on the Auto Industry

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain

The emergence of the transportation sharing economy (through on-demand transportation, car sharing and ride sharing) has created a vibrant ecosystem of alternative transportation and mobility options

- The proliferation of these providers has raised questions over the necessity of traditional car ownership, as consumers potentially adopt on-demand car / ride sharing platforms as a primary mode of transportation

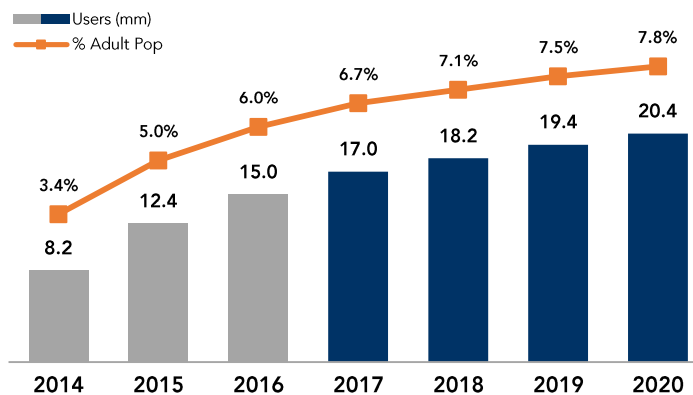
However, a profound shift in car ownership is likely to play out over many years

- Widespread existing auto adoption means that car ownership is often cheaper in the U.S. for large segments of the population
- Economic cost of alternative mobility options is often higher than that of car ownership – although this may change with the adoption of autonomous vehicles (discussed later)
- Interestingly, the percentage of Americans under 45 with drivers licenses has continuously decreased since 1983 <sup>(1)</sup>

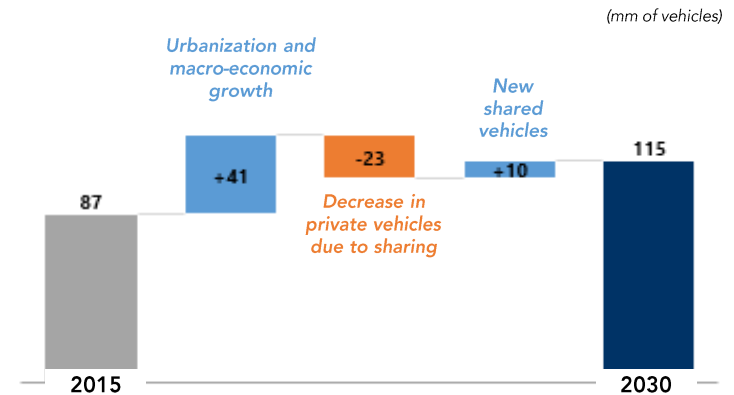
Alternative vehicle access platforms are beginning to impact players in the auto industry by creating both new opportunities and challenges

- OEMs are exploring offering mobility services themselves through partnerships and investments
- Auto purchases for OEM-provided car-sharing fleets will likely expand, but potentially cannibalize traditional auto sales
- Alternative access platforms are creating demand for new custom-tailored financial services, although not without challenges

U.S. Adult Transportation Sharing Economy Users, 2014-2020 <sup>(2)</sup>



Projected Annual Global Vehicle Sales <sup>(3)</sup>



# Auto FinTech Industry Trends

## Alternative Access – Selected Companies

AUTO FINTECH



### Selected Companies - Next Gen Rental / On-Demand Transportation / Specialized Financial Services

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain

IBM Institute for Business Value:



*"A new relationship – people and cars"* <sup>(1)</sup>

In January 2016, the IBM Institute for Business Value conducted a survey exploring how consumers personally expect to use vehicles over the next ten years. The survey, with over 16,000 respondents across 16 countries, found that:

- **86%** said they will own a car sometime in the next ten years, but:
  - 42% were very interested in a subscription pricing ownership model
  - 24% were very interested in a fractional ownership model
- **39%** said car sharing is a very important option
- **36%** like the on-demand ride sharing model



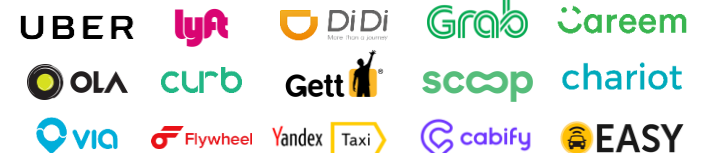
UBER

Travis Kalanick, Former CEO of Uber

"Our intention is to make Uber so efficient, cars so highly utilized that for most people it is cheaper than owning a car. Uber doesn't grow if car ownership is cheaper than taking Uber."

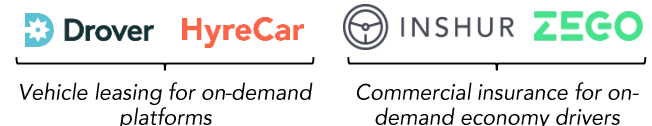
### On-Demand Transportation

Transportation services that consumers can request or schedule through technology-enabled platforms → enables users to access transportation near-instantly or on a specified schedule



### Specialized Financial Services for On-Demand

Financial services provided specifically for on-demand transportation platforms



Vehicle leasing for on-demand platforms

Commercial insurance for on-demand economy drivers

Not without challenges – companies in the space have shut down operations

Xchange Leasing  
AN UBER COMPANY























### Next Gen Rental

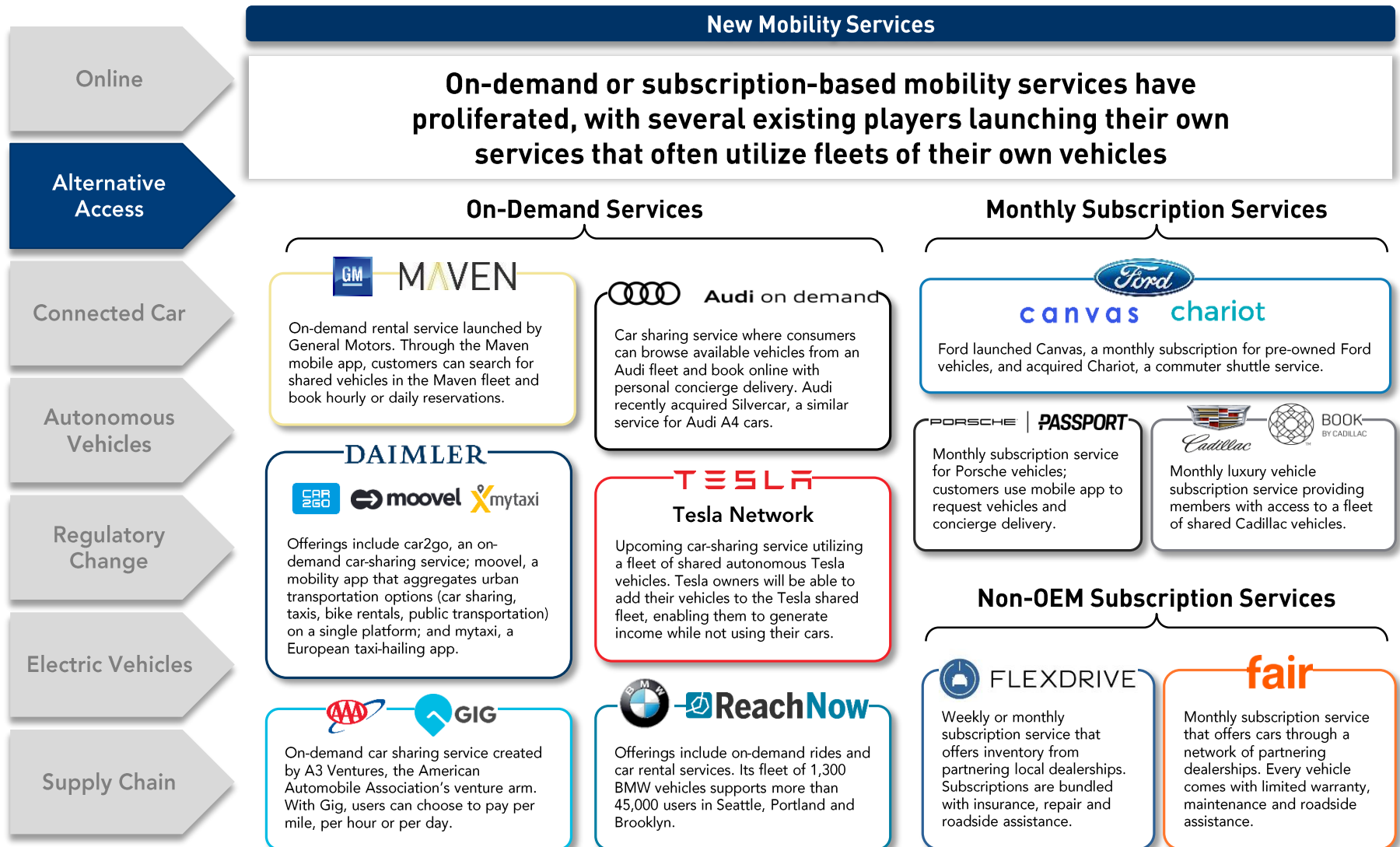
Provides consumers with more flexible rental models or the ability to rent out their own cars → through a subscription pricing or shared ownership model





Acquisitions, Investments and Partnerships								
Online	In response to the growing transportation sharing economy, auto manufacturers have been heavily involved in the space through acquisitions, investments and / or partnerships with startups							
Alternative Access	Acquisitions				Investments			
Connected Car	Automaker	Company	Date	Details	Automaker	Company	Date	Details
Autonomous Vehicles	Daimler / Mercedes-Benz		Sep-17	App-based ridesharing service	Daimler		Sep-17	On-demand ridesharing service Part of \$250mm round
			Feb-17	App-based taxi hailing service Acquired for \$43 mm			Sep-17	Peer-to-peer car rental service Part of \$92mm round
			Jul-16	Peer-to-peer airport car rental service	Toyota		Jun-17	On-demand transportation service Part of \$150mm round
Regulatory Change	Audi		Jul-16	British taxi hailing app Merged into Daimler's MyTaxi operations			Aug-17	On-demand transportation service Part of \$2,500mm round
			Mar-17	App-based car rental service Audi previously led Silvercar's \$28 mm Series C (Jan-16)			Apr-17	Peer-to-peer car rental service Part of \$45mm round
			Jan-17	On-demand transportation service			May-16	On-demand transportation service Established partnership to offer vehicles to rent on the platform
Electric Vehicles	Renault		Sep-16	Commuter shuttle service	Jaguar / Land Rover		Jun-17	On-demand transportation service \$25mm investment supporting Lyft's autonomous vehicle activities
	Ford		Sep-16	Commuter shuttle service	Honda		Dec-16	On-demand transportation service
		na	Initially a leasing platform for on-demand drivers Subsequently relaunched as Canvas, a subscription-based monthly rental service	Volkswagen		May-16	On-demand transportation service \$300mm investment	
				BMW i Ventures		May-16	App-based carpooling service Part of \$5mm round	
Supply Chain					General Motors		Jan-16	\$500mm investment and established partnership focused on autonomous vehicles







## Alternative Access – Activity from Traditional Players

### New Recurring Revenue Streams

**Alternative access platforms have created new recurring revenue streams for OEMs, but are creating challenges for their existing technology infrastructures**

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain

- The traditional OEM business model revolves around one-time transactions with customers, often through an indirect sale at a dealership with captive financing included
- As previously discussed, new opportunities in the alternative access and connected car spaces have led OEMs to offer mobility services with subscription- and usage-based pricing models
- However, OEMs that do not have suitable IT and billing infrastructures in place face challenges monetizing these recurring revenue-based products
- This issue may become critically important as OEMs also begin to monetize connected car data and connected services

### Case Study: Aria Systems

Aria provides a cloud-based monetization platform for subscription- and usage-based businesses. Its solutions enable OEMs to bill customers on a periodic basis, including flat subscription fees and variable usage-based fees.



#### Potential Applications

- On-demand car sharing, with loyalty benefits for frequent users
- Subscription-based car sharing fleets
- Usage-based insurance and usage-based leasing
- Monetization of data by selling downstream analytics to third parties

#### Benefits

- Accelerate time to market and flexibility
- Acquire more customers with flexible pricing
- Grow recurring revenue through subscription and usage-based offerings
- Increase customer engagement and lifetime value

### Selected Automotive Industry Clients



**Audi**

*Provides billing engine for Audi On Demand and other services*



**SUBARU**

*Provides billing engine for STARLINK, its in-vehicle connectivity system*



### On-Demand Startups Offering Financial Services

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change


Electric Vehicles

Supply Chain

**On-demand transportation companies have been exploring ways to increase engagement with their riders, such as offering payment services or credit**

In-house payments platforms are appealing in emerging markets, where credit card penetration is low and cash remains the dominant payment method


**Grab-GrabPay**

Consumers can use GrabPay to pay for Grab rides or transactions at partnering shops and restaurants; GrabPay also offers services such as top-up, peer-to-peer payments and rewards 




Acquisition of Kudo in April 2017 provides Grab with a network of local agents that help unbanked consumers access and pay for online products and services

**UBER**

Uber has partnered with MoMo, a Vietnam-based mobile payments startup, to enable passengers to pay for rides using their digital MoMo wallets 

Uber has also expanded into financial services in developed markets – in October 2017, it launched its own branded credit card through a partnership with Barclays and Visa   



**GOJEK-GO PAY**

Similar to a digital debit card, Go-Pay enables customers to store money on their mobile phones which they can use for all of Go-Jek's services including rides, grocery deliveries and transactions from partnering merchants 



Acquisitions of offline payment processor Kartuku, online payment gateway Midtrans and savings and lending network Mapan in December 2017 strengthens Go-Pay's capabilities in online and offline payments

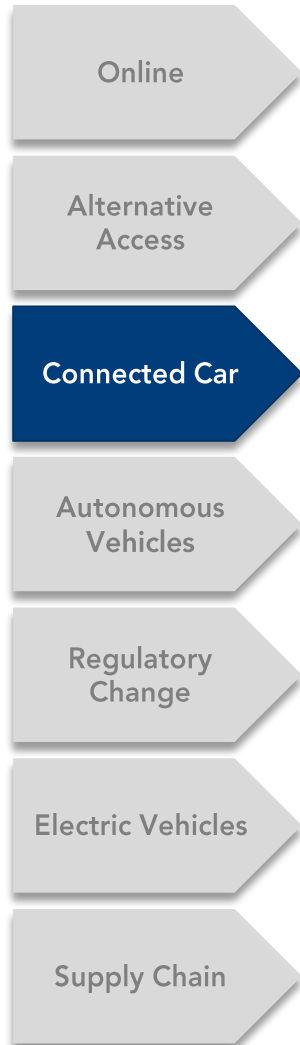
**OLA OLA MONEY**  
powered by ZipCash

Using either the Ola app or standalone Ola Money app, users can pay for rides and access other features such as merchant payments and money transfer 

**OLA CREDIT**

Ola also extends credit to select users, providing them with a credit limit and up to 7 days to pay for fares

**Regardless of the market, these offerings further provide companies with the ability to collect vast amounts of user data on travel and purchasing history, and could enable them to offer additional financial services such as insurance or lending in the future**

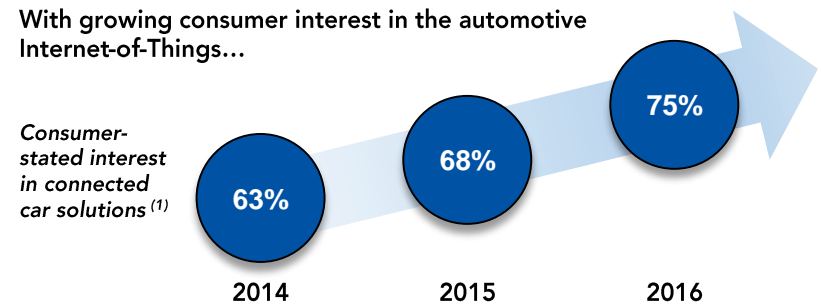


### Vehicle Connectivity on the Rise

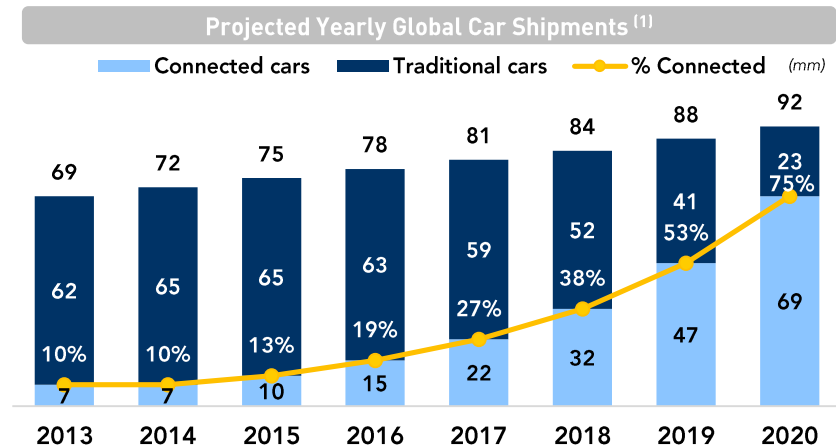
Enhanced vehicle connectivity has created a diverse ecosystem of constituents, as content, service and technology/infrastructure providers across multiple industries leverage enhanced data, analytics and/or distribution to better serve connected customers

- The “connected car” combines onboard sensors and Internet connectivity to optimize vehicle operation and maintenance, and deliver a more convenient and comfortable driver experience
- Cars can receive and transmit information and data, providing features such as:
  - Location services:** real-time traffic and weather updates; enhanced navigation and parking
  - Content & infotainment:** phone, email, Internet, social media, ecommerce, games
  - Vehicle managements:** diagnostics, real-time updates on car health; connectivity to maintenance and repair providers
  - Driving analytics:** usage-based insurance, driver safety scoring
- In addition to such services, data streams from connected vehicles can also provide great value to OEMs – for example, as a new revenue stream from sharing agreements with third-party partners or to improve direct-to-consumer targeted marketing capabilities

With growing consumer interest in the automotive Internet-of-Things...



...more and more cars on the road will become connected



### Telematics are Becoming Increasingly Pervasive in the Auto Industry

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain

Telematics is an application of the connected car that is increasingly relevant to financial services

- A crossover of telecommunication and informatics, telematics enables sensors to gather and transform data to be utilized for assessing risk more accurately
- Through the vast amounts of data generated with telematics, insurance companies can better identify risk and profile their insured customers



### Vehicle Telematics & The Auto Insurance Industry

- **Customer segmentation:** Ability to better identify risk and profile of the insured; i.e. riskier drivers
- **More accurate calculations of premiums, pricing and underwriting**
- **Risk mitigation:** Alert drivers to high accident areas or poor road conditions; real-time accident / claim reporting
- **Product innovation: Usage-Based Insurance (UBI)**

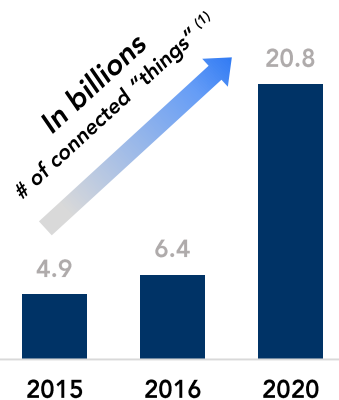
✓ "Pay-per-Mile"

✓ "Pay-as-you-Drive"

✓ "Pay-as-you-Go"

✓ "Pay-how-you-Drive"

- **70%** of all auto insurance carriers are expected to use telematics UBI by 2020 <sup>(3)</sup>



"Insurance companies have launched nearly **230 telematics** programs worldwide, in twice as many countries as two years ago. By **2020**, nearly **100 million vehicles** globally will be insured with telematics policies. This will grow to nearly **50%** of the world's vehicles by **2030**." <sup>(2)</sup>

- Ptolemus Consulting

Source:

- (1) CIO, "Gartner forecasts 5.5 million new 'Internet of Things' connections daily in 2016"  
(2) Ptolemus Consulting, "UBI Global Study 2016"  
(3) SMA Research, "A Catalyst for Change"



### Case Study: Allstate Creates New Telematics Startup

#### Allstate Launches Arity



launches

**arity**

Launch Date

November 10, 2016

HQ:

Chicago, IL

*"From ride-hailing apps to self-driving cars, the personal transportation industry is changing rapidly...Arity's 200-plus technologists, software developers and data scientists are 100 percent focused on creating the technology that will keep the road safer and smarter in this new future."*

Gary Hallgren  
President, Arity



[Click to Read Gary's Interview](#)

#### Overview

- On November 10, 2016, Allstate announced the launch of Arity, a technology company that provides software that analyzes driver behavior
- Arity utilizes billions of miles of historical driving behavior, 1+ million active telematics connections and over 7 years of collecting data directly from cars to generate insights on driver behavior
- Previously a business unit within Allstate, Arity's software is used by companies across the entire transportation industry, including insurance companies such as Allstate, Esurance, and Answer Financial, shared mobility companies and more
  - In October 2017, Arity announced an agreement with National General Insurance, its first non-Allstate client; Arity will help facilitate data collection and analysis for the insurer's new telematics program

#### Significance

- Reflects how the rapidly expanding Internet of Things is changing the transportation industry and drawing increasing attention from various players in the space
- Insights gleaned from telematics data help insurance companies better predict driver behavior, allowing them to improve risk assessment and price policies more accurately
- Arity's product offering is not limited to insurers – its driver data and analytics tools can also be practical for auto manufacturers, on-demand transportation companies and other companies involved in the transportation industry
- Builds on Allstate's track record of innovation, with the company having previously acquired SquareTrade in November 2016 and Esurance and Answer Financial in May 2011



- SquareTrade provides protection plans for consumer electronics and appliances



- Esurance became one of the first insurance companies to sell policies online, direct-to-consumer



- Answer Financial allows consumers to compare various insurance products with quote comparisons from 20 brand-name insurance companies

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain





### Closer Look – Selected Examples of Telematics in Auto Insurance

Online

#### Adapter & Smart Driving App



Automatic provides an adapter plug-in for consumer vehicles that collects data on driving habits, runs vehicle diagnostics and helps detect and report accidents.

#### Smartphone Driver Scoring Platform **sentiance**

Sentiance's mobile-based driver scoring platform converts smartphone sensor data into driving and behavior intelligence for driver-centric assistance, services and usage-based insurance.

Alternative Access

#### Smartphone Telematics Platform



Cambridge Mobile Telematics offers DriveWell, a white-label mobile app that generates insights on driving behaviors; insurers can use this data to offer usage-based or behavior-based insurance programs.

#### UBI Solution & Claims Support



Scope's end-to-end telematics solution includes hardware, integrated driver scoring technology, actuarial support services and claims management support services, enabling insurers to better manage client risk and encourage safe driving.

Connected Car

#### Smartphone UBI Solution



Driveway's white-label app captures driving behavior data in real-time and produces driving scores used by insurers to improve pricing, underwriting and marketing.

#### Data Collection & Predictive Analytics **THE FLOW**



The FLOW's award-winning smartphone app and device-agnostic telematics platform utilizes user smartphone sensors and contextual analysis to provide auto insurers, OEMs and fleet operators with actionable insights.

Autonomous Vehicles

#### Black Box Insurance



Ingenie offers users insurance policies that reward good driving behavior. It assigns a score to each customer and provides feedback using driving data gathered from a vehicle-fitted black box; drivers who increase their scores can earn discounts on their policies.

#### Smartphone UBI Platform



TrueMotion provides a technology-enabled platform that accurately captures driver behavior and enables insurance companies to distinguish between risky and safe drivers.

Regulatory Change

#### End-to-End Telematics for Insurers



MyDrive's device agnostic platform collects and analyzes driving data and delivers granular driver profiles to insurers that can be viewed through management portals or drive portals.

#### Smartphone Driver Scoring Platform



Zendrive provides an alternative to traditional, hardware-based on-board diagnostic solutions by using smartphone sensors to measure driver safety.

Electric Vehicles

Supply Chain

#### Global Insurance Telematics Platform



Octo Telematics offers a UBI program that detects risk, scores drivers, manages claims / accidents in real-time and monitors vehicle health. Octo operates in 26 countries and has 4 million connected users.

#### Adapter & Smart Driving App



Zubie provides an adapter plug in and mobile app that provides users with driving insights and features such as real-time vehicle location, trip history tracking, maintenance alerts and engine diagnostics.



### Telematics are Revolutionizing Fleet Management

While many of the telematics disruptors discussed previously focus on consumer applications, businesses with fleets of vehicles also benefit from telematics-enabled products and services

- Fleet telematics help companies control costs, increase productivity, increase fleet safety and security and reduce unauthorized vehicle use
  - By analyzing the data gathered from on-board sensors, companies can help drivers optimize routes and ensure safe driving practices
  - Fleet telematics companies often also offer enterprise-specific features such as compliance and mileage logging, expense recording, inspection tracking and driver identification
- Other trends such as the proliferation of ride/car-sharing companies and the adoption of autonomous vehicles (discussed later) may increase the number of miles driven by commercial / shared fleets instead of personal vehicles; as a result, fleet telematics may gain greater importance as optimizing and managing these assets becomes a priority for companies

### Highlighted Deal – Verizon Acquires Fleetmatics

August 2016

**verizon**

acquires

 **Fleetmatics**

for \$2.4 billion

#### About Fleetmatics

- Fleetmatics provides fleet and mobile workforce management solutions for service-based businesses
- The company's fleet management solutions include driver management, dashboards, fleet maintenance, real time alerts and other vehicle tracking features through a SaaS-based interface
  - The platform analyzes real-time and historical vehicle and driver behavioral data (for example, vehicle location, fuel usage, speed and mileage) to provide insights that help businesses increase productivity
- Fleetmatics serves approximately 37,000 customers and 737,000 subscribed vehicles

#### Overview

- On August 1, 2016, Verizon announced it had agreed to acquire Fleetmatics for \$2.4 bn in cash
- Fleetmatics was previously listed on the New York Stock Exchange following its IPO in October 2012
- Verizon incorporated Fleetmatics into its Verizon Telematics division, its telematics business unit offering connected-vehicle wireless, hardware and software solutions to consumers, enterprises, auto manufacturers and dealers
- The deal was Verizon's third telematics acquisition, having previously acquired Hughes Telematics in May 2012 and Telogis in June 2016

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain



### In-Car Payment Technology on the Rise

OEMs are increasingly partnering with payment solution providers to equip connected vehicles with in-car payment technology

- Current iterations of these truly mobile wallets are largely limited to paying for parking and gas, but have numerous potential use cases
- By offering additional services that tap into the Internet of Things and these new forms of connected technologies, OEMs are rebranding themselves from automakers to technology-enabled mobility companies

#### Connected Car

**Oct. 2015**

SAP announces launch of SAP Vehicles Network and partnerships with Samsung Pay, FIS, ZipLine and P97 Networks to deliver mobile payments for gas pumps



**Oct. 2016**

GM announces partnership that embeds Mastercard payments technology within GM cars, enabling users to make payments through an onboard platform



**Jan. 2017**

Daimler acquires electronic payment services provider PayCash and announces launch of Mercedes Pay



**Feb. 2017**

Jaguar launches in-car payment app for Shell gas stations, available to users in the UK



#### Autonomous Vehicles

#### Regulatory Change

#### Electric Vehicles

#### Supply Chain

2015

Volkswagen acquires Sunhill Technologies, a developer of a parking payments app



**Jan. 2016**

Ford announces FordPass, a mobile services platform, which includes a virtual wallet that can be used to pay mobility expenses such as parking



**Dec. 2016**

Volkswagen acquires PayByPhone, a provider of parking payments solutions



Visa and Honda showcase in-vehicle payment solutions as result of partnership



**Mar. 2017**

BMW announces integration of cashless parking payments service ParkNow with in-vehicle dashboards



2017



### Payments Technology Spotlight

#### Case Study: Cardtek

Payment solution providers like Cardtek are exploring a number of models for in-car payments, with three primary levels being discussed with car companies and payment schemes:



**1. Internet of Things (IoT) platform that interfaces with merchant devices (i.e. gas pumps, parking meters)**

- The car initiates pre-payment process, chooses payment type and defines payment amount
- The car is connected to the consumer's mobile phone via Bluetooth, with payment credentials stored in the phone via mobile wallets



**2. IoT platform and also a mobile wallet where customer payment credentials are stored**

- Car companies digitally store customer payment credentials within the car or in the cloud
- The car company becomes a mobile wallet service provider instead of relying on a third-party (i.e. ApplePay, Android Pay, SamsungPay, etc.)



**3. IoT platform, mobile wallet and also a "personal POS" where the payment process is securely conducted**

- Car has embedded POS terminal that handles the entire payment transaction inside the car
- To prevent misuse, customer identifies himself/herself to the car with biometric authentication before executing the transaction

*"A large number of everyday consumer payments – such as parking, gas, or picking up food at a drive-through – are car-related. The development of a secure in-car payment platform makes a lot of sense for consumers, and it opens the door of opportunity for automakers, payment companies, and merchants to provide a more convenient experience for their customers. The intersection of car manufacturing and modern payments has arrived, and this event will provide a glimpse at the road ahead."*

**Erdal Yazmaci**  
Co-Founder, Cardtek



#### About Cardtek:

Cardtek provides innovative end-to-end payment solutions for financial institutions, processors, telecom operators, personalization bureaus, retailers, terminal and card vendors as well as public transportation authorities. It serves more than 150 customers in 25 countries across the globe.

Online

Alternative  
Access

Connected Car

Autonomous  
Vehicles

Regulatory  
Change

Electric Vehicles

Supply Chain



### Autonomous Vehicles Present New Challenges and Opportunities for the Automotive Industry

**While widespread adoption is likely many years away, autonomous vehicles may cause a fundamental shift in the automotive industry, with profound impact on related financial service providers**

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Connected Car

**Autonomous Vehicles**

Regulatory Change

Electric Vehicles

Supply Chain

- Self-driving cars may make on-demand travel even cheaper, placing further downward pressure on the need for individual car ownership
- Ownership may increasingly shift away from personal ownership to car-sharing fleets owned by mobility companies, impacting auto dealers and lenders who currently operate on a consumer-centric model
- Autonomous vehicles may significantly decrease the number of auto-related accidents, resulting in structural changes to the auto insurance industry with lower premiums and changing assumptions around underwriting
- As adoption increases and vehicle operations become fully autonomous, liabilities for losses caused by autonomous vehicles may shift away from drivers to the manufacturers who develop the software powering autonomous driving systems
- Telematics and sensors within autonomous vehicles will be a valuable source of proprietary data, which can be monetized in a number of different ways, and certainly used within insurance underwriting and claims

*"By 2030, within 10 years of regulatory approval of fully autonomous vehicles, 95% of all U.S. passenger miles will be served by transport-as-a-service providers who will own and operate fleets of autonomous electric vehicles providing passengers with higher levels of service, faster rides and vastly increased safety at a cost up to 10 times cheaper than today's individually owned vehicles."*<sup>(1)</sup>

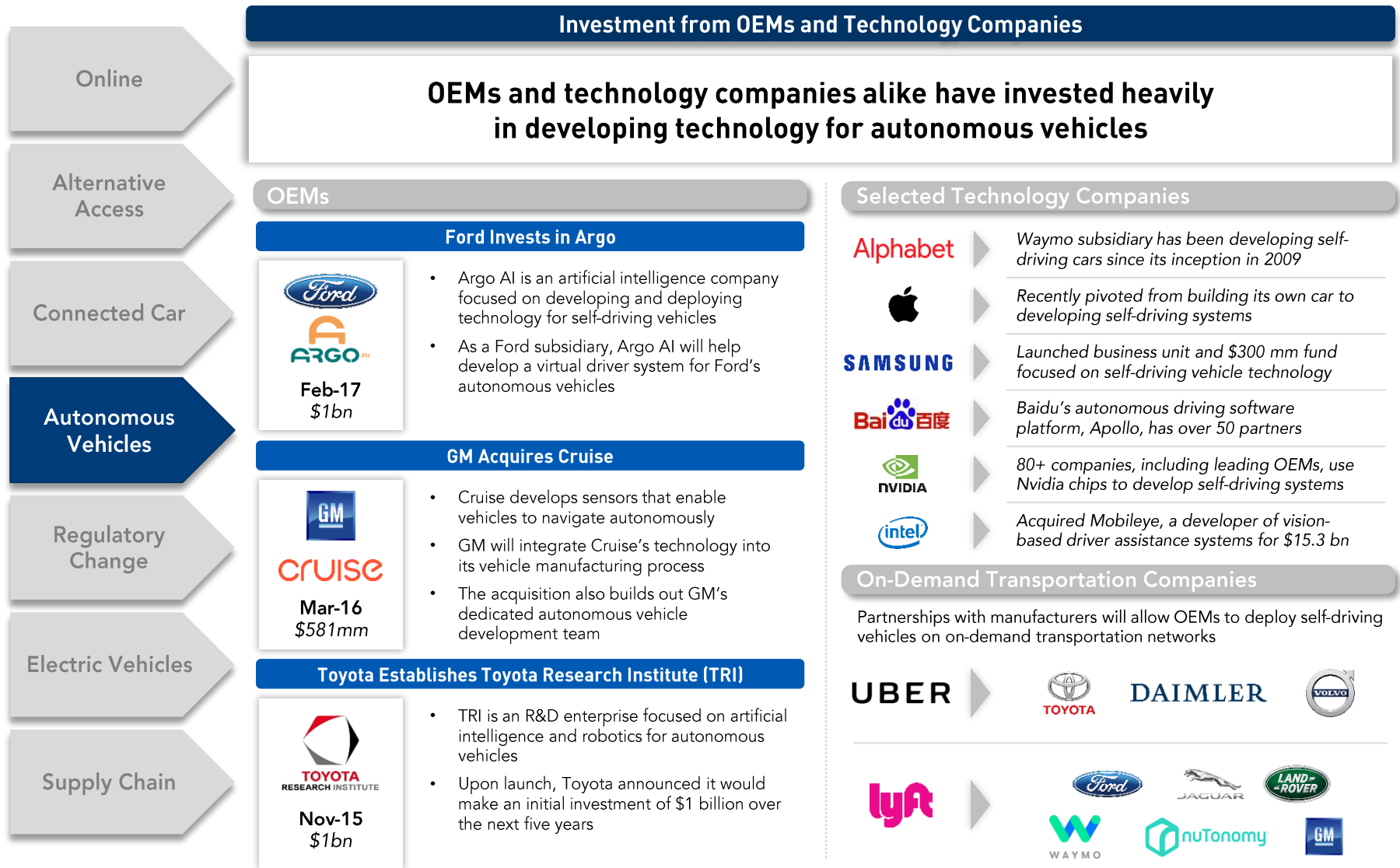
**RethinkX**

*"Currently, the personal auto sector accounts for roughly \$125 billion in loss costs. By 2040, we believe this sector could cover less than \$50 billion in loss costs [a 60% decrease]."*<sup>(2)</sup>

**KPMG**

In October 2015, Volvo announced that it would accept **full liability whenever one of its cars is in autonomous mode**, making it one of the first car makers in the world to make such a promise.<sup>(3)</sup>







### Changing Regulations May Shake Up the Space, Especially for Dealers

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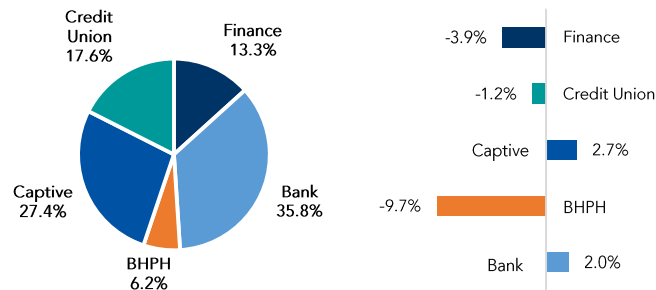
Electric Vehicles

Supply Chain

#### Increasing Supervisory Authority

- An evolving regulatory environment has placed pressure on dealers and lenders to be more transparent
- In June 2015, the Consumer Financial Protection Bureau (CFPB) extended its auto financing supervisory authority to include larger non-bank finance companies; the Bureau had previously only supervised auto financing at the largest banks and credit unions
- The regulation helps the CFPB enforce fair lending and debt collection practices by ensuring that finance providers comply with federal consumer financial laws
- Particularly affected were Buy-Here Pay-Here (BHPH) dealerships, which often target subprime consumers unable to get a loan through other channels

**2015 Loan Market Share**      **YOY Change in Mkt. Share**



*Reflects overall trend of increased transparency and reduced information asymmetry, helping educate consumers on their purchase and financing options*

#### Direct-to-Consumer



- Tesla utilizes a direct-to-consumer business model, where it bypasses third-party dealerships by selling cars through stores operated by the carmaker
- All other auto manufacturers use a network of independently owned dealerships to sell to consumers
- In most states, dealerships are heavily protected by state laws, with direct sale to consumers by auto manufacturers often prohibited
  - In response to Tesla's direct-to-consumer model, several states have passed bills reinforcing these bans
- The auto manufacturer has subsequently fought against these bans
  - In September 2016, Tesla filed a lawsuit against the state of Michigan to overturn its ban
  - In February 2017, Indiana passed a bill granting Tesla an exemption to the direct sales ban within the state

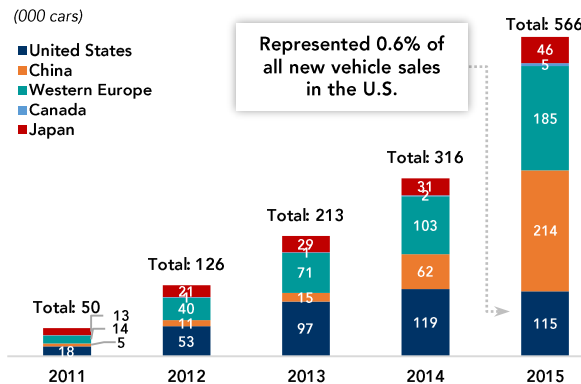
*A change in dealership regulations may have a profound impact on the auto industry as other OEMs begin to sell directly to consumers*



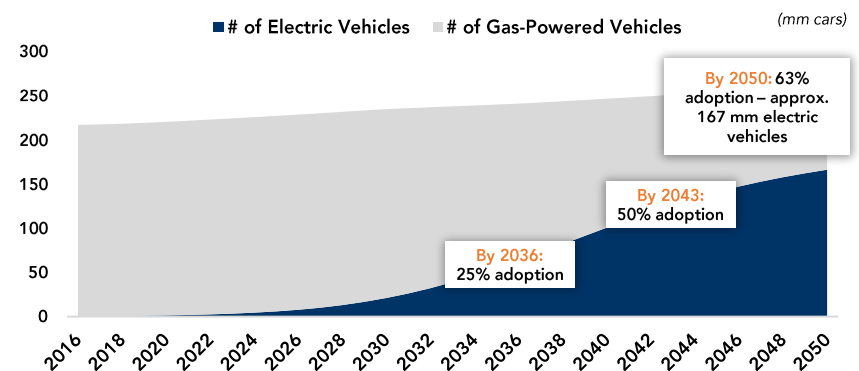
### Growing Adoption of Electric Vehicles

While still a small portion of the overall market, consumer adoption of electric vehicles (EVs) is increasing

Yearly Global Plug-in Vehicle Sales, 2011-2015 <sup>(1)</sup>



U.S. Projected # of Electric Vehicles, 2016-2050 <sup>(2)</sup>



#### Key Benefits

- ✓ **Fuel cost savings:** EVs are 3x more efficient than gas vehicles <sup>(3)</sup>
- ✓ **Maintenance cost savings:** with fewer moving parts, EVs require less maintenance

#### Key Concerns

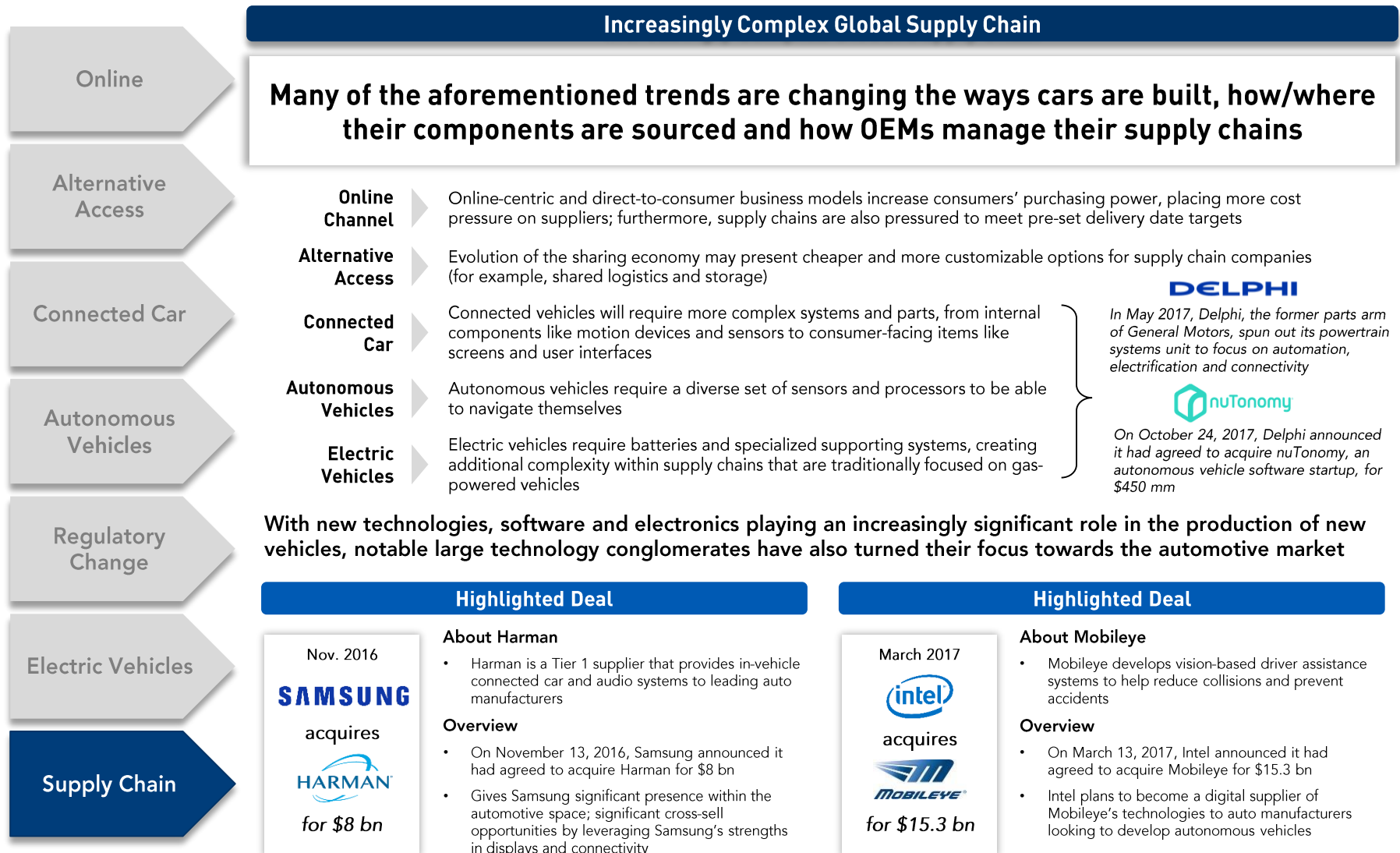
- ✗ **Price:** EVs typically cost more than gas vehicles
- ✗ **Range Anxiety:** EVs may have insufficient range to reach a destination due to limited battery capacity
- ✗ **Infrastructure:** charging stations are not as common as gas stations

This evolving technology has several implications for members of the auto industry:

- **Consumers** prefer to lease EVs rather than buy, since today's technology is in a rapid growth phase and likely to quickly become obsolete
  - In 2015, lease penetration in the EV market was 75% according to Edmunds.com <sup>(4)</sup>
- **Dealerships** will need to develop specialized knowledge around EV technology to better serve customers and replace potential lost maintenance revenue
- **OEMs** and **suppliers** are increasingly focused on developing higher range and more cost-efficient EV technology
- **Insurers** typically charge higher premiums for EVs, as the vehicles tend to cost more and require specialized repair services

Source:

(1) Argonne National Laboratory, "Light Duty Electric Drive Vehicles Monthly Sales Updates"  
 (2) Energy Innovation, "Energy Policy Simulator"  
 (3) Idaho National Laboratory, "How Do Gasoline & Electric Vehicles Compare?"  
 (4) CNBC.com, "Why 75% of electric-car buyers don't buy electric cars"





### Growing Opportunity in Supply Chain Finance

**As auto manufacturers around the globe continue to search for ways to increase supply chain efficiency while delivering cost savings, many are turning towards their balance sheets**

### Case Study: Taulia



Taulia is a leading financial supply chain company helping businesses and their suppliers unlock capital. Taulia's SaaS platform and supplier network helps companies provide financing to their suppliers against their payables, thus enabling both the company and its suppliers to unlock capital and optimize cash flows.

#### Products & Services

- Automated invoicing and streamlined processes for suppliers
- Companies can pay supplier invoices early in exchange for a dynamic discount
- Supply chain finance utilizing company or 3<sup>rd</sup> party cash

#### Benefits

- ✓ Simple and transparent invoicing for all suppliers
- ✓ Customers can take advantage of network effects, as suppliers can work with multiple buyers on a single platform
- ✓ Suppliers that are constrained with pricing pressures can better manage cash flow and thus avoid factoring
- ✓ Increased liquidity ensures that suppliers can produce materials and parts on time, preventing supply chain disruptions
- ✓ Improves relationship between OEMs and their suppliers
- ✓ Provide manufacturers with a higher rate of return on their cash

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## V. Auto FinTech Industry Landscape

# Auto FinTech Industry Landscape

## Category Descriptions

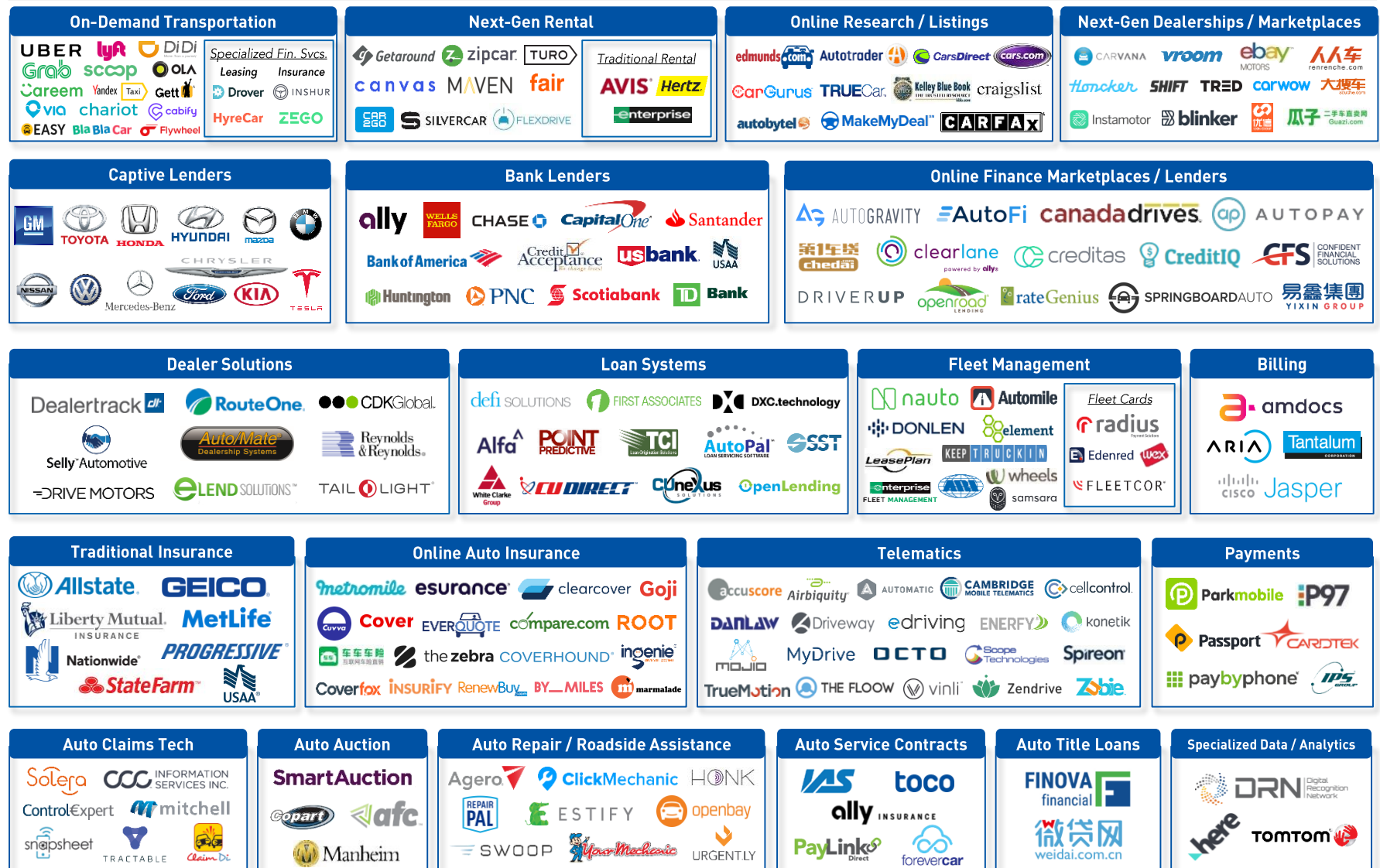
AUTO FINTECH



<b>On-Demand Transportation</b> Platforms where consumers can access quick, on-demand transportation; specialized financial services catering to the unique needs of on-demand drivers	<b>Next-Gen Rental</b> New business models around car rentals; includes offering flexible / non-traditional pick-up and drop-off locations and the ability for consumers to rent out their own cars	<b>Online Research / Listings</b> Enable consumers to research vehicles and view listings of available cars for sale by dealerships and consumers	<b>Next-Gen Dealerships / Marketplaces</b> Online alternative dealerships / marketplaces that sell used cars; offers an alternative to visiting a physical dealership
<b>Captive Lenders</b> Wholly-owned subsidiaries of auto manufacturers that provide financing to their customers through dealerships	<b>Bank Lenders</b> Typically depository financial institutions; offer loans to consumers to finance an automobile purchase; work both directly with consumers and through dealerships	<b>Online Finance Marketplaces / Lenders</b> Typically non-bank lenders; enable consumers to apply for an auto loan and become approved prior to purchasing the vehicle	
<b>Dealer Solutions</b> Software platforms used by auto dealerships to manage their operations across multiples areas including finance and insurance, sales, inventory and service	<b>Loan Systems</b> Systems used by auto lenders throughout the lending process – from managing the loan application and origination to loan administration after funds are dispersed	<b>Fleet Management</b> Solutions for companies with vehicle fleets; help minimize costs and optimize efficiency and productivity <div> <i>Fleet Cards</i>                          Payment cards typically used for fuel at gas stations                     </div>	<b>Billing</b> Solutions that enable automotive companies to bill customers on a periodic / recurring basis
<b>Traditional Insurance</b> Providers of traditional auto insurance products	<b>Online Auto Insurance</b> Auto insurance solutions provided online including comparison sites, online agencies and new types of insurance including usage-based offerings	<b>Telematics</b> Companies that integrate telecommunications and information technology to create actionable data from vehicles (i.e. “connected car”); often used in insurance and fleet management today	<b>Payments</b> Technology used to facilitate mobile or in-vehicle payments
<b>Auto Claims Tech</b> Technology specifically designed to improve the auto insurance claims process for consumers and insurers	<b>Auto Auction</b> Platforms that specialize in auctioning used cars to interested used-car dealers	<b>Auto Repair / Roadside Assistance</b> On-demand auto repair / repair marketplaces or roadside assistance delivered typically through an app	<b>Auto Service Contracts</b> Online focused auto warranty companies
		<b>Auto Title Loans</b> Online short term loans backed by vehicle titles	<b>Specialized Data / Analytics</b> Platforms that generate data-driven, location-based insights

# Auto FinTech Industry Landscape

## Representative Companies





## VI. CEO Interviews





# Tim Russi and Peter Greene, Ally Financial



## Tim Russi and Peter Greene, Ally Financial



**Tim Russi**  
President, Auto Finance



Tim is President of Auto Finance at Ally, responsible for developing strategy and driving performance for the company's auto business. Prior to his current role, he served in several leadership positions at Ally including, executive vice president of the auto business in North America, chief financial officer for global automotive services and chief operating officer for North America. Prior to joining Ally in October 2008, Russi worked for Cerberus as a senior advisor to Ally. He previously served as president of Dealer Financial Services for Bank of America, and also served in leadership roles at US Leasing (a Ford Financial Services company), Deloitte, DHR International and Ernst & Young.



**Peter Greene**  
Managing Director,  
Corporate Strategy and  
Head of Ally Ventures



Peter Greene has over 20 years of experience in various strategy, banking and investing roles in the financial services industry. He joined Ally in May 2010 and founded Ally Ventures in mid-2016 to identify key strategic start-ups for both investment and to enhance or diversify Ally's core capabilities. He concurrently serves as Managing Director of Corporate Strategy where he is involved in developing and executing the firm's corporate strategy, business development and M&A initiatives. Prior to joining Ally, Greene worked at Flexpoint Ford, a private equity investment firm with over \$1 billion under management specializing in financial services and healthcare. Prior to Flexpoint Ford, Greene was a Senior Managing Director at Bear Stearns and a member of the firm's Corporate Strategy Group where he was involved in the development and enhancement of new and existing businesses and oversaw a portion of the firm's investment portfolio. Greene started his career in Ryan Beck's (now Stifel Nicolaus) investment banking department primarily focused on commercial bank and thrift M&A transactions.

***"The consumer's desire for on-demand transactions and a greater selection of choices have forced the industry to evolve, and highlighted the need for companies to deliver products and services in emerging online channels where more consumers are shopping for vehicles."***

### How has the auto lending space changed over the past ten years? What do you think will drive change in the future?

Advancements in technology have digitized each step of the contract process, facilitating faster and more efficient transactions, and resulting in a better experience for all parties involved.

Consumers also have access to increased information which, together with technology advancements, provides them with more visibility into and control over the vehicle purchase process, including auto finance. The consumer's desire for on-demand transactions and a greater selection of choices have forced the industry to evolve, and highlighted the need for companies to deliver products and services in emerging online channels where more consumers are shopping for vehicles.

### How are consumer expectations changing around auto lending?

The auto finance process is becoming more consumer-driven than it ever was in the past. Consumers are more educated and tech savvy, and they are generally accustomed to a faster pace of doing business. Some studies estimate that consumers spend as much as 60% of their time shopping online for vehicles before making a purchase, and only 21% with their auto dealer, so often times they have a clear understanding of what they want before arriving at the point of purchase. Because of this, they have high expectations that the financing process will be digital, convenient and fast.



***“For the auto finance industry, growth of autonomous vehicles and ride sharing services will lead to consumer auto finance becoming more commercial in its nature, shifting finance companies’ models to service fleets rather than individuals.”***

### What should incumbents in the space be doing to capture more market share and drive customer engagement?

Companies today should maintain communication with customers, and be quick to recognize the pain points in the process or products and fix them. Focus on innovation is another key to success, which includes improving technology and efficiencies, and providing our customers access anywhere, regardless of the device they are using. You must continue to evolve your services based on demands in the marketplace, and keep pace with changes in technology to ensure you are delivering for customers.

### How do you see the nature of car ownership and usage changing in the future (on-demand transportation, ride-sharing, autonomous vehicles, etc.) and what opportunities and challenges could this create for Ally?

We see that there is an appetite for ride-sharing and on demand transportation among consumers; however these vehicles generally still need to be financed or leased. We’ve developed strong relationships with fleet managers and rental companies to capitalize on the increased demand in the space.

In terms of autonomous vehicles, we’re watching trends in the space closely. There are a lot of infrastructure changes and regulatory changes that would need to take place before a large scale transition. For the auto finance industry, growth of autonomous vehicles and ride sharing services will lead to consumer auto finance becoming more commercial in its nature, shifting finance companies’ models to service fleets rather than individuals. Financing companies will also need to adjust capabilities across sales, origination, servicing and asset disposition.

In addition to changes in the nature of automotive finance, some industry experts are predicting autonomous vehicles and ride-sharing will lower the number of vehicles per household, but this decrease will not materially change the distance driven per household, creating higher vehicle turnover.

With the pace of technology advancement, it is difficult to accurately forecast the future of transportation with a high degree of certainty. This is why Ally is exploring and investing in a wide variety of businesses, services and talent that diversify our capability, knowledge and the products we offer.



***"We've also been highly focused on developing and expanding relationships with online auto players in recent years...these relationships allow us to offer commercial financing, consumer financing and insurance products in more of the places where consumers are purchasing vehicles largely through our new direct lending capabilities."***

**Please discuss your recent acquisitions and strategic relationships with FinTech and Auto Tech companies.**

Our acquisition of BlueYield, rebranded Clearlane ([www.Clearlane.com](http://www.Clearlane.com)), was significant for our digital strategy in two ways. First, the move allowed us to add an active online vehicle financing marketplace to our portfolio that could plug into places we previously did not have access to and offer higher approval rates than any individual bank could. We intend to work with our network of 18,000 dealers to determine how Clearlane can best be integrated into the current model, allowing them to power online vehicle finance on their own websites. Second, we acquired a product and technology team that will develop other products to bring financing closer to the consumer.

We've also been highly focused on developing and expanding relationships with online auto players in recent years. We currently have active relationships with Carvana, TRED, Shift, Vroom and others. These relationships allow us to offer commercial financing, consumer financing and insurance products in more of the places where consumers are purchasing vehicles largely through our new direct lending capabilities.

Finally, Ally recently hired a team to build out a Transportation Finance business including expanding our fleet management services, and we have also been exploring ways to leverage our SmartAuction online auction in a broader market.

Ally is focused on innovation and the future of financial technology, which is why we recently launched Ally Ventures. Ally Ventures explores opportunities to engage and work with businesses, primarily startups that align with our strategic objectives. We hope to help them grow through investment, commercial relationships and mentorship with access to a broad range of resources. For more information on Ally Ventures, visit [www.AllyVentures.com](http://www.AllyVentures.com).



***"We look for technologies that would help us deliver faster, more efficient services and provide better experiences for our dealers and consumers."***

### What qualities of a disruptive company are you most interested in when making an investment or acquisition?

We take a technology-first approach when exploring AutoTech acquisitions. We look for technologies that would help us deliver faster, more efficient services and provide better experiences for our dealers and consumers. We also look for technologies that might help us improve internal processes and procedures.

For example, the BlueYield acquisition provided Ally tools that we would have otherwise had to outsource in developing our direct lending product. The Clearlane team is also building a dealer plug-in that will add the capability to offer customers financing online through a dealership branded platform, which is becoming increasingly important for younger customers. The Clearlane marketplace, and the coming dealer plug-in, help Ally deliver faster and more efficient services, and provide a better experience for our dealers and customers.

Also, SmartAuction, our dealer-to-dealer vehicle marketplace, allows eligible dealers to access a virtual inventory of wholesale vehicles online and through the SmartAuction mobile app. The SmartAuction platform provides dealers with a simple and fast way to buy or sell inventory, saving dealers time and money.

### What do you see as the long term vision for Ally? What new auto-related products and services will you be offering in the coming years?

Ally's vision for the future is to provide auto financing products and services for consumers and businesses across many different channels. With that in mind, we are continuously exploring opportunities to enhance products and services, expand into new channels and develop relationships with innovative new companies in the auto space. Our history in the industry, strong infrastructure, culture of innovation and solid network of relationships puts us in a strong position in terms of product development and delivery for the future.

Ally will continue to expand and enhance our Clearlane and SmartAuction platforms to adapt to our customers' needs. For instance, trends including autonomous vehicle development and ride-sharing service growth are expanding the need for expanded fleet services that can accommodate this shift in personal vehicle ownership and use.



***"The business is cyclical in nature and we face challenges related to the economy, consumer confidence and shifting consumer habits."***

***"No matter where the automotive finance industry goes in the future, Ally will adapt to ensure we meet consumer needs for vehicle financing."***

### What are the biggest challenges you face in growing the business?

Auto finance is a fiercely competitive industry and has been for as long as Ally has existed. The business is cyclical in nature and we face challenges related to the economy, consumer confidence and shifting consumer habits. However, we've overcome many industry cycles and shifts in the past, with an experienced and innovative team, and feel we have the right foundation and strategy in place to continue to grow and evolve in the future. No matter where the automotive finance industry goes in the future, Ally will adapt to ensure we meet consumer needs for vehicle financing.



# Gary Hallgren, Arity





Gary Hallgren  
President



Gary is President of Arity, a technology startup founded by The Allstate Corporation. Before Arity was launched in 2016, Gary was President of Allstate's Connected Car division. Gary previously worked in Telogis' Corporate Strategy department as a Senior Vice President, where he was responsible for strategic verticals including big data analytics, usage based insurance and advanced payment technologies. Gary has over 20 years of high-tech experience within the connected car, Internet of Things, telematics, usage based insurance and GPS fleet management industries.

***"Driving innovation with predictive analytics, Arity leverages expertise in risk modeling – including analyzing more than 28 billion miles of data and 85 years of Allstate insurance and driving insights – to predict and manage driving risk."***

### **What is Arity's mission? What products and services does the company offer?**

Arity is a technology company focused on making transportation safer, smarter and more useful for everyone. We analyze and transform billions of miles of data into actionable insights that can reduce risk on the road and help our partners make better decisions.

Driving innovation with predictive analytics, Arity leverages expertise in risk modeling – including analyzing more than 28 billion miles of data and 85 years of Allstate insurance and driving insights – to predict and manage driving risk. From data collection to risk scoring, Arity's solutions offer a number of ways to help improve security and efficiency on the road.

Companies all across the mobility ecosystem choose Arity and our solutions because they want to better know and understand drivers. The strength of Arity's data insights and API platform allows us to provide data analysis, solutions and actionable insights to insurers, shared mobility companies and auto manufacturers so that they can more accurately predict risk, make smarter decisions and improve efficiency within their businesses. For instance, we have productized our core UBI offerings, our software solutions and our driving scores into a single platform and are making our platform of services available to the entire transportation ecosystem.

### **Please walk us through Arity's genesis and the relationship with Allstate. Does it make sense to remain under Allstate's umbrella over the long-term?**

Arity is an independent subsidiary of The Allstate Corporation, but our team, technology and infrastructure are all separate from Allstate Insurance companies.

*(continued on next page)*



***“Arity is best positioned to know and understand transportation, allowing us to generate actionable information that helps make transportation safer and smarter for drivers and companies make better business decisions.”***

**Please walk us through Arity’s genesis and the relationship with Allstate. Does it make sense to remain under Allstate’s umbrella over the long-term?** *(continued from previous page)*

We were founded by Allstate, a Fortune 100 visionary and a leading insurance company, giving us access to 85+ years of insurance data and risk modeling expertise. This, and the Arity platform built on more than 27 billion miles of historical driving behavior with more than one million active telematics connections and 7+ years of collecting data directly from cars, has fostered a deep understanding of drivers’ behaviors. As a result, Arity is best positioned to know and understand transportation, allowing us to generate actionable information that helps make transportation safer and smarter for drivers and companies make better business decisions.

Backed by Allstate and built leveraging its historic data, Arity offers products to other insurers because we believe sharing these powerful insights will transform the industry and make transportation safer for everyone.

**What differentiates Arity from other players in the data / telematics space?**

Arity provides its customers with state of the art data collection and actuarially proven driving algorithms. The majority of our competitors can only offer one or the other; many rely on partnerships with third-party companies to deliver similar solutions. Until now, these types of resources have been scarce, and the few companies that have utilized resources to build an in-house platform to gather this type of data have had to shift their focus from their business to develop this platform.

Our platform is built on more than 27 billion miles of historical driving data and more than seven years of data directly from cars. Large, quality data sets are going to become even more important to provide the insight necessary to navigate and adapt to the changing connected car landscape. Arity is designed to give our customers a jumpstart so that they can focus on most efficiently processing and responding to critical metrics that will affect their portfolio.

**What are some unique use cases for the proprietary data and insights that Arity collects? What customer segments/industries offer the most exciting growth opportunities?**

Arity is able to paint a broader picture for insurers, shared mobility platforms and drivers through collected data. For insurers, Arity is able to evaluate and predict individual driving risk and monitor for future losses for underwriting and to segment leads. For shared mobility platforms, Arity’s insights help identify top drivers, perform upfront risk assessments and then quantify ongoing risk either by driver or as a cohort. Finally, for drivers, Arity’s platform can improve driver safety by providing real-time insights on traffic and upcoming safety hazards, and delivering reports on vehicle health and maintenance.



*"In order to reach its full potential, the transportation industry must not only lean on big data points, but big insights derived from growing number of data sources to help manage through future unknowns."*

**How do you see the profound changes in transportation (ride-sharing, connected cars, autonomous vehicles, etc.) impacting traditional industries such as insurance and other financial services? How do these trends create opportunities for Arity?**

Arity is developing technology that aids the transportation ecosystem in navigating the changing face of transportation. Transportation is broken, and ridesharing companies are at the forefront of increasing efficiencies and improving safety. Arity is offering solutions that provide value to the industry and empower ridesharing companies to grow their businesses. As we look to the future of mobility, the insights generated from our risk model and analytics engine can be used across different industries, including insurance which will be serving a customer base that is a hybrid of single vehicle ownership, ride sharing, car sharing and at some point autonomous vehicles.

**What is the long-term vision for the Company? What new products and services will you be offering in the coming years?**

At Arity we are leaning on the depth of our expertise involving analytics and technology to create insights and solutions for partners across the entire ecosystem including OEMs, insurers, shared mobility companies, government and telecoms; solutions that offers the chance to create a more efficient and safer system for everyone.

Insurance is a big part of the ecosystem and you cannot engage in the personal transportation industry without it. As transportation continues to evolve there will be new opportunities for insurers to add value to consumers and businesses all the while making transportation safer and smarter. Arity is uniquely positioned to help instigate and adapt to this change given our history of understanding how people move.

Despite the rapid growth of the shared mobility industry, rideshare, car share and peer-to-peer companies are still in their infancy and transportation continues to be largely inefficient. In order to reach its full potential, the transportation industry must not only lean on big data points, but big insights derived from growing number of data sources to help manage through future unknowns.

We've only seen the tip of the data iceberg in terms of the insights we can yield. It's not just about transforming insurance, rideshare or car share businesses. Arity is also beginning to leverage our insights and understanding of how people move to transform cities with solutions and partnerships designed to help simplify how people do and can get from point A to point B.



# Andreas Hinrichs, AutoGravity



Andreas Hinrichs  
CEO



Andreas is the Chief Executive Officer of AutoGravity. He previously held several leadership roles at Daimler Financial Services, most recently as Chief Financial Officer of its Africa & Asia/Pacific division. Andreas has over 20 years of experience working in the US, Europe and Asia, and leading digital initiatives on a global scale.

***"The AutoGravity user experience serves a rising population of digitally-savvy car shoppers looking for digital alternatives to the existing car financing experience."***

### Please walk us through the history of AutoGravity and the Company's relationship with Daimler.

AutoGravity was founded by an international team of auto industry veterans and digital natives to fundamentally transform the way people buy and finance cars. The company was incorporated in October of 2015 in Irvine, California and piloted its flagship apps in the summer of 2016. Today the platform has more than 1,000,000 users and works with some of the largest retail and captive lenders in the country to give car buyers access to financing in the palm of their hand.

AutoGravity received seed funding from Daimler Financial Services. Mercedes-Benz Financial Services was the first lender to publicly join the AutoGravity platform. Recently, Volkswagen announced an equity investment in AutoGravity. This partnership brings two of the world's largest car manufacturers together behind AutoGravity and reaffirms that AutoGravity is the technology and innovation leader in the auto financing space.

### What is the fundamental problem that AutoGravity is trying to solve in the auto purchasing process?

AutoGravity is on a mission to transform the way people buy and finance their cars. From the beginning, AutoGravity was built to serve car buyers, lenders and dealerships, using technology to solve problems and create value for each of its key stakeholders. AutoGravity is the digital glue between consumers, dealers, and lenders.

The AutoGravity user experience serves a rising population of digitally-savvy car shoppers looking for digital alternatives to the existing car financing experience. With AutoGravity, car buyers can select any new or used car and get up to four binding finance offers in minutes – right on their phone, anytime and anywhere they want.

AutoGravity technology opens a new digital channel that helps lenders and dealers attract and acquire new customers. Because car buyers can select their deal on their smartphone, they go to the dealership qualified and ready to buy a car. This increases satisfaction for everyone involved by making the car buying and financing process more efficient and convenient.



***“AutoGravity was built to realize the potential of the smartphone to empower anyone to quickly and efficiently look for cars from the comfort of their phone in four simple steps.”***

### How are you using technology to solve this problem? What products and services are you offering today?

The rising adoption of smartphones has changed the way people shop. AutoGravity was built to realize the potential of the smartphone to empower anyone to quickly and efficiently look for cars from the comfort of their phone in four simple steps:

1. Choose a car – shop for any vehicle new or used. Research shows that car buyers, especially Millennials, tend to make decisions based on car payment. AutoGravity makes it easy to estimate your payment for any car you choose.
2. Find a dealer – geolocation technology helps identify nearby dealers that sell the selected car.
3. Search for financing – scan a driver’s license to quickly pre-fill financing information and get access to up to four binding auto finance offers in minutes.
4. Select a lender – choose from up to four personalized financing offers.

AutoGravity assists dealers by educating customers on various models and financing options before they go to the dealership. Dealerships work with AutoGravity because the platform sends qualified buyers that are ready to drive off the lot with a fair deal on a new car.

In response to user feedback, AutoGravity recently launched real-time vehicle inventory to empower users to shop for specific cars sitting on the dealership lot.

The app was built to be easily white labeled for prominent OEMs, lenders and large dealer groups. An AutoGravity web plugin empowers customers to secure financing using AutoGravity’s intuitive technology without leaving the dealership website. Dealers see the opportunity for technology to fundamentally transform the way that cars are financed and can offer that experience to customers browsing their inventory.

### What are the biggest challenges you face in running a dynamic, fast-growing business?

AutoGravity has experienced substantial growth since its first apps hit the marketplace in the summer of 2016. The company has had more than 1,000,000 downloads of its native mobile app and more than \$1 billion USD in finance amount has been requested on the AutoGravity platform. As the business grows, it is imperative that the company maintains its agile product development methodology to meet consumer demand.



***“AutoGravity works with all franchised dealerships in the United States, including four of the top five largest dealer groups. AutoGravity also works with some of the largest retail and captive lenders in the country.”***

### Who has AutoGravity partnered with? How have those partnerships helped grow the business?

AutoGravity is the digital glue between lenders, dealers and their customers. AutoGravity works with all franchised dealerships in the United States, including four of the top five largest dealer groups. AutoGravity also works with some of the largest retail and captive lenders in the country.

Aside from dealers and lenders, AutoGravity partners with respected industry players such as Black Book, Chrome Data and TransUnion to ensure that every step of the user experience is powered by best of breed technology and data. To ensure a seamless integration with lenders and dealers, AutoGravity partners with auto financing system solutions such as RouteOne and Dealertrack.

Late last year, AutoGravity joined forces with Fletcher Jones Motorcars to launch FJ Drive, the Nation's first and only native mobile app that allows customers to apply for financing for any new Mercedes-Benz vehicle with real-time inventory from their smartphone.

In addition, AutoGravity partnered with VW Credit and Kia Motors Finance to launch apps for their customers which gives Volkswagen, Kia, Hyundai and Genesis the same seamless mobile app experience.

AutoGravity will be announcing additional white label partnerships in the coming months.

### How do you see the nature of car ownership and usage changing in the future (on-demand transportation, ride-sharing, autonomous vehicles, etc.) and what opportunities and challenges could that create for AutoGravity?

AutoGravity expects to see the continued digitalization of the car shopping experience, including rising consumer demand for personalized offers and flexibility through smartphone technology. Every day, the company hears from consumers who demand more control over their car shopping journey, using AutoGravity to secure financing before they go to the dealership. AutoGravity will continue to identify and alleviate pain points and serve a broader spectrum of unmet needs, making the car purchase and ownership experience even more satisfying.

### What's the long-term vision for the Company? What new products and services will you be offering in the coming years?

AutoGravity sees a world in which financing a vehicle becomes a seamless digital transaction because people complete their financing digitally before purchasing the vehicle. As a scalable digital platform, AutoGravity aims to be the industry standard for car buying and financing.





# Cody Green, Canada Drives



**Cody Green**  
Founder & Co-CEO  
**canadadrives**

Cody founded Canada Drives in 2010 and serves as Co-CEO. Prior to founding Canada Drives, Cody spent a great portion of his professional life working in dealerships across Western Canada. Cody was recognized as 2016 Entrepreneur of the Year for Fintech (Pacific) by Ernst & Young and by Business in Vancouver's Top 40 under 40 and Auto Remarketing Canada's Top 40 under 40.

***"By providing a solution where consumers could get their options upfront, we created a better buying experience for the customer, as well as a highly profitable and scalable opportunity for the dealerships to increase their business."***

### **What was the vision behind founding Canada Drives?**

Working in the auto industry, I witnessed first-hand the challenges many consumers were having obtaining auto financing through banks and car dealerships. By providing a solution where consumers could get their options upfront, we created a better buying experience for the customer, as well as a highly profitable and scalable opportunity for the dealerships to increase their business.

We were fortunate in the sense that the timing was right – consumers were becoming more comfortable with both making purchases and accessing financial products online. Although car dealerships had begun building out a digital presence, they hadn't fully embraced the impact online shopping was going to have on their business. This environment allowed us to execute a concept that the Canadian market was ready for.

### **What is the fundamental problem that Canada Drives is trying to solve for consumers?**

The car buying experience isn't working for a large percentage of the population. Our goal has always been to make obtaining car financing more accessible regardless of the customer's credit. We still lean on the legacy underpinnings of both the financial and automotive industries to accomplish this. We leverage the existing car dealership infrastructure to support vehicle acquisition and the banks to provide competitive finance options.

### **What products and services do you offer on the platform today? What will you be adding in the future?**

Our primary service is helping Canadians obtain auto financing, and that has been the foundation of our relationship with our customers. Over time we've expanded our product offerings to include personal loans and credit cards based off demand from our customers. This has provided us additional revenue opportunities as well as new ways in which we can initiate the customer relationship and further accelerate our growth.



### canadadrives.

*"We've witnessed the shift from desktop to mobile for the car shopping journey and by being a first mover in our market we've gained competitive advantages that we look to build on in the future."*

*"Integrating further aspects of the car buying experience into our platform will further enhance the experience for the customer and drive additional value for our partners."*

#### What key technologies are you leveraging in delivering your solutions?

We never try to be idealistic in our pursuit of enhancing the customer experience through technology and we will leverage existing 3rd party solutions such as Salesforce, Adobe and AWS when we can. When there isn't a solution available we will build it. An example has been our SMS platform. This has allowed hundreds of our customer support agents to communicate more effectively with our customers over their desktop computers. This has made things like vehicle selection and document collection far easier and greatly improved our efficiency.

As we look to the future we are striving to be a mobile-first company in all our projects. We've witnessed the shift from desktop to mobile for the car shopping journey and by being a first mover in our market we've gained competitive advantages that we look to build on in the future. With all of our platforms and technology, we are ensuring that they are highly scalable. For us this means having the ability to increase the volume of customers, introduce new products and enter new markets seamlessly with our systems supporting that growth. This has prompted us to leverage cloud solutions for data management and some of our infrastructure solutions.

#### What are the biggest challenges you face in running a dynamic, fast-growing business?

With any fast-growing company, there are challenges. Our staff count has soared from a dozen employees to over 300 in a few years, and in that time received one million auto loan applications. We've really tried to maintain an agile approach to all aspects of our business – with testing and refinement being the cornerstone even at a time when we've reached a much larger scale.

#### What's the long term vision for the Company and where it can ultimately go?

We have positioned ourselves at the intersection of the customer buying experience which gives us a lot of flexibility on where we go next. Integrating further aspects of the car buying experience into our platform will further enhance the experience for the customer and drive additional value for our partners. We also see finding additional products that can be offered to our consumers, whether auto or finance related, being a big part of our growth going forward combined with the rapid growth we're seeing in introducing our model into new international markets.



# Sergio Furio, Creditas



**Sergio Furio**  
Founder & CEO



Sergio Furio is the Founder and CEO of Creditas, a leading Brazilian secured lending platform focused on the auto finance and real estate markets. Before founding Creditas, Sergio spent eight years at the Boston Consulting Group, consulting companies on retail banking strategy. Before that, he worked at Deutsche Bank's Investment Banking Division.

***"Creditas' vision is to make secured loans a mass product and restructure Brazilian families' debt to unleash the true financial potential of Brazilian population."***

### What was the vision behind founding Creditas?

Creditas is all about reducing the ridiculously high interest rates that Brazilian borrowers pay. In a country with a population of 200 million, lending is only a US\$0.5 trillion business, mostly because borrowing rates are above 40%. Banks became addicted to short-term high-margin lending products (i.e. credit cards, overdraft and personal loans) and haven't built capabilities to democratize access to cheaper lending. Creditas' vision is to make secured loans a mass product and restructure Brazilian families' debt to unleash the true financial potential of Brazilian population.

### What are the fundamental problems Creditas is trying to solve for its customers?

Creditas uses technology and data science to deliver a superior user experience for Brazilian consumers. Since consumers are not familiar with collateralized lending products, optimizing the conversion funnel becomes critical and our solution provides a great user experience and operational excellence. Our platform also allows investors to gain exposure to high-quality assets with minimum origination costs.

### How large is the auto market in Brazil? How is getting an auto loan in Brazil different from the US, and how are Creditas' solutions differentiated?

Brazil has 50 million cars and 8 million car purchases per year, 75% of those being used cars. Brazilians finance 50% of car purchases, and the loan origination process is quite efficient. There is a central bureau (Cetip) that electronically connects to the regional DMVs (Denatrans) allowing loan originators to operate quite efficiently. The Brazilian market is mostly dominated by resellers, similar to the US. This channel became relatively crowded with margins eroding over time. Instead of competing in the reseller market, Creditas focuses on car refinancing / title loans for prime customers that currently pay extremely high interest rates for consumer unsecured loans (typically refinancing debt from 200%+ to 30%). In addition, Creditas markets auto purchase financing via a direct channel with consumers, partnering with digital platforms to offer simple and efficient auto loans.



***"Besides our current home equity and auto equity products, we are planning to expand our car purchase financing product and develop strong partnerships with car sharing platforms."***

### How do you see the nature of car ownership and usage in Brazil changing in the future?

Brazil is one of the biggest markets for the car sharing platforms, due to major traffic problems and the high expenses associated with owning a car. Economic recession has forced millions into unemployment who become perfect candidates to work for the Uber-likes. However, most Brazilians still prefer to own a car, especially for long-distance and weekend travel. Car sharing is probably reducing the number of cars per family, but higher income simultaneously allows more families to own a car. I would expect car ownership rates to continue growing for the next 3-5 years.

### What are the biggest challenges you face in running a dynamic, fast-growing business?

Bringing in and retaining the best talent has become our top priority. The technology ecosystem is growing fast but it lacks the track-record of the U.S., reducing the pool of available talent that understands how to grow a business at scale.

### What's the long-term vision for the Company? What new products and services will you be offering in the coming years?

We want to lead a movement in the country towards secured lending. We expect the market to grow to US\$300 billion in the next decade and we want to lead this transition. Besides our current home equity and auto equity products, we are planning to expand our car purchase financing product and develop strong partnerships with car sharing platforms.



# Stephanie Alsbrooks, defi SOLUTIONS





## Stephanie Alsbrooks, defi SOLUTIONS



**Stephanie Alsbrooks**

Founder & CEO

defi SOLUTIONS

Stephanie is the founder and CEO of defi SOLUTIONS. She founded defi SOLUTIONS to serve the need for origination systems to meet the speed and flexibility requirements of new and fast-growing auto lenders. Before founding defi, she held leadership positions at AmeriCredit, Sixth Gear and ThinkCash and has over 20 years of experience creating risk-based technology solutions for auto and emergency cash lenders.

***"Our goal was to create an affordable loan platform with a sense of community and purpose that met the unique and changing needs of lenders, no matter their size, processes or goals."***

***"Lenders need to be able to respond to market changes quickly, make changes on the fly to meet compliance issues and automate process to provide speedy and accurate loan decisions."***

### What was the vision behind founding defi SOLUTIONS?

By 2012, I had a great deal of strategic management and hands-on work experience in decision engine technology and loan originations and I'd spent most of my 15-year career buying, modifying or building loan origination systems, and battling the technology status quo. Georgine Muntz, defi's current COO (an original defi investor), and I had worked alongside one another over the years and had often discussed our frustration over the fact that the technological innovation that brought efficiencies to the rest of the business world hadn't made it to the lending industry. We set out to change that. Our goal was to create an affordable loan platform with a sense of community and purpose that meets the unique and changing needs of lenders, no matter their size, processes or goals.

### What are the fundamental problems you are trying to solve for your lender customers?

Technology innovation in the auto finance space was virtually nonexistent only a few years ago. When it came to loan origination systems – the heart of any auto lending business – lenders had two choices: 1) invest a lot of time and money on a custom system that was outdated as soon as it was implemented; or 2) buy an inflexible, out-of-the box system that created more problems than it solved. The lack of viable technology solutions left many small and mid-sized lenders at a distinct disadvantage. Lenders need to be able to respond to market changes quickly, make changes on the fly to meet compliance issues and automate process to provide speedy and accurate loan decisions.



### defi SOLUTIONS

***"This industry is highly fragmented with over 40,000 auto dealers sourcing loans and over 2,000 lenders serving the market. Changing any process requires a massive amount of coordination, integration, training and marketing."***

#### What makes your product superior to legacy systems?

defi SOLUTIONS provides flexible, affordable software solutions that meet the unique and changing needs of lenders. Our lenders leverage our SaaS platform so they can focus on lending rather than on hardware, security and technology management. No matter their size, processes or goals, lenders get leading-edge, web-based technology at an affordable price, with do-it-yourself configurability to quickly meet market shifts, with faster implementation, with system scalability to match business growth and with multi-device accessibility for mobile workforces.

We were lenders. We understand the needs of lenders. We designed all services in the defi SOLUTIONS family of products thinking like lenders. Also, everyone involved (our clients, partners and industry leaders) think and act in terms of community – to help grow and support the needs of the entire lending industry.

We now offer a loan origination system with integration to more than 40 data partners, with digital document handling and eContracting for faster funding, a loan management and servicing system, full-service analytics and reporting and an auto loan portfolio online marketplace that brings together buyers and sellers. Bottom line, defi SOLUTIONS gives lenders the FREEDOM to do business how they want to do business.

#### What key technologies are you leveraging in order to deliver a differentiated loan origination system?

We are fully leveraging the Microsoft.net stack in combination with many open source and partner technologies. We believe we should build what does not exist and what is key to lending. We believe we should partner with the top players where possible – like Salesforce and Looker – and integrate with others to provide seamless access to lending data and services. We're using React Redux to provide a world class UX and SQL to access and store data. We rely on hosted services from AWS, Azure and FNTS to support our hardware and internet needs.

#### Which key processes in the industry are the most difficult to digitize?

Our focus on auto lenders has presented various challenges in automation and adoption of new technology and processes. This industry is highly fragmented with over 40,000 auto dealers sourcing loans and over 2,000 lenders serving the market. Changing any process requires a massive amount of coordination, integration, training and marketing. Getting rid of paper has been very challenging and getting lenders to embrace automating credit decisions has also been tough. On top of these challenges you have a high dependence on capital providers who exert a high amount of control over lenders' processes, which presents additional hurdles to change.



### defi SOLUTIONS

***"Our current platform of services offers lenders the freedom to automate or change any part of their lending process. The ever-increasing demand for speed in the purchase transaction creates a huge opportunity for defi to help lenders streamline processes and meet the needs of millennials and online transactions."***

#### **What technology or other structural changes would accelerate changes / improvement in auto finance?**

Technology that seamlessly integrates the shopping, buying, financing and delivery process to remove the hassle of the auto purchase transaction is key. The structure of direct vs indirect lending and disparate inventory tracking and control combined with the fragmented dealer model make this technology a challenge. We are now seeing that auto lenders are ready and willing to adopt new technology that makes integration possible. Data security and compliance structures are slowing adoption and must continue to evolve to support a much more integrated and open environment.

#### **What are some of the challenges in integrating with key constituents across the automotive landscape (lenders, data providers, other third parties)?**

We believe the success of defi SOLUTIONS was largely born from the dynamic, inclusive culture that leadership consistently nurtures. However, overcoming a silo mentality and getting clients to see the benefits of sharing resources has been challenging. From day one, product features requested, developed and paid for by one defi client have been shared with all defi clients. A defi Idea Portal lets client present development ideas, vote on them, bid and offer an amount they are willing to pay toward the development of the idea, and in large part decide their importance in the defi development schedule. Additionally, client system administrators are challenged to participate in the defi COMMUNITY that provides a platform for users to share knowledge and ideas, ask questions and get answers from one another as well as defi experts. Client decision makers are encouraged to participate in Executive Roundtable discussions that bring together competitors to discuss the future of the industry.

#### **How do you see the nature of car ownership and usage changing in the future (on-demand transportation, ride-sharing, autonomous vehicles, etc.) and what opportunities and challenges could this create for defi?**

The cool thing about defi is no matter how the industry changes we and our lenders can evolve with it. Our current platform of services offers lenders the freedom to automate or change any part of their lending process. The ever-increasing demand for speed in the purchase transaction creates a huge opportunity for defi to help lenders streamline processes and meet the needs of millennials and online transactions. There is more data available on consumers as well as inventory, which creates more opportunities for integration and collaboration between data providers and lenders and more opportunities for seamless online buying. The increased utilization of ride sharing and autonomous vehicles could create downward pressure on vehicle sales. However, we see that as an opportunity to work with emerging ride share companies and other providers of new lines of business.



defi SOLUTIONS

***"Our goal is offer a full suite of lending technology services that allow lenders to automate and deliver all parts of the lending experience from shopping and application through payoff. "***

**What are the biggest day-to-day challenges you face in running a dynamic, fast-growing business?**

We face the same challenges as everyone – balancing it all and not dropping any balls. We need a sales machine to drive revenue; we need great client support to implement and keep clients engaged; we need great tech to sell and implement. We need cash to support it – the bottleneck is constantly moving from place to place. Getting the right people in the right role at the right time is a constant challenge.

**What's the long term vision for the Company? What new products and services will you be offering in the coming years?**

Our goal is to offer a full suite of lending technology services that allow lenders to automate and deliver all parts of the lending experience from shopping and application through payoff. We plan to add products to make the auto lending transaction easier to automate. This includes eSignatures, automation of the loan structure negotiation process, access to remarketing and capital provider reporting and compliance tools. We want to continue to serve our lenders small and large in a way that ensures they have a significant strategic advantage over their competitors.



# Peter Sayer, FlexPath Capital



**Peter Sayer**  
Founder & CEO



Peter is the Founder & CEO of FlexPath Capital, a financial technology and consumer finance company. Peter is an executive with broad capital markets and technology experience. Prior to founding FlexPath Capital, Peter was an investment committee member and advisor at Alliance Bernstein. Before that, he led EquipSystems as CEO and was a member of IBM's solution sales group. Peter is a graduate of Lehigh University and has an MBA from Babson College.

*"Our structure has accommodated investors with over \$600B of assets under management and operators with less than \$5M, both seeking transparent, asset management and reporting solutions."*

### What was the vision behind founding FlexPath Capital? What products and services do you offer?

Responsible Lending. Flexible Solutions.

FlexPath Capital's vision is to provide transparent solutions to asset managers, marketplace lenders and investors looking to access the auto finance industry. We leverage a combination of proprietary and partner platforms to provide tailored core origination, portfolio valuation and acquisition, performance analytics and consulting services. We integrate with the best solution providers to solve our clients defined challenges in a simple to use, unified platform.

### How are you leveraging technology to offer auto financing solutions? How have you differentiated yourselves against traditional competitors?

FlexPath Capital differentiates itself in our structure and the solutions to allow our financial partners to profitably navigate through the everchanging automotive finance landscape. We excel in rapid evaluation and integration of new solutions to deliver a seamless experience to the investor while maintaining responsible servicing standards for the retail consumer.

Our structure has accommodated investors with over \$600 billion of assets under management and operators with less than \$5 million, both seeking transparent, asset management and reporting solutions.



***"A normal evaluation system in the auto industry usually consisted of 20-30 thousand combinations of data. Our models consist of more than 67 million."***

### What factors do you consider when approving or denying an auto loan or portfolio?

In a prime world with new cars, much of the risk has been taken out of the system. Credit bureaus have lots of data and can pretty easily determine credit risk. Dealers are held to strict standards by the manufacturers and the manufacturers warrant their cars.

Sub-prime is radically different. The dealers have much more control. The customer often has a challenging past, and the cars could have been anything from babied to abused. Cars have far more life than a 3-year lease and people still have to get to work, even if they have had financial troubles. There is no comparison between sub-prime and prime deals, so we had to develop entirely new approaches to finding the right combinations of dealers, customers and vehicles. Our approaches combine proprietary technologies, vast data sources, partnerships and unique industry expertise to protect customers, investors and even the dealers.

This is where responsible lending comes in. We track the performance of the dealer to ensure that we don't facilitate a bad transaction, where the customer ends up buying the wrong car or does business with the wrong dealer. While we can't control everything, we certainly don't have to participate and expose the customer to a bad situation or investors to the wrong asset. We use unique algorithms to evaluate the dealer, combine thousands of data elements and risk models about the specific vehicle, vehicle class and performance history with thousands of data elements about the customer, instantly. While we do use common metrics like FICO scores, they are primarily to help baseline the asset in the event that an investor wants to trade the portfolio. Our assessments of the sale go well beyond simple use cases like a FICO score on a new car purchase at an authorized dealer.

The fact is, more than half of the people employed in the US don't qualify to purchase a new car. Everyone loves the stability of a new car purchase, but for most Americans, it is not an option available to them. Our guiding principles have always been about making the non-prime space operate more intelligently and responsibly.

When we set out on this journey, our North Star was clear, but our path with existing technologies, scoring systems and industry practices wouldn't get us there. We scoured the market and were ready to invest in the right combination of platforms, but they still wouldn't allow us the execution we needed. So, we built our own. To give you a sense of the complexity, a normal evaluation system in the auto industry usually consisted of 20-30 thousand combinations of data. Our models consist of more than 67 million.

Today, we have partnered with many of the leading technology vendors that participate in our marketplace to provide the investor and the consumer the greatest ability to be successful with their investments. We are excited to be on the bleeding edge of a rapidly transforming industry where the variables of risk change rapidly and often. We do not believe we need to be everything to everybody, rather we want to partner with the management teams and solution providers that will work with us to deliver against our vision. Responsible lending. Flexible solutions. Trusted advisor to the capital markets and dealers alike.





***“Many of the technology solutions being adopted around buying/selling, insuring and paying for automobiles will positively effect the industry, consumer protection and the efficiency of owning a car.*”**

### **What trends are you seeing in the subprime marketplace as far as delinquencies and competition in the marketplace?**

A general tightening in underwriting standards has already begun to take place. As collateral supply has caught up with pent up demand, individual credit, collateral and dealers are the subject of deep, retrospective performance analysis. The growth of new car sales and leases, increased relative value of used cars and proliferation of new financing company entrants all contributed to the significant recovery in the asset class since 2009. Not all this growth was smart and is now manifesting itself in increased scrutiny of the asset class and the participants within it. To the counter-cyclical investor, this bodes well for market entrance and investment outperformance.

Broadly, the slight uptick in delinquencies is not seen as surprising at this point. However, legacy portfolios attached to older, higher mileage cars are subject to a greater severity of loss in liquidation, putting downward pressure on portfolio performance. Adding to the complexity, retail consumers have begun to take on more debt, while the employment picture and lack of wage growth continues to be the subject of debate. Change management is hard when companies are doing well and growing and can be unfathomable when companies are forced to shrink their footprint and achieve profitability at the same time. This has put the operators of these financial companies under tremendous pressure to adjust their footing or exit the market all together.

Ultimately, these pressures will lead to less competition over the short term, smarter solutions for investors and consumers alike and greater operating efficiencies and profitability across the industry. This transition is exciting for the long-term viability of the industry. This will be precipitated by mergers of companies and acquisitions of portfolios, new innovative market entrants and capital sources seeking FlexPath Capital's guidance. Current market dynamics are creating a unique investment opportunity given the low interest rate environment and balance sheet pressures on traditional lenders. Going forward, it is likely that traditional sources of fixed income will not be sufficient to meet investors' income needs.

Many of the technology solutions being adopted around buying/selling, insuring and paying for automobiles will positively effect the industry, consumer protection and the efficiency of owning a car. This should translate into greater asset transparency for the capital markets investor and better performance for their investments.

FlexPath Capital is the beneficiary of these opportunities having aligned our business structure with operators and capital markets partners over many years. Being an operational leader in the industry and providing deeply valued advice to the capital markets provides proprietary deal flow at the asset and portfolio levels, keen insight into capital markets investment criteria as well as the ability to provide deeply valued solutions to the marketplace.



***“We help the marketplace navigate the rapidly changing auto finance landscape with origination, acquisition, servicing and consulting necessary to achieve their tailored goals.”***

### What industry trends do you see creating new opportunities for FlexPath?

FlexPath Capital benefits from the consolidation of the industry and proliferation of technological solutions in and around the consumer. FlexPath is positioned to capitalize on this opportunity with our unique structure, industry partnerships and senior leadership with multiple decades/cycles of experience. We mix the bleeding edge of technological solutions with proven portfolio management capability necessary to make the investments perform. We help the marketplace navigate the rapidly changing auto finance landscape with origination, acquisition, servicing and consulting necessary to achieve their tailored goals.

The need for origination and servicing solutions will only increase in the face of a tougher operational environment. Auto is unique amongst consumer assets and is constantly changing. Our agile development environment together with lean techniques learned and refined over the past few decades, allows us to integrate with and roll out innovative solutions for our customers, across the marketplace of participants, in weeks, giving them greater control and insights that they can profit from. Building off partnership solutions, we rapidly address the concerns of our customers providing them with real-time insights into their business around all aspects of the investment and operational processes above and below the surface:

#### Above

- Fundamental Research
- Technology Selection and Implementation
- Risk Management
- Proprietary Deal Flow
- Investment Selection
- Reporting/Service

#### Below

- Data Harvesting
- Customer Tracking/Analytics
- Market Intelligence Data
- Residual Value/Trade Optimization
- Portfolio Risk AI
- Interest Rate Arbitrage Automation



# Chase Fraser, Fraser McCombs Capital



**Chase Fraser**  
Managing Partner



Fraser McCombs Capital

Chase Fraser is a Managing Partner at Fraser McCombs Capital, a VC firm investing in early and late stage automotive technology companies. The firm was founded in 2011 and currently manages \$125 million. Previously, Chase founded MarketQuiz, the innovator of next-generation automotive service marketing and CRM. The company was acquired by SCI-Marketview in 2008. Before MarketQuiz, Chase was a principal with Fraser Industries. The company was the largest wooden pallet manufacturer and recycler in North America, and in 1997, went public on the NASDAQ. Chase graduated from The University of Texas at Austin, is married with two children and currently resides in Boulder, Colorado.

*"Automotive is probably one of the three hottest investment sectors right now, and we don't see that slowing down anytime soon."*

**Please describe Fraser McCombs Capital's investment approach. What types of investment opportunities are you seeking?**

We focus on early to mid-stage technology companies in the automotive space.

**What is your criteria as far as stage of company and size of investment?**

We're stage agnostic. We are more focused on potential growth trajectory and utilizing our network and experience within the industry. We write \$2 million to \$8 million checks.

**How are you able to leverage your deep knowledge and connections in the industry to help existing portfolio companies?**

Many of our LPs are from the automotive industry. That allows us to test ideas and potentially take advantage of certain LP's sales distribution.

**How has the environment for investment around the auto industry changed in the past five years? Is the space getting significantly more attention today?**

It's incredible. When we started the fund five years ago, many people said we were crazy. Limited deal flow and the quality of entrepreneurs was adequate, but not great. I read recently that there are 140 VCs who have made at least an investment into AutoTech, including more corporate venture investment. Automotive is probably one of the three hottest investment sectors right now, and we don't see that slowing down anytime soon. There will be shakeup in the industry for the next 10-15 years.

**What specific areas of the auto ecosystem are you looking at most closely?**

FinTech is certainly gaining traction in the space. The ability to purchase a vehicle online, with the myriad of financial processes associated, will be a reality very soon.



Fraser McCombs Capital

***"We now have true flexibility in transportation choices. The smart manufacturers are now discussing 'vehicle miles traveled' versus number of vehicles sold."***

**What is your thesis around the advent of connected cars and the changing auto landscape as far as consumer ownership and usage (on-demand, ride sharing, etc)?**

I have a friend who just sent his daughter off to college. He asked if she wanted an Uber allowance or a new car, and she chose the Uber allowance. Another very wealthy friend sold his second car because he claimed it was more convenient to ride-share. These are seismic shifts in thought process and will dramatically change the way we utilize transportation. We now have true flexibility in transportation choices. The smart manufacturers are now discussing "vehicle miles traveled" versus number of vehicles sold. Autonomous will be the next big sea change.

**Bob Lutz recently said that there will be no human-driven vehicles on the roads in 20 years. Do you agree with him?**

No. There is no doubt that autonomous vehicles will be prevalent, but the sheer volume of used vehicles on the road are here to stay for a while. The vehicles have utility, are an average of 11 years old and, in the minds of an individual driving an \$8k vehicle, are less expensive to operate. This becomes solely an economic decision. I also have very little faith that the regulatory authorities can get out of their own way. 40 years from now? Probably no human drivers other than a very small subsection of enthusiasts.

**Please walk us through a few investments you are excited about.**

In FinTech, we own an interesting business called Confident Financial Solutions (CFS). We lend money to consumers who are having their vehicles repaired, and often at the point of purchase. It's obviously a space we know well, can be helpful with distribution and are the current market leader. It's a nice combination of SaaS and lending. Another business is AutoPay. They finance/refinance automotive loans, with much of the transaction happening online. It's an early step to what will truly be an online vehicle purchasing process.

**Are there specific threats or opportunities for the auto industry that you see that may not be getting much press?**

With the increase in vehicle complexity and expense, we see new opportunities to re-bundle and finance warranties and maintenance services to better support new ownership models. An example would be a vehicle lease that allows for multiple different models to be driven in a calendar year, inclusive of vehicle maintenance.



# Peter Breitstone, Goji



**Peter Breitstone**  
CEO



Peter Breitstone joined Goji as CEO in 2017. He has over 20 years of senior executive leadership experience at several global insurance companies, including: Insureon (EVP of Sales, Programs and Facilities), Zurich (SVP of Enhanced Market Dynamics at Zurich N.A.), and Aon (CEO of Aon Global Environmental Services Group and Aon's Agency Specialty Product Network and Private Risk Management). Peter built and sold Environmental Partners, a brokerage specializing in Environmental Risk and Insurance Management, to Aon in 2006. He is admitted to the Bar in New York and the District of Columbia.

***"Goji's innovative online-to-offline agency-driven approach matches consumers and insurance carriers, meeting each of their needs."***

### Please walk us through the history of Goji and where the Company is today.

Goji is pioneer in technology-enabled insurance distribution and uses a data-driven, consultative approach to help customers find home and auto insurance that best meet their needs. Goji's innovative, online-to-offline agency-driven approach matches consumers and insurance carriers, meeting each of their needs.

Goji offers customers straight-forward, expert advice and personalized, real-time quoting across multiple insurance carriers, while at the same time using analytics to drive profitable growth for the carriers through a more cost-effective distribution platform.

Goji was founded in 2007, as Consumer United, and is based in Boston, MA. The company rebranded as Goji in 2015 and, in April 2016, refocused its operations to improve the quality and profitability of customers written. It became clear that simply treating all customers the same did not work, in terms of both unit economics and carrier appetite. Consequently, Goji elected to shift to a focus on preferred customers and a metrics-driven sales strategy that leverages sophisticated data analytics, resulting in greater success with both customers and carriers. Goji's performance metrics are currently at their all-time highs. Goji leverages a fully-built platform to drive continued growth through accelerated customer acquisition.

Goji is led by a highly experienced management team and is backed by well-funded and established investors. Goji's lead investors include Thayer Street Partners, a leading middle-market focused private equity firm based in NY; Matt Coffin's Coffin Capital & Ventures; Five Elms Capital, a Kansas City-based growth capital investment firm focused on tech-enabled companies; and Village Ventures, led by Matt Harris (now Managing Director at BainCapital Ventures, overseeing fintech investments). Goji's recently-appointed Executive Chairman, Matt Coffin, has significant management & investment experience as the Founder and CEO of LowerMyBills.com, a leading mortgage business that sold to Experian, and as former President of Marketing at Experian, as well as having successfully invested in many similar businesses. Matt Coffin and Josh Koplewicz recently recruited me as CEO in August 2017, after spending time advising Goji, as well as having worked together, in the past.





***"From a technological perspective, under 5% of consumer insurance purchases are made online today... positioning Goji well for a secular shift online, which is currently in the early innings."***

***"Goji's solution not only offers consumers price quotes but actually writes preferred customers on behalf of its longstanding network of carriers..."***

### What are the key market trends driving Goji's growth?

The "rumors of the death [of auto insurance] are greatly exaggerated." While the introduction of self-driving vehicles may eventually impact part of the auto insurance market, it's hard to believe that the bulk of the personal insurance market won't continue to thrive.

Consumer auto and home insurance represents over ~\$40 billion in annual recurring commission revenue in the US alone and we do not view online consumer insurance as a 'winner take all' market.

From an economic perspective, home and auto insurance are needed in both good and bad economic times, which insulates Goji's business from the economy, while population growth and housing formation will continue to grow the size of the US insurance market.

From a technological perspective, under 5% of consumer insurance purchases are made online today, compared to 38% for consumer travel, positioning Goji well for a secular shift online, which is currently in the early innings. However, unlike consumer travel, insurance is far more complicated and difficult to scale.

The current climate has resulted in price instability, which has pushed a lot of people into the market to seek out easier alternatives for cost-effective coverage. Following recent hurricanes, insurance carriers in core markets like Houston have experienced significant losses, resulting in customers facing price increases and cancellations for reasons that having nothing to do with individual losses or characteristics. Our analytics team identifies niche trends where market dislocations lead to unjustifiably higher prices for certain demographics, in an attempt for carriers to balance their books. We're able to utilize our proprietary algorithms to identify attractive customers who have fallen victim to market forces, offering customers better and cheaper product options while offering carriers the opportunity to expand in certain markets, as other carriers suffer CAT-related losses.

### How is Goji differentiated from others selling insurance online? Who do you see as your competition?

Goji has one of the most unique distribution platforms in the industry, as it leverages data and analytics to actually capture high value customers and build a book of business with many carriers. Goji's solution not only offers consumers price quotes but actually writes preferred customers on behalf of its longstanding network of carriers, whereas most other online platforms tend to only offer teaser price quotes and capture non-standard customers.

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### Goji

***"While price is always important, coverage features, personalized advice from licensed agents and analytics tend to be the driver of Goji's relationship with its customers."***

***"...while the world is evolving whereby online and offline markets are converging, preferred consumers seeking insurance are going to need both for the foreseeable future."***

#### How is Goji differentiated from others selling insurance online? Who do you see as your competition?

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We'd like to believe that no one really is our competition; however, there are other players who report to play in our space. There are new entrants who are online insurance distribution players that believe customers are capable of buying online without any human intervention; in those cases where they do, they tend to only write non-standard customers, which are less complex to underwrite but are typically higher risk and generate lower ROIs. Most of the technology platforms that offer multiple personal insurance carrier options don't actually write insurance, instead, they simply connect with a customer and then pass that customer – in the form of a lead – to another company who tries to write the insurance. Certain new-entrants competing online are also insurance carriers, therefore only offering one product and compete directly with insurance carrier incumbents, whereas Goji is not an insurance carrier (and does not retain any insurance risk) and offers customers options across its integrated carrier partner network. While the insurance industry is beginning to shift online and offer customers a better experience, Goji uniquely offers customers the ability to do business with us however the customer wants to do so.

We've found that the preferred customer demands more than what's typically offered by online comparison shopping sites. While price is always important, coverage features, personalized advice from licensed agents and analytics tend to be the driver of Goji's relationship with its customers. This consultative approach serves the customer well and leads to maintaining long-term customer relationships that are more focused on coverage than solely on price.

#### Are consumers completely comfortable purchasing insurance online or are human agents still critical to binding policies?

Insurance is complicated. Some InsurTech companies would have you believe that insureds can't wait to buy insurance without interacting with an agent. Whereas, some insurance agents would say that insureds are not capable of understanding the complexities of buying insurance without a human agent. We believe that the reality is somewhere in-between; while the world is evolving whereby online and offline markets are converging, preferred consumers seeking insurance are going to need both for the foreseeable future.

The majority of consumers shopping online for insurance today are looking for a Certificate of Insurance or an ID card at the cheapest price but don't actually care about covering their risk; for those insureds, they'll buy online. However, they typically cancel their insurance frequently and fall into the category of 'non-standard' insureds. Then there's the other category of consumers seeking to protect their wealth from risk; that category, while migrating towards online purchasing is not comfortable deciding what to buy. Consequently, there's a need for a better user experience, as well as offline agents advising the customer on how best to protect their risk. We believe this dichotomy is not going away any time soon. While it's possible, in the future, that A.I. and predictive analytics will improve this process, people will still want to know that they're properly covered. Goji lives to address this complexity. We spend an enormous amount of time on user experience as well as analytics necessary to make sure that the customer can get the highest quality product at an affordable price.



***“Goji has amassed a robust customer database generated from millions of historic customer interactions, enabling it to formulaically filter and identify high-value customers, which becomes increasingly accurate with more user data.”***

**Please discuss Goji’s marketing strategy. How do you think about customer acquisition costs and the long-term value of those customers?**

Unit economics are critical to the success of any business. Most other online businesses follow the old adage, “lose money on every deal but make it up in volume.” However, when we consciously shifted to our high lifetime value model last year, we made a pledge that we’d acquire high value customers in a positive unit-economic way.

Goji efficiently acquires customers through a targeted sales and marketing approach, focused on high-value Preferred customers. Today, over ~95% of Goji’s customers are preferred, representing higher credit quality customers, the vast majority of whom are homeowners, which translates to better cross-sell rates and retention rates, all of which leads to stronger unit economics and higher lifetime value.

**How are you leveraging technology to be a disruptive force in selling insurance?**

Between our database and predictive analytics, we’re getting better and better at identifying high value online insurance buyers. The technology is allowing us to separate buyers from window shoppers and other online consumers.

Many online offerings today offer insurance products at cheap teaser prices in an attempt to attract customers who are not fully aware of what they’re buying. However, we’re not big fans of tech gimmicks and market plans solely designed to market to online consumers; instead, we’re focused on offering high value products to high lifetime value customers, ensuring that they get the right coverage at the right price.

Goji has amassed a robust customer database generated from millions of historic customer interactions, enabling it to formulaically filter and identify high-value customers, which becomes increasingly accurate with more user data. Goji acquires customers through a differentiated and high ROI strategy. Furthermore, Goji’s fully integrated, proprietary end-to-end technology platform was developed over several years of investment. Goji also recently rolled out a new model, which enables it to evaluate prospects on a real-time, granular basis before introducing them to its program.



***“Ultimately, Goji can acquire customers more economically than its partners, leading carrier partners to outsource to Goji, which becomes a win-win proposition.”***

### What are the biggest day-to-day challenges you face in running a dynamic, fast-growing business?

Keeping all the trains running on time. I’m constantly reevaluating the customer experience, employee engagement, technology development, customer acquisition and our partnership channels, among other areas of our business.

The biggest challenge is growing while continuing to offer the highest quality product and provide the highest level of customer experience. I’m very focused on making sure our salespeople are positioned to offer the best coverage at the lowest price while ensuring that carriers are happy with the products we offer and customers we provide them.

### What is the long-term vision for the Company? What new products and services will you be offering in the coming years?

Becoming the digital distribution platform of choice for our customers, carriers and partners.

We’re constantly refining our analytics engine in order to be able to assess the varying quality of customers across the internet and right-size each type of customer to each type of product.

Goji has designed a very efficient mousetrap for sourcing, identifying and converting high value customers.

I approach the company from an omnichannel perspective, involving distribution via direct-to-customer, affinity groups and B2B partnerships, among other paths. Goji can ultimately fulfill for carriers based on their specific appetite, as their distribution partner, by parsing customers into granular buckets and running highly targeted customer acquisition campaigns to address partner’s specific preferences related to certain customers attributes and profiles. Preferred customer prospects are typically assigned to Goji’s Preferred sales agents and placed with Goji’s Preferred carriers while other, non-preferred prospects may similarly be handled by Goji’s non-preferred sales agents and placed with Goji’s other carriers who have a specific appetite for such a customer. Ultimately, Goji can acquire customers more economically than its partners, leading carrier partners to outsource to Goji, which becomes a win-win proposition.



# Stefan Heck, Nauto



**Stefan Heck**  
Co-Founder & CEO



Dr. Stefan Heck is Co-Founder and CEO of Nauto, the Palo Alto-based auto technology company whose AI-powered connected camera network is making driver safer and smarter today and informing autonomous vehicle development in the future.

Until recently, Dr. Heck was Consulting Professor at the Precourt Institute for Energy at Stanford University, directed the Energy Transformation Collaborative and was a research fellow at the Steyer Taylor Center at Stanford's business and law schools. Previously he was a Director at McKinsey, where he co-founded and led the Cleantech and Sustainability practice and worked extensively with Global 100 technology, industrial, infrastructure, building systems, retail, utility and energy companies across the U.S., China, Korea, Japan, India and Europe. He is on the Board of the Silicon Valley Leadership Group, is an angel investor in disruptive technology companies and is author of a critically-claimed book, *Resource Revolution: How to Capture the Biggest Business Opportunity in a Century*.

Stefan earned a Ph.D. in Cognitive Science from UCSD and a B.S. with honors in Symbolic Systems from Stanford University. As an undergrad, he launched Stanford's first Solar Car Project, which continues in present day.

***"By monitoring and analyzing external road conditions, vehicle data and driver behavior, Nauto detects distracted driving and coaches drivers to develop safer habits in real-time to avoid collisions before they occur."***

### What was the vision behind founding Nauto?

Our transportation system is dangerous, inefficient and flawed in many ways. And while there are many exciting developments happening to address these issues, including autonomous vehicles, connected cars, energy efficient electric cars and greater use of car sharing, for our transportation system to truly transform into a safer, self-driving world of tomorrow, we need a greater understanding of how humans behave behind the wheel today. We also need immediate solutions to tackle issues like distracted driving, which is increasing at an alarming rate.

### What products and services does Nauto offer?

Nauto is an artificial intelligence-powered safety system makes any vehicle safer and smarter. By monitoring and analyzing external road conditions, vehicle data and driver behavior, Nauto detects distracted driving and coaches drivers to develop safer habits in real-time to avoid collisions before they occur. That's an important and immediate mission. Secondly, Nauto is working with automakers, who are deploying Nauto and pooling data to help power their own autonomous vehicle development.





***“Nauto’s key value propositions include a sophisticated distracted driving detection feature, as well as data insights that can help commercial fleets become more efficient.”***

***“Nauto also has its proprietary VERA Score which evaluates drivers; these features allow insurance companies to better price risk, reduce fraud and add efficiencies to claims processing, among other benefits.”***

### Who are some of your key clients? What is the Nauto value proposition for them?

In addition to working with dozens of commercial fleets in North America, Japan and Europe, Nauto has commercial agreements with strategic partners like GM, BMW, Toyota and other automakers. We are also working with various vertical channel markets, such as the insurance industry and automotive technology platforms like Geotab to provide solutions to their own clients. Nauto’s key value propositions include a sophisticated distracted driving detection feature, as well as data insights that can help commercial fleets become more efficient. Nauto’s video data also helps commercial fleets in insurance claims, often exonerating drivers in wrongful liability situations. Nauto can also help insurance companies price risk more efficiently.

### What are the advantages of a computer vision-based system over various telematics and UBI solutions that also analyze driving behavior?

Nauto uses internal- and external-facing cameras and other sensors, as well as proprietary algorithms which gather visual data inside and outside of the vehicle, providing powerful insights and context that standard telematics cannot. Nauto also has a proprietary VERA Score – a driver scoring and evaluation system; these features allow insurance companies to better evaluate and price risk and add efficiencies to claims processing, among other benefits.

### How significant an impact have you been able to demonstrate of the use of Nauto technology to improve driver safety?

We are not revealing specifics, but since our commercial deployment this year, Nauto’s fleet customers have reported immediate and significant reductions in collisions or crashes, increased ability to exonerate drivers in insurance claims and marked efficiency improvements, leading them to scale up quickly from pilot to fleet wide deployment.

### In what ways are insurers leveraging Nauto data to make the underwriting and claims processes more efficient?

Nauto’s sophisticated visual data and other insights provide powerful context that standard telematics cannot. Nauto also has its proprietary VERA Score which evaluates drivers; these features allow insurance companies to better price risk, reduce fraud and add efficiencies to claims processing, among other benefits. Nauto is also working with insurance companies to help them develop products and solutions geared towards policy holders.





***"...insurance companies are using Nauto to deliver benefits to policyholders in the commercial fleet business and automakers are using Nauto to power autonomous vehicle development."***

### How are insurers integrating Nauto's technology into their overall offering to their customers?

As stated above, Nauto is also working with insurance companies to help them develop products and solutions geared towards policy holders, e.g. for households with teen and elderly drivers. In addition, Nauto has partnered with companies such as Atlas Financial Holdings, one of the biggest insurers of taxis, paratransit and limo fleets, who are deploying Nauto units to thousands of their policy holders as a way for them to provide an efficiency and safety benefit to customers.

### How are Nauto's solutions being used to develop autonomous vehicles?

Nauto is working with several automotive companies, including BMW, GM, Toyota and others, who are deploying Nauto in their own fleets. These automakers have agreed to pool data – anonymized and in aggregate – and are using resulting insights and data to get a better understanding of human driving behavior, which is critical to developing a safe and efficient autonomous driving system.

### What are some other unique applications of Nauto data?

In addition to its sophisticated distracted driving detection features, commercial fleets are using Nauto to identify traffic hot spots or potentially hazardous areas. They are using Nauto's proprietary VERA Score to reward excellent drivers and give feedback to drivers who need improvement. Visual data also can immediately exonerate drivers in cases of wrongful liability; insurance companies are using Nauto to deliver benefits to policyholders in the commercial fleet business and automakers are using Nauto to power autonomous vehicle development.

### What's the long term vision for the Company? What new products and services will you be offering in the coming years?

Nauto has a big and urgent mission: to have a dramatic and positive impact on the safety of our roadways by reducing distracted driving and alerting drivers to other hazards. We also see a need to provide an onramp to an autonomous driving future that will allow harmonious co-existence of human-driven and self-driven vehicles. Ultimately, we aim to significantly improve the way we move around and live in urban environments.



# Tim Grace, PointPredictive



**Tim Grace**  
CEO & Chairman



Tim is a strategic innovator, having led the development of several revolutionary products in the financial services, payment card and mortgage industries. Prior to founding PointPredictive, Tim was the senior vice president of Global Product Solutions at CoreLogic, where he successfully introduced a variety of advanced credit, fraud prevention, rental, consumer lending and valuation solutions. Previously, Tim was the president and CEO of BasePoint Analytics, which he co-founded in 2004 and led to its successful exit in a sale to CoreLogic in 2009. Prior to that, he spent 10 years with HNC Software / FICO where he served as the vice president of Issuer Fraud Solutions.

***"We know, and have been able to prove, that we can halve auto lenders' early pay default losses with machine learning."***

### How did your prior experience in other areas of financial services lead you to the auto lending market?

Since the early 1990s, we have been working in the areas of machine learning and predictive analytics to target fraud. Our first experience was working for a company called HNC Software. The company was a pioneer in commercial applications for artificial intelligence and machine learning. At the time, credit card fraud was emerging as a real threat to financial institutions and machine learning was a perfect fit. Banks were able to pool their fraud data together and HNC was able to teach machines how to find the fraud in real time.

The application called Falcon was a smash success and gained about 80% of the credit card transaction fraud market in a matter of years. Several of us left that company to see if we could solve new fraud problems. It was 2004, and mortgage fraud, like credit card 10 years before, was emerging as a real threat to banks and lenders. We founded BasePoint Analytics — a new company that built the first machine learning models for the mortgage industry. These models worked very well to detect fraud that was often hidden and mistaken for credit loss. We were able to help lenders halve their fraud and default losses by using sophisticated models to generate predictive scores in order to spot misrepresentations and inconsistencies in applications. We sold that company and technology to First American / CoreLogic where it is now used by many of the largest lenders in the U.S.

In our newest company, PointPredictive, we are targeting auto lending fraud and misrepresentation. Misrepresentation loss is emerging as a serious threat to lenders and banks alike, with an estimated \$6 billion in losses in 2017. And we know, based on our experience, that solving this problem is well suited for machine learning and predictive analytic scores. We know, and have been able to prove, that we can halve auto lenders' early pay default losses with machine learning. We have seen in tests with large lenders that they could save \$50 million or more per year using our scores, with false positive rates that will actually improve the customer experience for consumers. It's really exciting to see machine learning work industry after industry and to know that we have been on the forefront of each of those industry changing shifts.



***“PointPredictive delivers both a full application score that identifies losses across the application and fraud type spectrum and also dealer scoring that identifies dealer risk 180 days earlier than traditional methods that are based on defaults at the dealer.”***

### **Why has the auto lending industry been behind other areas of lending such as credit cards and mortgages when it comes to sophisticated fraud scoring?**

Investment in fraud has been light in auto lending over the last 20 years. And to be honest, there haven't been many exciting new technologies for auto lenders to use. The same technologies that look for social security mismatches or score for identity compromises have really been the only thing lenders have had at their disposal. Given that this type of identity scoring and data verification only protects against about 15% of the current misrepresentation losses, the industry really needed a new approach. PointPredictive delivers both a full application score that identifies losses across the application and fraud type spectrum and also dealer scoring that identifies dealer risk 180 days earlier than traditional methods that are based on defaults at the dealer.

When you look at the root cause that may have been behind the lack of technology innovation and investment, it is really because the losses due to misrepresentation have traditionally been understated. Many of the fraud and misrepresentation losses have been classified as credit losses or early or first payment defaults. This masked the loss rate of fraud and misrepresentation within lenders, and the losses were chased by credit score or credit policy changes that have proven to be unsuccessful at curbing these losses. When times were good and the industry was growing, it was easy to look beyond those defaults because the book of business was growing so rapidly. As soon as the market shifted, those losses started to matter. Fraud is now a burning issue. From lenders we surveyed, 70% of them are actively looking at new fraud tools and making investments in fraud in 2018.

### **What are the key forms of fraud you see in auto lending? How pervasive is the fraud?**

Income misrepresentation and employment fraud continue to be the largest problems and most common issues lenders grapple with. Borrowers, dealers or fraudsters going into a dealership and providing false income or false employment to qualify for the loan – depending on the severity, these then cause early or even first pay defaults for lenders.

Synthetic identity is emerging as fraudsters have found that they can use fictitious, constructed identities to fool lenders and dealers into giving them the keys to a car, often times with little or no money down.

*(continued on next page)*



***"We estimate about \$6 billion in auto lending fraud this year and possibly more next year."***

***"We work closely with lenders across the industry to collect, tag and then apply data science to their historical data."***

**What are the key forms of fraud you see in auto lending? How pervasive is the fraud?** *(continued from previous page)*

Dealer or finance manager fraud is also a continuing trend for everyone to deal with. Unscrupulous dealers or finance managers manipulate consumers and provide false information to lenders on applications to sell cars at a ridiculous markup.

Fraud ring activity – organized fraud rings continue to expose the holes of the lending processes by targeting dealers and lenders with holes in their fraud strategies.

All of these fraud types are very pervasive and in some cases growing year over year. We estimate about \$6 billion in auto lending fraud this year and possibly more next year.

**Using AI is all about analyzing past patterns to make predictions about the future – how have you been able to get the historical data you need to build robust predictive fraud scoring models in the auto space?**

This takes a lot of work and it's where most AI companies fail. But this is where we actually excel. Our experience in building several key fraud consortiums across multiple industries in the past (credit card, debit card and mortgage fraud) has given us a lot of credibility when it comes to working with auto lenders to analyze and build models from their historic data. We understand how to collect data, what data to collect, how to ensure the safety of the data and how to construct agreements with lenders to protect everyone's interests (ours, lenders and consumers). This is experience that was built over 25 years.

We work closely with lenders across the industry to collect, tag (identify performance issues and what caused the performance issues) and then apply data science to their historical data. To date, we have examined and built models on over 30 million historical automotive loan applications and all of the historical performance information that went along with applications that turned into funded loans.

The models are extremely effective, achieving fraud detection rates exceeding 50% of a lender's total fraud and misrepresentation losses while still maintaining or even improving the customer experience. In some cases, we recommend using our models to streamline the lending experience for consumers or dealers with very low fraud risk scores. The models are improving daily as we compile more intelligence and experience into them. We are projecting that we will improve our model efficacy in identifying fraud by about 10-20% a year while reducing false positives to even lower levels.



***“While we get quite a few calls both from international auto lenders and other verticals, we are focused heavily in the U.S. with active discussions with 30-40 of the top automotive lenders in the U.S. and working with partners in mortgage and retail.”***

**PointPredictive raised its Series A financing round in June of 2017. Can you discuss the capital raising process and how you approached the process?**

It's a long process of education. We had to educate investors on our technology, on the market for application fraud solutions, on the auto lending industry need for ground-breaking technology but we also had to educate investors that our technology worked and was proven. We had pilots and retrospective tests with multiple lenders where we proved we could save each of these lenders between \$20 and \$50 million a year.

We really approached the process by looking for an investor that really understood the fraud space, but, equally as important, one that understood machine learning and analytics and their application in banks and financial institutions. Not every investor specialized in that. But when we met our current investors, Mosaik Partners, it was a clear match. They understood our business and our technology and were super excited to be a part of it.

**What is the longer-term business plan for the Company? What new products / services and verticals do you intend to add / target in the future? Do you plan on expanding internationally?**

Our approach of understanding business fraud problems and building predictive analytics to solve these problems naturally lends itself to both vertical and international expansion opportunities. We have solutions built and ready for automotive application and dealer risk, mortgage application fraud scoring, and online retail transaction and application scoring. While we get quite a few calls both from international auto lenders and other verticals, we are focused heavily in the U.S. with active discussions with 30-40 of the top automotive lenders in the U.S. and working with partners in mortgage and retail. This keeps us pretty busy today.

We find our success is based on focusing on our core expertise – machine learning predictive scoring for application and transaction fraud. Application fraud is the fastest growing type of fraud across most industries – not just auto. As we identify emerging or unaddressed fraud issues, we will attack them as a company.



***“If a lender doesn’t automate and get faster and more accurate in identifying fraud, they will probably not be competitive.”***

**How do you think about all of the potential changes in the auto industry over the next 20 years and what that means for PointPredictive?**

Near-term changes in the auto industry are great. Everything is being automated. Easier access to automotive loans and streamlined “from your couch” application processes and even car purchasing means lots of opportunities for our technology. Given that we can score 5000 applications per second with our current production infrastructure, we are perfectly positioned for screening risk associated with any type of lending approach. Everything is moving towards technology. This will really force lenders to adopt technology to keep up. If a lender doesn’t automate and get faster and more accurate in identifying fraud, they will probably not be competitive.

If we speculate on self-driving cars or a completely automated transportation industry, we can’t be sure what that will mean. While I would love to see all that happen in our lifetimes, I am not confident it will. One thing we do know from our experience over 25 years is that there will be a constant need for evolving and adaptive learning and mitigation techniques to solve risk management problems. We’ll be there to help with this.





# Alex Timm, Root



Alex Timm  
Co-Founder & CEO

**ROOT**

Alex is the Chief Executive Officer and co-founder of Root. Prior to Root, Alex worked at Nationwide Insurance, most recently as Senior Strategy Consultant for the property and casualty lines of business. His experience in the industry spans from financial manager to mergers and acquisitions to pricing and reserving at the age of 14. Alex is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries.

***"I decided to build a modern auto insurance company from the ground up – one founded on the principle of fundamental fairness that is also dedicated to making consumers' lives easier."***

***"...our main differentiator is that the biggest factor in our ratings algorithm (by far!) is driving data as measured by telematics."***

### What was the vision behind founding Root?

I have been in the insurance industry since I was 14, working across a variety of departments in well-established carriers. In corporate strategy, I was responsible for identifying market and industry trends and making recommendations on how the business model should evolve in response. But I soon came to two realizations: consumers were embracing mobile technology at an unprecedented rate but we were still stuck in the age of internet quotes (or even brick-and-mortar agents); and, while big data opened up a whole world of possibilities to fix what was broken, we didn't have the ability to capitalize on that opportunity. The result – technology was moving forward and leaving insurance behind.

I saw a big opportunity for the auto insurance industry to completely reinvent itself. By taking advantage of what technology and machine learning have to offer, insurance companies could not only provide a truly modern customer experience, but they could also make things better. Fairer. Traditional carriers, though, have been largely unable or unwilling to take this leap. So I decided to build a modern auto insurance company from the ground up – one founded on the principle of fundamental fairness that is also dedicated to making consumers' lives easier.

### Please walk us through the process of applying for a quote with Root. What factors does Root consider when underwriting its customers?

We pride ourselves on having the easiest process in the business. Customers simply download an app and sign up for a test drive in a few quick taps. Then, after a few weeks of normal driving, the Root app delivers a quote primarily based on the customer's driving skills. If a customer wants to purchase the quote, they can do that right in the app within a few minutes. The insurance card is right in the app and we'll even cancel their old policy for them. We've designed the process to be as streamlined and delightful as possible – no more stacks of paperwork or dozens of text boxes and screens to fill in.

While we consider some other factors that are predictive of risk or fraud, our main differentiator is that the biggest factor in our ratings algorithm (by far!) is driving data as measured by telematics. That's a big deal in this industry.



### ROOT

***"Since we don't give a quote to bad drivers – the 30 percent of drivers who are responsible for 50 percent of claims – we are able to give good drivers a discount of up to 52 percent off their current rates."***

***"I find that consumers are very open to new technology – as long as it makes their lives better – and we've seen great reception to our offerings."***

#### How is Root able to deliver cost savings over traditional auto insurance providers?

Root is the nation's first mobile-only carrier that uses telematics to give fair prices to potential customers. Unlike traditional insurers, we calculate insurance rates primarily based on actual driving behavior. Using the power of technology, we gather data on individual driving behaviors such as braking patterns, acceleration and mileage – more than 200 different variables. Since we don't give a quote to bad drivers – the 30 percent of drivers who are responsible for 50 percent of claims – we are able to give good drivers a discount of up to 52 percent off their current rates.

We're also the first insurance company to offer a discount for self-driving cars, beginning with Tesla. Cars with semi-autonomous technology have proven to be much safer on the road. According to the NHTSA (National Highway Traffic Safety Administration), Tesla's Autopilot feature reduced its crash rate by 40 percent. Our app is able to gauge when a driver is likely using the Autopilot technology and reward them with a discount for those miles.

#### What are some of the key use cases for your proprietary data and analytics?

We aren't the first company to use telematics. We're just the first company to do it right.

While other companies have dabbled in telematics, they largely use the data to give small discounts and (rare!) small surcharges. When they do surcharge for bad driving behavior, they don't adjust in an amount which is commensurate to risk. It's a patch on a broken system. Good drivers are still subsidizing bad ones.

Root, on the other hand, is using data and technology to eliminate that subsidy and give good drivers the rates they actually deserve. Essentially, we're building a new kind of insurance system from the ground up – one which is fundamentally fair.

#### What have you learned about customer attitudes towards telematics-based insurance?

We've been very pleased with customer response. I find that consumers are very open to new technology – as long as it makes their lives better – and we've seen great reception to our offerings. People like the idea of being rewarded for their good skills and, of course, the fact that we're able to offer so much savings is a huge selling point.



### ROOT

***"As autonomous technology improves and our roads get safer, we will see insurance costs decline rapidly."***

***"When that happens, the insurance companies that survive will be the ones that understand autonomous technology, are nimble enough to adapt and are lean and efficient."***

#### **How do you see the role of insurance evolving with the potential adoption of partial- and fully-autonomous vehicles? What opportunities and challenges could this create for Root?**

Right now, the cost of insurance is still rising. While autonomous vehicle technology is improving, we haven't seen the effects of autonomous technology impacting industry-wide loss costs.

However, that's going to change. As autonomous technology improves and our roads get safer, we will see insurance costs decline rapidly. When that happens, the insurance companies that survive will be the ones that understand autonomous technology, are nimble enough to adapt and are lean and efficient.

Why do I say "lean"? Most industry competitors are burdened with large amounts of fixed cost overhead and are spending billions of dollars on marketing. Those costs make up anywhere from 15-30% of the premium, depending on the insurer. However, as losses push premiums lower, this percentage will skyrocket. The long and short of it is that you can afford to have a billion dollar marketing budget when you sell insurance for \$500 – but that makes a lot less sense if you are selling that insurance for \$100. I suspect we're going to see many major players begin to sink under their own weight.

#### **What is the long-term vision for the Company? What new products and services will you be offering in the coming years?**

In the near term, our goal is to be active in all 50 states by the end of 2019. We currently insure drivers in six states, with plans to expand to six additional states in the coming months. Further down the road, I'd like to offer multiple insurance products in addition to car insurance, continuing to revolutionize the industry with products that leverage technology to make insurance fairer, simpler and more affordable.



# Marc Weiser, RPM Ventures



**Marc Weiser**  
Managing Director



Marc Weiser is Managing Director of RPM Ventures, a Midwest and Silicon Valley-based seed and early-stage venture firm focused on B2B & B2B2C internet and mobile startups, with \$200 million in assets under management. For RPM, Marc specializes in investing in Automotive, Mobility, and Transportation startups.

***"We have tightened our investment focus over time, but a key component continues to be our deep relationships with large players in the Midwest, especially around the auto industry."***

### **What is the history of RPM Ventures? Please give us some background on the firm.**

RPM was founded in 2000 by Tony Grover and me with a small \$10 million fund. Both of us had spent years in Silicon Valley as entrepreneurs, raised venture capital, had exits and had family ties to Michigan. We both moved back to Michigan for our own personal reasons, and, after meeting each other, saw an opportunity to establish a firm with one of its areas to invest in companies focused on selling to the Midwest industrial base. This required spending considerable time in Silicon Valley, where the majority of our deals originate. Today, I split my time between Michigan and Silicon Valley.

We have tightened our investment focus over time, but a key component continues to be our deep relationships with large players in the Midwest, especially around the auto industry. At the same time, we have broadened our presence in Silicon Valley by establishing our reputation with entrepreneurs and other VCs in our areas of expertise. In 2015 we added a 3<sup>rd</sup> partner, Adam Boyden, who lives in the Bay Area. He is a successful serial entrepreneur that RPM has backed several times over the past 15 years.

We now have \$200 million under management across 3 funds, with operations in both Michigan and Silicon Valley.



***"If it doesn't force a change in the way the whole market must do business, then it may be a good company, but not a disruptive one."***

### What types of investments does RPM Ventures make? What specific areas is the firm focused on?

We are believers in playing to your strengths, so our investment focus has been tightened because of past successes like Openlane (marketplace for wholesale vehicles), Xtime (CRM for auto dealer services), Deepfield (real-time network performance and security analytics), Automatic (connected car platform) and SoFi (innovative finance and wealth management). From these experiences, we have become very thesis driven, and primarily make investments in and around these sectors. Today that means internet and mobile B2B enterprise solutions, marketplaces (with an emphasis on insurance and FinTech) and have a specialty in automotive and transportation: autonomous, connected car and mobility. I spend 100% of my time in this latter space.

We primarily lead Series A rounds, but we have led several larger seed rounds, and participate in the occasional Series B.

### What qualities of a disruptive company are you most interested in when making an investment?

Like everyone we prioritize the team first. However, we are fond of saying we want entrepreneurs who will "run up the beach at a machine gun nest, while biting the heads off chickens!" For us, investing in different teams goes deeper than just a disciplined entrepreneur with a bit of insanity; we require that we build a deep relationship with the team prior to investing. You are unlikely to see us invest in a team that shows up and says they expect term sheets in a few weeks.

Beyond that, there are a few basic things we look for: big markets, of course, but it must be one that is obviously very broken. There are plenty of markets with problems, yet they are still efficient which leads to a low chance of disruption. We look for products that fundamentally shift the cost or revenue curves of the whole market. If it doesn't force a change in the way the whole market must do business, then it may be a good company, but not a disruptive one.

Finally, we joke that we like companies with "no rational chance of success." If all of the industry insiders or major players think it can't be done or won't work, then you know you are probably on to something really big!





***“Mobile and cloud is allowing for very fast and low-cost ways to disrupt legacy systems.***

***More importantly, these technologies fundamentally change the way consumers use transportation.”***

### **How was the automotive IT space changed over the past ten years? What do you think will drive change in the future?**

There are two basic ways for software and technology investors to look at the automotive and transportation industries: 1) Companies replacing legacy systems in the current market. 2) Technologies that will fundamentally disrupt the movement of goods and people.

With legacy systems, these tend to be models where the pain and budgets to solve problems are very well defined and easy to diligence. This is where investing in the space was 10 years ago: better software, and clever ways of displacing incumbents who still produced green screen technology seemed rational. Getting customers to switch (mostly OEMs and dealerships) was challenging, but patience and time could solve that. Anything that was attempting to be truly disruptive, at that time, would likely take billions of dollars, especially since consumer behavior wasn't changing.

We see great parallels in automotive IT with the internet wave of the 90s vs the internet of the 2000s. Costs to build web based systems shrunk by orders of magnitude because of computing power, connection speeds and the rise of the mobile and the cloud. Today we are seeing that same effect in the auto and transportation sector. Mobile and cloud is allowing for very fast and low-cost ways to disrupt legacy systems. More importantly, these technologies fundamentally change the way consumers use transportation. While manufacturing still has inherently high fixed costs, the way we ultimately use transportation is becoming altered permanent as the costs of delivering those services continue to drop precipitously.

Ultimately, it will be the end consumer and how quickly they are willing change their behavior that forces continued change. It won't be immediate, but consumers are beginning to imagine life without car ownership with transportation models where you have multiple modes of getting from point A to point B without friction or wait.

### **What is the firm's investment thesis around automotive IT? What are some of the investments RPM has made recently within the space? Are there any specific investment opportunities you regret passing on?**

For over a decade, we have spent the vast majority of our time investing in companies replacing legacy players. It was a game of patience, not capital. More money wouldn't make things go faster. Anyone that showed up that thought they'd displace incumbents were unrealistic about the capital required.

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***"We believe there is a tremendous amount of tacit knowledge that still needs to be gained, so we are making investments in companies that will completely disrupt incumbents as well as startups that provide platforms to allow the major existing players to evolve as seismic shifts in the industry occur."***

**What is the firm's investment thesis around automotive IT? What are some of the investments RPM has made recently within the space? Are there any specific investment opportunities you regret passing on?**  
(continued from previous page)

I was on the board of a successful software company selling to OEMs and car dealerships with Steve Jurvetson of DFJ. He suggested we look at this new car company he was investing in, Tesla. We assumed it would take billions to make it work, and as a result we refused to even take a look. It did take billions to make it work, but I wish I could take that one back!

However, with the emergence of connected car, and our investment in Automatic in 2013, our beliefs began to change. New entrants could fundamentally transform the way the entire value chain worked from both the top down and the bottom up, and wouldn't need billions to do so. Today we spend the vast majority of our time on mobility and autonomy, but there are still some very broken things about the industry today and we remain vigilant in looking for entrepreneurs that have products that can steal large amounts of existing revenue streams quickly from legacy players.

In mobility and autonomy, we are looking at 3 basic areas: 1) Industries that will forever be changed by mobility and autonomy, (e.g. insurance). 2) Companies that will fill gaps in fundamental technology or services needed to reach level 5 autonomy. 3) Companies that enable the change in consumer behavior that comes from mobility. We believe there is a tremendous amount of tacit knowledge that still needs to be gained, so we are making investments in companies that will completely disrupt incumbents as well as startups that provide platforms to allow the major existing players to evolve as seismic shifts in the industry occur.

Some examples of these are:

- **DRIAV.** Insurance for autonomous vehicles. While they haven't revealed their products yet, the company has announced that they will be tackling the problem of how auto insurance will evolve as the industry launches vehicles with ADAS, and ultimately level 4 autonomy. These cars will still have a human at the wheel, but also have AI controlling the vehicle at times, creating a complex chain of liability.
- **PolySync.** A fault tolerant operating platform for autonomous systems, still partially in stealth. As both traditional and non-traditional automakers begin to think about scaling their ADAS and autonomous functionality, what is clear is that the safety of these systems is paramount. You can't have a spinning pinwheel or blue screen of death in a vehicle with mission critical systems. PolySync provides a platform for their customers to build autonomous systems on with real-time fault tolerance, so critical systems don't go down.
- **Deliv.** Provides crowdsourced drivers for same day delivery of goods for major retailers like Macy's, PetSmart and Best Buy, while also enabling new commerce entrants like Plated, Bloom That, and Google Express. They are integrated into the e-commerce stream; Deliv does not have the cost of consumer acquisition and creates a low friction experience for end consumers. They are a key part of the defense for many major retailers against the likes of Amazon and Wal-Mart. UPS invested as a strategic in a later round, as they saw themselves at risk of being disrupted by new models for commerce.



***"Importantly, all of the ancillary parts of the value chain are under threat, and many of the players just don't have the tools or assets to react. Rental cars, short haul airlines, roadside motels, accident attorneys, etc... all are ripe to disappear."***

**How do you see the increase in overall connectivity (IoT / connected cars) and changes in the nature of car ownership and usage (on-demand, ride sharing, autonomous vehicles, etc.) impacting the auto industry? Who ultimately wins / loses?**

I think we've reached a point where the future models are generally obvious. Mobile devices will be used in a Lyft/Uber-like fashion to hail a vehicle that drives itself. Similar vehicles will be used for long haul trucking, and ultimately last mile delivery. Urban areas will go first, followed partially by suburban areas. Rural areas will have unique needs that require more complex solutions sets. The end result is fewer cars required, reducing the need for manufacturing.

Oddly enough, it is connectivity that may be the most overlooked issue. Putting a host of sensors on a car still will not allow it to drive itself in every situation. For example, the laws of physics won't allow laser, radar or vision to peer around corners that are blocked by buildings, pedestrians or trees. Connectivity to the environment, other cars and people will be required for us to get all the way to the ultimate vision.

That problem, if solved by a small number of companies, will put those players in the driver's seat to dominate the market. Otherwise, we'll wait for regulators and it will create a more level playing field allowing for more winners. In that environment, the incumbents that can figure out how to create a win-win for their suppliers and themselves, while being flexible enough to respond to changing consumer needs, should do well. Those that adhere to the behaviors of the past (e.g. suppliers are bashed on margin; consumers are viewed as homogenized data, not individuals, etc.) will die without a market to even sell their manufacturing assets to.

**Are there threats to the industry that incumbents are not yet focused on today?**

**Absolutely!** There is as great a chance that we see flying passenger drones as we do self-driving cars with no steering wheel. Flying drones can be designed from the get go to send out real-time data to each other, and there is no complex infrastructure to connect too. The infrastructure costs are a fraction of the costs to get to full autonomy.

Importantly, all of the ancillary parts of the value chain are under threat, and many of the players just don't have the tools or assets to react. Rental cars, short haul airlines, roadside motels, accident attorneys, etc... all are ripe to disappear. Major players are trying to sort it out. Smaller players that should be more nimble seem to be sitting things out, many of which are simply waiting to die.



# Brad Weisberg, Screenshot



**Brad Weisberg**  
Founder & CEO



Brad is the Founder & CEO of Screenshot, a leading virtual claims platform for the auto insurance industry. Before founding Screenshot (then known as BodyShopBids), Brad was Senior Vice President of Sales at Where I've Been, a social networking application that was acquired by TripAdvisor. Brad also founded TheJMom, a matchmaking network business that was acquired in 2013.

***"The vision for Screenshot is to help ease the burden of an auto claim on all parties, first and foremost for the customer, but also to help the shops have more streamlined operations and ultimately to help the insurance carrier have more clarity around the entire process."***

### What was the vision behind founding Screenshot?

Screenshot was originally founded as BodyShopBids, and was focused on using technology to help consumers paying out of pocket to have a better experience with body shops and the repair process in general. In 2012, the body shops actually helped us connect with insurance carriers so we could help streamline the claims process. The vision for Screenshot is to help ease the burden of an auto claim on all parties, first and foremost for the customer, but also to help the shops have more streamlined operations and ultimately to help the insurance carrier have more clarity around the entire process. We simply want to create technology at a pace that insurance has never seen before, and help with the change management to keep up with the evolving demands of customers.

### Can you walk us through the traditional claims process vs. filing a claim using Screenshot? How does Screenshot leverage technology to make this process more efficient?

Screenshot is involved in simplifying the auto repair estimate portion of the claim. A customer can file a claim in any way they chose with their carrier, but each claim requires a compliant estimate of cost to repairs the damage. Screenshot uses a whole suite of advanced technology to streamline the estimate and repair process. We have developed a CRM system that helps customer support representatives capture photos quickly from the customer, a shop or a salvage facility. We then have an entire infrastructure we have developed to manage the estimate process real-time, ensuring the highest level of accuracy possible. We also provide technology to body shops that helps simplify the process to obtain approval of supplemental damages. By having every piece of technology (carrier, customer, shop) tied together, the entire process is optimized. We find that our staff is 3-5x more efficient than the traditional estimating methods.



***"A great experience and flawlessly executed virtual claim provides the best possible consumer experience."***

**What are the benefits you bring to carriers, repair facilities and consumers? Is there one of these groups that benefits the most from your solution?**

All of the parties benefit together from our solution. The technology Snapshot creates is truly seamless between all parties. However, consumers likely appreciate the benefits more than carriers or shops because they are only exposed to this event once every 7-10 years. A great experience and flawlessly executed virtual claim provides the best possible consumer experience.

**Do you see automotive industry trends like increased car connectivity, ride sharing, semi-autonomous vehicles and eventually fully-autonomous vehicles impacting Snapshot? What opportunities and challenges could these trends create for the Company?**

Semi- and fully-autonomous vehicles actually create a large growth opportunity for Snapshot. As the vehicles on the road become safer, and the frequency of accidents decreases, it will make less sense for carriers to centralize their own estimating staff, and the outsourcing trend towards Snapshot will accelerate. We have found that ride sharing has created a whole new opportunity for companies like Snapshot. Accidents are often a function of miles driven, and ride sharing companies drive a lot of miles. It is still too early to tell the full impact of the transition to ride sharing's impact on claims, but I see this more as an issue for carriers to face as they price risk, as companies like Snapshot will for sure be able to handle the claims as they arise in the future.

**What are the biggest challenges you face in running a dynamic, fast-growing business?**

The challenges have evolved over the years, and continue to evolve as the organization grows. In 2011 and 2012 our challenge was determining strategy, in 2013 it was building a customer base and reputation and in 2015 it became scaling the workforce. Right now I am spending most of my time building out the executive team and making sure the strategy aligns with our culture and the vision of the company. Delegating can be difficult and it takes work, especially as a passionate entrepreneur, to hand over the keys to new leaders and watch them run the critical operations of the company.

**What is the long-term vision for the Company? What new features and services will you be offering in the coming years?**

We continue to evolve the organization to keep up with new carrier requests and the evolving needs of the end consumer. For now the industry is just starting to embrace virtual estimating, so I imagine that the next few years will continue to focus on growth, scaling and tweaking our technology to optimize the consumer experience.





# Jim Landy, SpringboardAuto





**Jim Landy**  
Founder & CEO



Jim has over 20 years of experience in leading successful auto finance companies. Prior to founding SpringboardAuto in 2015, he founded and served as President and CEO of CarFinance Capital, an online consumer direct auto financing company. Jim previously founded and was CEO of Triad Financial Corporation, a consumer vehicle loan and lease origination company that was sold to Ford Motor Credit and later a consortium of private equity investors. While at Triad Financial, he founded and was CEO at Roadloans.com, one of the first online auto finance companies. Jim also served as President / CEO of Fireside Bank, a California state chartered bank.

*"...we built a consumer-direct auto-finance platform based on customer feedback and the demand for a seamless, digital experience."*

### What was the vision behind founding SpringboardAuto?

To transform car buying and financing for customers into a modern, seamless, easy-to-use fully-online experience.

### What is the fundamental problem that SpringboardAuto is trying to solve in the vehicle purchasing process?

We help companies deliver a modern car buying and lending experience to their customer base. By leveraging our unique expertise, we built a consumer-direct auto finance platform based on customer feedback and the demand for a seamless, digital experience. Acting as our innovation hub, our customer direct operation allows us to continually enhance our technology solutions to align with current market trends. Because the customer is at the core of what we do, the companies we work with can feel confident knowing that we deliver a best-in-class and highly rated customer experience.

### What products and services do you currently offer?

We like to say we create opportunities!

- **B2B:** We offer 3 core solutions to credit unions and banks for both prime and nonprime customers including:
  - **Digital Lending-as-a-Service** – Our turn-key, white label, end-to-end financing technology complete with operations fulfillment, risk management and optional marketing support delivers a seamless customer experience to consumers.
  - **Full Spectrum Lending** – Extends a prime lender's product to include customers with nonprime credit with our decision-as-a-service program.
  - **Decline Referral Program** – Enhance the effectiveness of your direct marketing campaigns by monetizing your decline applicant traffic.

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*"With consumers looking to complete more of the transaction online, we believe the market opportunity is growing to 50% of transactions (\$500 billion) in the next few years."*

### What products and services do you currently offer? (continued from previous page)

- B2C: Online auto financing offering transparent loan terms through a self-service loan configurator tool and complete with transaction management services.
  - **Purchases from a private owner** – Confidence in knowing all of the pieces of your transaction will be completed accurately and securely.
  - **Purchases from a dealership** – Simplicity in completing the financing and sales process online.
  - **Refinancing your existing vehicle** – Speed in lowering your monthly payment or interest on your current loan.

### How large is the market opportunity for SpringboardAuto?

Auto lending is a significant asset class for credit unions and banks. With consumers looking to complete more of the transaction online, we believe the market opportunity is growing to 50% of transactions (\$500 billion) in the next few years.

### How is SpringboardAuto leveraging technology to create a differentiated solution?

We designed and engineered our platform with a modern technical architecture that is built for integration with partners, data sources, and vendors. The platform is configured for multi-tenancy to power credit unions and banks with turn-key, white label solutions. Our platform is unique because we have a consumer direct operation that is core to our business and acts as our innovation hub. This allows us to be a customer of our own platform. We continually evolve this platform based on direct customer feedback and market demand. This, in turn, allows our credit union and bank customers to stay current with market and customer shifts.

### Can you describe for us your partnership with CUNA? How has it helped the business grow?

CUNA Mutual is a strategic investor. We are working closely together to deliver impacting solutions to the credit union industry. Credit unions are member-focused and our platform provides the best user experience available.



*"Our roadmap includes many areas of automation throughout the car buying, selling and financing experience to make it truly seamless."*

**How do you see the nature of car ownership and usage changing in the future (on-demand transportation, ride-sharing, autonomous vehicles, etc.) and what opportunities and challenges could this create for SpringboardAuto?**

We continuously research the market, evaluate customer demand and gather data supporting trends. We are looking forward to the opportunity enabling our financial institution partners with innovative solutions as the market evolves.

**What are the biggest day-to-day challenges you face in running a dynamic, fast-growing business?**

Like most technology companies, prioritization and focus are the keys to success.

**What's the long term vision for the Company? What new products and services will you be offering in the coming years?**

Our long term vision is to be the dominant provider of digital lending experiences. To do this, we will continue to enhance our offering based on customer and market demand while simplifying the way in which partners can interact with the various components of our technology through APIs. Our roadmap includes many areas of automation throughout the car buying, selling and financing experience to make it truly seamless.



# Aldo Monteforte, The Floow



## Aldo Monteforte, The Floow



**Aldo Monteforte**  
Founder & CEO



**THE FLOOW**

Aldo Monteforte is the Founder & CEO of The Floow, a leading provider of telematics data management for the auto insurance and automotive industries. Prior to founding The Floow in 2012, Aldo invested in and helped build several high growth telematics companies, including COBRA and Digital Persona. Aldo was previously a Director in the Investment Banking Division at Nomura.

Aldo is a graduate of Stanford University, Graduate School of Business, where he earned an MSc in Management. He is a member of the Sloan Alumni Advisory Board of Stanford GSB and graduated *cum laude* from the University of Pavia's "Economia e Commercio" program in Italy.

***"The company was founded with the purpose of reducing the number of road accidents and deaths on our roads..."***

***"Since The Floow's inception in 2012, we have been harnessing sensors, software and data to enable the insurance and automotive industries to address these issues."***

### What was the vision behind founding The Floow?

Our vision centers on a future where individual mobility is safer and smarter for everyone. The company was founded with the purpose of reducing the number of road accidents and deaths on our roads, which are now the leading cause of deaths of young people. In addition to the terrible human costs, accidents create expensive inefficiencies. Since The Floow's inception in 2012, we have been harnessing sensors, software and data to enable the insurance and automotive industries to address these issues. Today we have a growing team of more than 100 passionate professionals and have accumulated billions of data miles of experience. We've used this data to develop our scores against millions of claims and federated one of the largest portfolios of insurance clients globally.

### How is The Floow differentiated from other players in the telematics space?

We count the following as our key differentiators:

- 1) **Device Neutrality:** The Floow has built a device-neutral UBI platform, seamlessly supporting smartphones as sensors, aftermarket devices (such as OBDs and professionally fitted "black boxes") and original equipment. This flexible and open platform guarantees the generation of consistent insurance-grade scores and is currently in production with leading insurance carriers in the U.S., UK, Europe and South Africa. Device neutrality enables our insurance partners to support diverse customer segments with telematics score and services, regardless of data source.

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***"The Scoring IP model we have in place with our insurance partners is designed with the express goal of enabling our insurance partners to build their own unique scoring IP on the back of The Floow's algorithms."***

***"In all cases we support our partners by taking responsibility for data collection, processing and transformation into insurance-grade scores, accident analytics and user-facing services."***

### How is The Floow differentiated from other players in the telematics space? (continued from previous page)

- 2) **Unique Score IP Creation for Insurers:** The Floow offers a world class suite of behavioral and contextual scores, demonstrably predictive of claim propensity, built by underwriters for underwriters and trained against millions of claims data. The Scoring IP model we have in place with our insurance partners is designed with the express goal of enabling our insurance partners to build their own unique scoring IP on the back of The Floow's algorithms.
- 3) **A Focus on Education:** The Floow has developed several advanced educational modules and coaching schemes that build upon our scoring technology, with positive and proven impact on safety. Educational content is delivered via a range of digital media (app, web portals and, if possible, onboard infotainment systems). These modules are designed on the basis of conditioning techniques which result in reduced accident frequency and severity as well as an excellent customer experience. We work with each insurer to identify the risk presented by their portfolio of drivers and to target different levels of risk with appropriate educational interventions. For example, we have enhanced our young driver telematics solution with a unique coaching program which is proven to deliver a material behavioral improvement, saving lives by the avoidance of potentially fatal crashes.
- 4) **Leading Smartphone-as-sensor technology:** The Floow offers one of the world's best smartphone-as-a-sensor solutions as independently evidenced by the 2016 Award of Best Smartphone Telematics Service Provider in Europe, by telematics research specialist, Ptolemus.

### Who are some of your key customers today and how are they using The Floow's telematics solutions?

The Floow has partnerships with some of the largest insurance companies, fleet providers and auto manufacturers in the world, such as Direct Line Group, AIG, AAA, Liberty Mutual, HDI Talanx, Europcar and Renault-Nissan. In all cases we support our partners by taking responsibility for data collection, processing and transformation into insurance-grade scores, accident analytics and user-facing services.

A great example of our work is with Direct Line Group's successful award-winning Shotgun telematics proposition. With Shotgun, we monitor journeys and provide drivers with an app which delivers continuous in-the-moment scoring. Customers have the opportunity to gain rewards from retailers and popular brands in exchange for safer driving. These targeted rewards are proven to double the amount by which a driver improves. We also deliver our coaching program, FloowCoach, to Shotgun customers and our data shows that for every 100 drivers participating in the program, 16 accidents are avoided.



***"Our insurance clients can achieve measurable bottom line ROI in terms of risk segmentation, behavior changes and improved loss reduction, so telematics represents a powerful tool for insurers."***

### What does the experience of your clients show about the return on investment that insurers realize from telematics offerings?

From our experience to date with both device and smartphone based solutions, our partners are seeing 25% improved claims benefit across the book. This is due to a combination of selection and Hawthorne effects, which means that the best drivers are those happy to be watched. As long as people remember that they are being monitored, they are less likely to show poor behavior.

Also, our scores are highly predictive of claim propensity. Drivers who score poorly are likely to claim every couple of years whereas those scoring high may only claim once in every 20 years. This improved risk scoring enables our insurance clients to cherry-pick the best risks at the right price and to extend their underwriting footprint into new areas.

Aside from these more standard benefits we have also seen significant behavioral improvements through conditioning techniques rooted in social science. With DLG's Shotgun, we have proved that accidents can be avoided with a mix of education, insight and incentives.

Once these benefits are added to improved retention and reduced fraud, the final result can be up to 3x the profitability per customer in telematics versus traditional policy types. Our insurance clients can achieve measurable bottom line ROI in terms of risk segmentation, behavior changes and improved loss reduction, so telematics represents a powerful tool for insurers.

### As a firm with clients in multiple regions around the world, what differences do you observe in the patterns of telematics adoption?

UBI is spread unevenly across the world. In the United States, certain industry analysts state approximately 10% of all U.S. based auto insurance policies are now on telematics. Considering penetration was estimated around 6% less than a year ago, you can see solid growth.

If we move to Europe, in Italy (the pioneering country for box-based telematics, with risk selection and fraud prevention as main considerations) the market leader (Unipol) has 36% of its 10 million-strong portfolio on telematics. Market leaders in the UK and the rest of Europe are at a lower penetration, in the 1-5% range.

In China, where we are involved in a number of pilots, the regulatory framework is not ready yet for fully fledged UBI, though we see great potential.

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***"Telematics is still a 'push' proposition where insurance companies need to entice customers with discounts. The challenge and the opportunity is to transform this 'push' into a 'pull' proposition."***

### **As a firm with clients in multiple regions around the world, what differences do you observe in the patterns of telematics adoption?** *(continued from previous page)*

In general, we do not believe UBI will experience a "big bang" dynamic. Instead, it will expand gradually as insurers iterate and build experience. Telematics is still a "push" proposition where insurance companies need to entice customers with discounts. The challenge and the opportunity is to transform this "push" into a "pull" proposition. This calls for a range of rich and diverse services that engage users more, and leverage the incredibly granular understanding of individual mobility afforded by telematics.

We're focusing on helping to develop the market on two fronts:

- 1) Supporting our clients with more sophisticated and digitally savvy propositions for their end users, including differentiators like rewards and coaching
- 2) Promoting smartphone-as-a-sensor service offerings that can be up and running affordably and quickly in any country to minimize cost of entry

### **What are you observing about differences in adoption of telematics solutions in personal lines vs. commercial insurance?**

Commercial insurance is starting to catch up and embrace UBI, though it still lags behind personal lines. This is a welcome development because a number of fundamentals suggest UBI is a great fit for commercial lines.

Penetration in the personal lines space depends on the insurers offering a suitable product and drivers being prepared to be monitored and realizing its benefits, particularly from a cost perspective. This is currently the case in the higher premium space (e.g. young drivers), but we're seeing an expansion through the portfolio, with some of our clients now seeing up to 40% of new business in their target segments buying a telematics policy.

In the commercial space the dynamics are different since fleet managers can demand that their drivers are monitored. With recent developments, such as the new HGV driver monitoring regulation in the U.S., we are seeing more traction in fleets. For a fleet operator benefits can be even bigger than for personal lines, because they see additional benefits such as reduced fuel and servicing costs.



***"The Floow will remain passionately focused on one singular objective: to produce the best predictive analytics for insurers worldwide and enrich policyholders' experience to the point of mass market adoption."***

**Do you foresee telematics ever becoming an embedded aspect of the majority of auto insurance policies, and what will it take to achieve that?**

We believe telematics will remain an option available to policyholders, though a popular one, which could account for 30-50% of the market, depending on individual geographies. Smartphone based UBI will grow in popularity, alongside solutions enabled by on-board equipment installed by OEMs, as new models move towards 100% connectivity by 2020.

**What's the long-term vision for the Company? What new products and services will you be offering in the coming years?**

We look forward to continuing to equip the global insurance industry with indispensable technology that protects human life and promotes all forms of smart mobility. The Floow will remain passionately focused on one singular objective: to produce the best predictive analytics for insurers worldwide and enrich policyholders' experience to the point of mass market adoption. In the process, we intend to reinforce The Floow as the best workplace for people who are hungry to harness sensors, software and data in the quest to make mobility safer and smarter.

Our roadmap for the next five years is hugely exciting, with opportunities arising from pervasive connectivity of new vehicles, proliferation of sensors, increasing autonomy and changes in the vehicle ownership model. Our product roadmap is designed to enable our partners to take advantage of these transformational trends. Some of our key developments will include:

- 1) Pricing from telematics data: Enabling insurance partners to eliminate the need for traditional rating proxies by generating accurate premiums directly and exclusively from behavioral data collected from mobility sensors and onboard devices.
- 2) Rating of autonomous vehicles: The Floow is engaged in Research and Development programs to offer insurance partners unique access to a new generation of risk models designed to predict claim propensity of Level 3 (and above) vehicles.
- 3) A suite of consumer propositions to help insurers evolve into smart mobility providers.



# **Shawn Smith and Todd Hodnett, VaaS (Digital Recognition Network / Vigilant Solutions)**



**Shawn Smith**  
Founder & President



Shawn has over 20 years of experience in the development of software systems and business management. Prior to founding Vigilant Solutions, Shawn was a key developer of probabilistic risk assessment models used by the U.S. Navy; developed analysis and decision systems for optimization of semiconductor manufacturing lines within Texas Instruments and Motorola; and founded Global Knowledge Systems, which was later acquired by Applied Materials, where he served as Managing Director.

**Todd Hodnett**  
Executive Chairman



Todd Hodnett is the founder and current Executive Chairman of DRN. Prior to DRN, Todd was the President and CEO of Recovery Database Network, which he founded after leaving Rock Island Live Entertainment, where he served as the Corporate Development Officer and General Counsel. Upon graduating with his Bachelor's degree from Texas Christian University, Todd was commissioned as a Second Lieutenant in the U.S. Army Reserves where he served until he was honorably discharged as a Captain in 2002. He attended Oklahoma City University School of Law, receiving his Juris Doctor degree in 1992.

***"DRN provides vehicle location data to manage risk, prevent fraud and improve portfolio results for financial services, automotive lending and insurance firms."***

### **Please describe VaaS and its subsidiaries, Digital Recognition Network (DRN) and Vigilant Solutions to us.**

VaaS International Holdings (Video Analysis as Service) is the preeminent provider of license plate recognition ("LPR") and facial recognition products and data solutions. Structured as a holding company with two wholly-owned subsidiaries, each with a distinct focus on VaaS' two primary end markets: Commercial Clients and Public Safety Clients.

DRN provides vehicle location data to manage risk, prevent fraud and improve portfolio results for financial services, automotive lending and insurance firms.

Vigilant Solutions uses a combination of facial recognition, vehicle location data and criminal records to protect officers, families and communities by providing data and software solutions to federal, state and local law enforcement around the globe.

### **How large are the commercial and public sector markets for license plate recognition?**

VaaS estimates that the public sector market for LPR is over \$500 million globally per annum. VaaS created many of the commercial applications for LPR and while we are not sure of the market size, we are sure that it is larger than the public sector market opportunity.



***“VaaS has invented methods to use historical databases of LPR data to both categorize data and provide for probabilities metrics on locating the current garaging location of a vehicle.”***

### How has VaaS built out its network of license plate data and readers?

Both Vigilant and DRN had visions for leveraging hosting as a platform for data sharing.

Vigilant, from the start, offered hosted data management together with proprietary (now patented) analytics. Though unorthodox at the time, LPR data hosting has become very popular. These days Vigilant enables 1000s of U.S. law enforcement agency sharing relationships as they have collectively scanned and shared over 3 billion license plate records. In addition to the data originated and shared by law enforcement, Vigilant and DRN successfully enabled a commercial data sharing agreement for applicable law enforcement agencies that has added another 5 billion license plate data records to the benefit of public safety.

DRN started with a hosted approach oriented to the auto recovery industry. When DRN started, having each repossession company host its own data server was not a practical option. Accordingly, DRN teamed with Vigilant and the Recovery Database Network (RDN) to provide an LPR capability (via Vigilant) coupled with a mechanism to download REPO related hotlists via RDN. Use of LPR technology was a great success to the benefit of all within the recovery market. Auto finance companies have enjoyed over \$3 billion worth of LPR enabled recoveries while REPO companies working for auto lenders have enjoyed higher revenue and economies of scale. This virtuous cycle has had the effect of over 5 billion license plate records being scanned by REPO companies. This data is then shared to state, local and federal law enforcement which has directly led to solving 1000s of high profile crimes and saving countless lives.

### Please discuss how you supplement raw data with analytics to provide full solution sets.

Raw LPR data takes time to interpret. VaaS has invented methods to use historical databases of LPR data to both categorize data and provide for probabilities metrics on locating the current garaging location of a vehicle. VaaS algorithms allow for LPR scans to be categorized as workplace, residential, or public parking. Further, based on frequency and last sighting locations, algorithms exist to create relative scoring to provide estimates of where a vehicle is currently being garaged.

Additional analytics exist to discern the make and model of vehicles sighted. In addition, geographic zones can be defined to examine if a common vehicle is seen in proximity of a number of crime locations. These analytics used individually and together are essential to assisting law enforcement in criminal investigations and by commercial entities in scoring addresses or otherwise determining the location of a vehicle.



***"The most common use case for LPR in auto finance is to create a 'live' match to a vehicle that is currently being sought for repossession by the lien holder."***

***"The insurance market provides a large, new market for LPR data. Garaging fraud is a \$2 billion to \$4 billion annual loss for carriers and LPR can efficiently determine if the policy address is different from the cars actual garaging location."***

### What are the key use cases for license plate recognition within financial services?

The most common use case for LPR in auto finance is to create a "live" match to a vehicle that is currently being sought for repossession by the lien holder. Further, historical sightings of vehicles can allow recovery agents to be more efficient in recovering assets for lenders; it is very common for a lender to not have access to the current garage location of a vehicle sought for repossession. Finally, LPR sightings can be used to validate the address of record that lenders have related to vehicles being sought for recovery; this approach has been patented by VaaS. Knowing if a contemplated address for a vehicle is correct allows for a faster and lower cost of recovery than before the advent of LPR databases.

### Can you provide some examples of how your data has aided high profile criminal cases?

LPR data has been used to assist most high profile criminal cases since 2010 including:

- The Times Square bomber (identifying terrorist)
- The Boston bombing (identifying associates)
- The San Bernardino shooting incident (identifying associates)
- Various sniper murder incidents (ID and apprehend shooters)
- The Pulse nightclub bombing (identifying associates)
- The Dallas downtown shooting incident (identifying associates)
- Countless others...many of which are not known to the public

### What new commercial opportunities are you seeing for license plate recognition data?

The insurance market provides a large, new market for LPR data. Garaging fraud is a \$2 billion to \$4 billion annual loss for carriers and LPR can efficiently determine if the policy address is different from the cars actual garaging location. Further, LPR data can be used effectively to determine if clients purchased personal policies and are really using the vehicles insured for commercial purposes. Finally, LPR data can be applied to underwriting and point of sale algorithms to help properly price carrier loss risk by validating the veracity of address information provided by the potential insured or detecting that fraudulent address information was provided by the potential insured.

Another new and exciting market is the use of LPR for marketing. For brick and mortar locations, LPR can be used to determine marketing demographics related to the roadway traffic that represents the available market for such retailers. Applications such as card-free loyalty programs at drive-throughs and email marketing lists are but some of the value-adds in this new market.



***“The availability of a database used for public safety of over 8 billion LPR data records is an insurmountable advantage for VaaS.”***

### What are the obstacles for anyone else looking to compete with you?

There are many, key among them are:

- One cannot invent a time machine and generate historical data. The availability of a database used for public safety of over 8 billion LPR data records is an insurmountable advantage for VaaS.
- Without experience and availability of a large database, one cannot easily develop algorithms to digest and provide insights based on masses of LPR data ingestion. VaaS has already done this and patented a number of key approaches to make LPR data valuable.
- The creation of user contributory databases and data sharing provides a defensible position for VaaS. When deciding what data management platform to adapt as LPR purchase decisions are being evaluated, VaaS provides a much higher platform value than other industry options.
- With regards to international markets, sovereign nations are usually looking to ensure that the solution they adapt can be scaled to handle the entire nation’s data and end-user analytical needs. Only VaaS has legitimate experience in providing an enterprise “whole nation” scale of LPR technology offering to sovereign nations. Further, all of the who’s who clients within the United States are using VaaS products, making VaaS offerings the safe and best choice for risk adverse foreign clients.

### What other types of image-based intelligence are the Company exploring?

- Face recognition via body camera devices, video cameras and smart phones
- Ballistics shell casing analysis for creating common gun links between crime scenes
- General search indexes applied to historical video archives in order to create search vectors to allow investigators to more quickly find leads within masses of historical video archives





# Jonathan Matus, Zendrive



**Jonathan Matus**  
Co-Founder & CEO



**Zendrive**

Jonathan is the co-founder and CEO of Zendrive, the world's largest and fastest growing driving analytics platform. Before founding Zendrive, Jonathan spent 6 years at Facebook and Google, where he focused on various mobile and machine-learning projects. Jonathan graduated from Harvard *cum laude* with an honors thesis on Artificial Intelligence.

***"We help deal with some of the most difficult aspects of road safety and costs – through reduction of crashes, tickets, maintenance and of course, insurance."***

### What was the vision behind founding Zendrive?

My co-founder Pankaj Risbood and I formed the basis for our telematics work at Zendrive during our time at Google, where we developed and launched the now widely adopted speech-recognition engine. While we loved working on this really difficult technical challenge, we were eager to work on a technology that has a direct positive social impact – in other words, working on tech that is directly used for more than, say, ad sales.

I grew up in Israel, where there is a military conflict of some sort every few of years. The stunning realization is that the number of wartime casualties is dwarfed by the number of people killed while driving. That really highlights how much of a problem road deaths have become – and indeed for individuals between the ages of 15-24, the #1 cause of death is road traffic crashes.

My co-founder Pankaj and I recognized that we could use the same approach we developed at Google and apply it to driving: like a speech-recognition engine improves accuracy with the addition of many millions of vocalizations, so could a rapidly growing dataset of driving-behavior data be used to create algorithms that get better and better at predicting and preventing crashes, with the ultimate goal of saving lives.

### Who are your key customers today? What are the fundamental problems you are trying to solve for them?

A variety of commercial fleets, auto insurers and mobile developers. All of them are using Zendrive to provide safer, superior and more profitable driving-related services. We help deal with some of the most difficult aspects of road safety and costs – through reduction of crashes, tickets, maintenance and of course, insurance.



***"We use smartphone sensors to gather driving data while most insurers and telematics providers focus on hardware plug-in devices installed in vehicles.***

***The end result is that we not only have a solution that is highly attuned to distracted phone use (which is so essential to accurately predict crashes in the age of the iPhone), but we were also able to build a large userbase faster than the industry has ever seen."***

### How is Zendrive different vs. other telematics players?

We are fundamentally different from most telematics players in many ways, such as in the type of talent we hire, the AI technology we built and the business strategies we use to grow. But if there's one aspect that's really easy to understand without revealing too much about our "secret sauce," it's our focus on mobile: we use smartphone sensors to gather driving data while most insurers and telematics providers focus on hardware plug-in devices installed in vehicles. The end result is that we not only have a solution that is highly attuned to distracted phone use (which is so essential to accurately predict crashes in the age of the iPhone), but we were also able to build a large userbase faster than the industry has ever seen. We hit the 15 billion miles-driven and analyzed milestone in about 7 months, and Progressive Insurance, one of the leaders in the field, hit the 15 billion mark after 18 years and who knows how many hundreds of millions of dollars invested. We are on track to more than double that figure by the end of 2017, and our accuracy and predictive power continue to grow proportionally.

### What key technologies are you leveraging in order to deliver a differentiated solution? What are the pros and cons of a smart-phone based telematics solution vs. OBD devices?

From the 50,000-foot view, you can simplify what we do by saying that our artificial intelligence algorithms are able to take all the data we are gathering and predict risk of a crash. We are using several AI techniques that we've optimized and expanded since our time at Google and Facebook. These are highly capable of identifying patterns in unstructured or very "noisy" datasets. One interesting aspect of the architecture is that the more information we process and the bigger that database gets, the more accurate and precise we can get at predicting the likelihood that a car collision will occur, or where drivers known for risky behavior are more likely to engage in fast braking, hard acceleration, distracted driving or other unsafe habits.

In addition to the various AI-related capabilities, there are some more basic things that differentiate our approach from OBD-based solutions:

- Zendrive's smartphone-based tech can directly and accurately assess distracting phone use. As a matter of fact, we recently conducted the largest ever study on distracted driving.<sup>(1)</sup> OBD is completely blind to this type of risk. Since ~20% of crashes result from smartphone distraction, this is a big blind spot.
- Zendrive's smartphone-based tech can never "take over your car," whereas OBD can be used by hackers to crash cars mid-trip.<sup>(2)</sup>
- Zendrive's technology can be embedded in any existing mobile app and can run on any Android or iOS smartphone around the globe. OBD devices are not compatible with every car on the road.
- OBD (and any hardware solution for that matter) have a financial and operational cost related to their deployment. Getting an app on a smartphone is easy, and can be much faster and more cost effective.



***"Zendrive is delivering new data and new insights into problems, such as phone use by drivers, that we haven't been able to effectively measure before."***

**Talk to us about the value of the proprietary data that you collect and how this can be leveraged.**

I mentioned some of its value before, but I can go deeper. We recently did a three-month study that looked closely at the phenomenon of distracted driving. It found out that among 3 million anonymous drivers who took 570 million trips, the motorists used their mobile phones on 88 of every 100 trips. Traffic deaths are preventable. We know what behaviors contribute to traffic deaths, so we can develop strategies that reduce and eventually eliminate them. Zendrive is delivering new data and new insights into problems, such as phone use by drivers, that we haven't been able to effectively measure before. And we can connect with communities, local decision makers, safety experts and driving coaches to use our data to save lives. We're able to use the very mobile technology that is often a traffic hazard for something that can help save lives.

**How do you see the nature of car ownership and usage changing in the future (on-demand transportation, ride-sharing, autonomous vehicles, etc.) and what opportunities and challenges could this create for Zendrive?**

Generally speaking, consumers in urban environments are shifting away from personal car ownership and onto new models of mobility. Owning a car in a city means the headache of spending lots of time and money on parking and going to gas stations, dealing with insurance, repairs and rush-hour stress. The availability of ridesharing, car sharing and on-demand services makes car ownership less of a necessity for young professionals.

In addition to working with insurers, Zendrive built an expertise and a fast-growing customer base in the New Mobility space. We were selected as the best tech vendor in the on-demand economy in 2015 and continued to work overtime with innovative mobility players. So as the segment grows, so does Zendrive.

Zendrive platform is well-positioned to provide a crucial component in the AV safety stack. One of the most difficult questions to answer for AV tech is "how do you know when an AV is 'ready' to launch in a given market?" And related to that, how to make sure that these vehicles have a great awareness of the real-time environment they operate in? Zendrive has unprecedented knowledge, in real time, of the various driving styles and behaviors across geographies and weather patterns. We're doing some exciting work in addressing some of these challenges.



***“Every car that has a phone with Zendrive technology in it, or an autonomous vehicle that has access to Zendrive’s ‘central nervous system,’ can understand in real time what’s happening in any given intersection. That can be used in more than one way to improve safety in radically new ways.”***

### What are the biggest challenges you face in running a dynamic, fast-growing business?

There are two types of challenges, both related to the pace at which we are growing.

First challenge is that our tech stack needs to constantly be upgraded and designed for growth – and our back-end and platform teams have done some amazing work to support our growth. Hiring great people quickly enough to support this growth is also a challenge, of course, since we are not compromising on quality or character. But that’s just a part of growing a business in Silicon Valley.

Second challenge is that we are operating in the intersection of transportation, insurance and data analytics. With the recent rapid growth of our database (15 billion miles in 7 months) and industry recognition, there have been a lot of tempting partnership opportunities thrown at us. As a young company that needs to remain disciplined and prioritized, we unfortunately need to say “no” a lot.

### What’s the long-term vision for the Company? What new products and services will you be offering in the coming years?

The long-term vision of the company frankly goes back to its origins: Our goal is to make traffic deaths a thing of the past. Technology clearly illustrates that deaths from auto crashes are preventable, and we want to leverage this technology to eradicate any and all collisions. Every car that has a phone with Zendrive technology in it, or an autonomous vehicle that has access to Zendrive’s “central nervous system,” can understand in real time what’s happening in any given intersection. That can be used in more than one way to improve safety in radically new ways.

A recent study we did with NYU was just a single snapshot illustrating this. They looked at a dataset from a couple years ago, and were able to see strong correlation between Zendrive data and locations of actual crashes in NYC. Since then we’ve grown by more than 5 orders of magnitude, allowing for a much more granular and immediate analysis – you can probably imagine what that will look like when we grow 10x or 100x from where we are today. This vision of saving people’s lives, of predicting and preventing crashes, is something Zendrive is uniquely positioned to realize – and that I am personally very excited about.



## VII. Selected Transactions



## i. Financing



# Selected Auto FinTech Transactions

## Financing



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
12/11/17	Creditas	Vostok Emerging Finance; IFC (World Bank); Naspers; QED Investors; Kaszek Ventures; Quona Capital	\$50	Online Finance Mktplaces / Lenders
11/30/17	Mojio	Kensington Capital; Trend Forward Capital; Innogy Ventures; Amazon Alexa Fund; BDC IT Venture Fund; Deutsche Telekom Capital Partners; Relay Ventures	30	Telematics
11/27/17	Radius Payment Solutions	Inflexion Private Equity	201	Fleet Management
11/19/17	Zego	Balderton Capital; Localglobe; Undisclosed Investor(s)	8	On-Demand Transportation (Specialized Fin. Svcs.)
11/15/17	Goji	Hudson Structured Capital Management	15	Online Auto Insurance
11/15/17	Yixin Group	Public Market Investors	867^	Online Finance Mktplaces / Lenders
11/03/17	Cheche365.com	China Capital Group; Shunwei Capital; CBC Capital	30	Online Auto Insurance
10/23/17	Honcker	Evolution Corporate Advisors; Lead Edge Capital	4	Next Gen Dealerships
10/20/17	Fair	BMW i Ventures; Penske Automotive Group; Mercedes Benz	na	Next Gen Rental
10/19/17	Automile	Insight Venture Partners; SaaStr Fund; Point Nine Capital; Dawn Capital; Salesforce Ventures	34	Fleet Management
10/18/17	Finova Financial	CoVenture; Undisclosed Investor(s)	103*	Auto Title Loans
10/16/17	RenewBuy	Amicus Capital	9	Online Auto Insurance
10/12/17	Vehiculum	Coparion; SchneiderGolling; Undisclosed Investor(s)	2	Online Finance Mktplaces / Lenders
09/25/17	Tantalum	Disruptive Capital Finance	3	Billing
09/19/17	The Zebra	Accel Partners; Silverton Partners; Floodgate; Ballast Point Ventures; Daher Capital; Birchmere Labs; Mark Cuban Companies	40	Online Auto Insurance
09/19/17	Clearcover	Lightbank; Greycroft Partners; 500 Startups; Silicon Valley Bank; Undisclosed Investor(s)	12	Online Auto Insurance
09/12/17	Aria Systems	Madison Bay Capital Partners; Hummer Winblad Venture Partners; InterWest Partners; Venrock	18	Billing
09/07/17	Fair	Javelin Venture Partners; Charles River Ventures; Foundation Capital; Sherpa Capital; Moonshots Capital	16	Next Gen Rental

# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
09/05/17	ForeverCar	CMFG Ventures; Method Capital; Undisclosed Investor(s)	\$15*	Auto Warranty
08/23/17	AutoFi	Crosslink Capital; Ford Motor Credit Company; Lerer Hippeau Ventures	10	Online Finance Mktplaces / Lenders
08/02/17	Drive Motors	Bullpen Capital; Y Combinator; Khosla Ventures; Perkins Coie; Emagen Entertainment Group; Undisclosed Investor(s)	5	Dealer Solutions
07/19/17	Zego	LocalGlobe	2	On-Demand Transportation (Specialized Fin. Svcs.)
07/13/17	Cover	Social Capital	11	Online Auto Insurance
07/06/17	CreditIQ	Undisclosed Investor(s)	3	Online Finance Mktplaces / Lenders
07/06/17	AutoGravity	VW Credit	30	Online Finance Mktplaces / Lenders
06/30/17	Nauto	Allianz Digital Corporate Ventures; BMW i Ventures; Draper Nexus Venture Partners; General Motor Ventures; Greylock Partners; Playground Global; SoftBank Vision Fund; Toyota AI Ventures	159	Fleet Management
06/29/17	By Miles	InMotion Ventures; Hambro Perks	<1	Telematics
06/06/17	Tractable	Ignition Partners; Zetta Venture Partners; Undisclosed Investor(s)	8	Auto Claims Tech
06/02/17	Coverfox	Transamerica Ventures; SAIF Partners; Accel Partners; Catamaran Ventures	15	Online Auto Insurance
05/23/17	Acko	Accel Partners; SAIF Partners; Catamaran Ventures; Pratithi Investment Trust; Undisclosed Investor(s)	30	Online Auto Insurance
05/15/17	ControlExpert	General Atlantic	na	Auto Claims Tech
05/12/17	Yixin Group	Tencent; Bitauto; China Orient Asset Management; Undisclosed Investor(s)	579	Online Finance Mktplaces / Lenders
04/20/17	Tantalum	HandySoft; Disruptive Capital Finance	na	Billing
03/16/17	Insurify	MassMutual Ventures; Nationwide Corporation; Undisclosed Investor(s)	5	Online Auto Insurance
03/06/17	The Floow	Fosun International; United Electronics Co; Direct Line Group	16	Telematics
02/22/17	EverQuote	Savano Capital Partners; SecondAlpha; Link Ventures; Stratim Capital; Oceanic Partners; T Capital Partners	36	Online Auto Insurance

# Selected Auto FinTech Transactions

## Financing (cont.)

AUTO FINTECH



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
02/17/17	Creditas	IFC (World Bank); Naspers; QED Investors; Redpoint eVentures; Kaszek Ventures; Accion Frontier Inclusion Fund	\$19	Online Finance Mktplaces / Lenders
02/15/17	AutoGravity	Daimler	30	Online Finance Mktplaces / Lenders
02/08/17	AUTOPAY	Fraser McCombs Capital; Undisclosed Investor(s)	na	Online Finance Mktplaces / Lenders
01/25/17	GT Motive	Kartesia	11	Auto Claims Tech
01/25/17	Cuvva	LocalGlobe	2	Online Auto Insurance
01/23/17	AutoFi	Ford Motor Credit Company	na	Online Finance Mktplaces / Lenders
01/17/17	VaaS International	Undisclosed Investor(s)	5	Specialized Data / Analytics
01/09/17	Diyi Chedai	Addor Capital; You Jin Capital; Matrix Partners China; Yixin Investment; 360 Finance	52	Online Finance Mktplaces / Lenders
12/23/16	Automile	SaaStr Fund; Salesforce Ventures; Dawn Capital; Point Nine Capital	8	Fleet Management
12/12/16	Mojio	Telekom Capital; Relay Ventures; BC Tech Fund; Amazon Alexa Fund	7	Telematics
11/02/16	AutomotiveMastermind	JMI Equity	45	Dealer Solutions
11/02/16	Paydrive	NFT Ventures	1	Online Auto Insurance
10/26/16	ForeverCar	CUNA Mutual Group; CMFG Ventures	10	Auto Warranty
10/25/16	Root	Drive Capital	4	Online Auto Insurance
10/14/16	Snapsheet	F-Prime Capital; IA Capital Group; Liberty Mutual Strategic Ventures; Intact Ventures; Undisclosed Investor(s)	20	Auto Claims Tech
10/04/16	White Clarke Group	Five Arrows Principal Investments	na	Loan Systems
09/30/16	Zego	Undisclosed Investor(s)	<1	On-Demand Transportation (Specialized Fin. Svcs.)
09/26/16	Estify	Romulus Capital; ff Venture Capital	6	Auto Repair / Roadside Assistance

# Selected Auto FinTech Transactions

## Financing (cont.)

AUTO FINTECH



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
09/21/16	Metromile	China Pacific Insurance	\$50	Online Auto Insurance
08/10/16	Finova Financial	MHS Capital; Refactor Capital; Metamorphic Ventures; 500 Startups; Al Hamra Group; CoVenture; Undisclosed Investor(s)	53*	Auto Title Loans
08/02/16	Yixin Group	Bitauto Holdings; Tencent; Baidu; JD.com	550	Online Finance Mktplaces / Lenders
06/29/16	Amodo	Speedinvest	1	Telematics
06/28/16	Goji	Undisclosed Investor(s)	19	Online Auto Insurance
05/30/16	Creditas	QED Investors; Kaszek Ventures; Redpoint eVentures; Accion Frontier Inclusion Fund	8	Online Finance Mktplaces / Lenders
05/24/16	Zubie	Melody Capital Partners; OPENAIR Equity Partners; Castrol InnoVentures; Comporium; Nokia Growth Partners; BP Ventures; Magna	6	Telematics
05/23/16	Weidai	Vision Knight Capital; New China Capital Management; Dongyi Risheng Decoration	153	Auto Title Loans
05/12/16	AutoFi	Crosslink Capital; Laconia Ventures; Undisclosed Investor(s)	17	Online Finance Mktplaces / Lenders
05/01/16	Tantalum	Disruptive Capital Finance	4	Billing
05/01/16	Carvi	Samsung Venture Investment; Korea Telecom Investment; POSCO	5	Telematics
04/15/16	RenewBuy	Mount Nathan Advisors	1	Online Auto Insurance
04/12/16	Diyi Chedai	Matrix Partners China; China Growth Capital	34	Online Finance Mktplaces / Lenders
04/06/16	Cardtek	MV Holding; Revo Capital	na	Payments
03/31/16	Innovative Aftermarket Systems (IAS)	Genstar Capital	na	Auto Service Contracts
03/28/16	Nauto	Allianz Digital Corporate Ventures; BMW i Ventures; Draper Nexus Venture Partners; Index Ventures; Playground Global; Toyota Research Institute	12	Fleet Management
03/22/16	Open Lending	Bregal Sagemount	40	Loan Systems
03/07/16	Breeze Labs	Pivot Investment Partners; Undisclosed Investor(s)	9	On-Demand Transportation (Specialized Fin. Svcs.)

# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
02/23/16	SpringboardAuto.com	CUNA Mutual Group	na	Online Finance Mktplaces / Lenders
02/18/16	Aria Systems	Hummer Winblad Venture Partners; Bain Capital Ventures; InterWest Partners; Venrock; VMware; Rembrandt Venture Partners; Madison Bay Capital Partners; Hercules Capital	\$50	Billing
02/18/16	Confident Financial Solutions	Undisclosed Investor(s)	2	Online Finance Mktplaces / Lenders
02/16/16	Metromile	China Pacific Insurance; First Round Capital; Index Ventures; Intact Financial; Mitsui & Co. (U.S.A.); New Enterprise Associates; SV Angel	103	Online Auto Insurance
01/28/16	Finova Financial	500 Startups; Undisclosed Investor(s)	na	Auto Title Loans
01/28/16	Insurify	Rationalwave Capital Partners	2	Online Auto Insurance
01/26/16	The Zebra	Silverton Partners; Daher Capital; Ballast Point Ventures; Undisclosed Investor(s)	17	Online Auto Insurance
01/05/16	Cuvva	Undisclosed Investor(s)	<1	Online Auto Insurance
11/11/15	Claim Di	Golden Gate Ventures	2	Auto Claims Tech
11/10/15	AutoGravity	Daimler	20	Online Finance Mktplaces / Lenders
11/09/15	RenewBuy	Mount Nathan Advisors	1	Online Auto Insurance
11/01/15	Tantalum	Disruptive Capital Finance	5	Billing
10/16/15	VaaS International	Undisclosed Investor(s)	<1	Specialized Data / Analytics
10/15/15	AutoFi	500 Startups; Basset Investment Group; Crosslink Capital; Laconia Capital Group; Lerer Hippeau Ventures; Eniac Ventures; ZenStone Venture Capital	3	Online Finance Mktplaces / Lenders
10/06/15	TrueMotion	General Catalyst Partners; Bain Capital Ventures; Lakestar	10	Telematics
09/24/15	DriverUp	SF Capital Group; Emerald Development Managers; RRE Ventures	20	Online Finance Mktplaces / Lenders
09/22/15	CoverHound	American Family Ventures; ACE Group; RRE Ventures; Blumberg Capital; Core Innovation Capital; Route 66 Ventures	33	Online Auto Insurance
09/15/15	Coverfox	Catamaran Investment	na	Online Auto Insurance

# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
09/10/15	Weidai	Hakim	\$24	Auto Title Loans
08/10/15	Confident Financial Solutions	Undisclosed Investor(s)	2	Online Finance Mktplaces / Lenders
07/18/15	Accuscore	Undisclosed Investor(s)	1	Telematics
07/14/15	P97	Emerald Technology Ventures; ATAPCO	9	Payments
07/08/15	Breeze Labs	Aslanoba Capital; Otter Rock Capital; Undisclosed Investor(s)	3	On-Demand Transportation (Specialized Fin. Svcs.)
06/30/15	Tractable	Zetta Venture Partners; Entrepreneur First; Acequia Capital	2	Auto Claims Tech
06/25/15	Automatic Labs	Amicus Capital; CDK Global; Comcast Ventures; Y Combinator; RPM Ventures; Anthemis Group; USAA; Undisclosed Investor(s)	24	Telematics
06/05/15	Vinli	Samsung Venture Investment; Cox Automotive; First Round Capital; The Westly Group; Continental	7	Telematics
06/04/15	Zubie	Nokia Growth Partners	2	Telematics
05/17/15	OnSource	Greybull Stewardship	2	Auto Claims Tech
05/06/15	Automile	Dawn Capital; Point Nine Capital	5	Fleet Management
04/30/15	EverQuote	Undisclosed Investor(s)	2	Online Auto Insurance
04/24/15	Coverfox	SAIF Partners; Accel Partners	12	Online Auto Insurance
04/17/15	VaaS International	Undisclosed Investor(s)	61	Specialized Data / Analytics
03/25/15	Root	Drive Capital	3	Online Auto Insurance
03/24/15	Mojio	Telekom Capital; Relay Ventures; BDC Capital; Undisclosed Investor(s)	8	Telematics
03/09/15	CoverHound	RRE Ventures; Bullpen Capital; Blumberg Capital; Core Innovation Capital; Tugboat Ventures; Route 66 Ventures; American Family Ventures;	14	Online Auto Insurance
03/01/15	Tantalum	Disruptive Capital Finance	2	Billing

# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
02/23/15	DriverUp	Emerald Development Managers; RRE Ventures	\$50	Online Finance Mktplaces / Lenders
02/20/15	Openbay	Koa Labs; Gad Liwerant; Undisclosed Investor(s)	6	Auto Repair / Roadside Assistance
02/06/15	Insurify	Undisclosed Investor(s)	2	Online Auto Insurance
01/09/15	Yixin Group	Tencent; JD.com	250	Online Finance Mktplaces / Lenders
01/01/15	Snapsheet	Undisclosed Investor(s)	2	Auto Claims Tech
12/16/14	Confident Financial Solutions	Undisclosed Investor(s)	2*	Online Finance Mktplaces / Lenders
11/25/14	Octo	Pamplona Capital Management	na	Telematics
11/11/14	RepairPal	USAA	6	Auto Repair / Roadside Assistance
11/01/14	Metromile	Undisclosed Investor(s)	38	Online Auto Insurance
10/03/14	Estify	Romulus Capital; ff Venture Capital	2	Auto Repair / Roadside Assistance
09/29/14	Guevara	Mosaic Ventures; Collaborative Fund; True Ventures	4	Online Auto Insurance
09/08/14	Parkmobile USA	BMW Group	na	Payments
09/03/14	Cambridge Mobile Telematics	Undisclosed Investor(s)	3	Telematics
08/11/14	Zubie	Nokia Growth Partners; Magna; OPENAIR Equity Partners; Castrol Innoventures; Comporium	8	Telematics
07/08/14	The Floow	Direct Line Group	na	Telematics
04/15/14	Goji	Spark Capital; Thayer Street Partners	14	Online Auto Insurance
03/01/14	Tantalum	Disruptive Capital Finance	1	Billing
02/18/14	Innovative Aftermarket Systems (IAS)	Genstar Capital	na	Auto Service Contracts



# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
12/18/13	Comparenow.com	White Mountains Insurance Group; Mapfre	na	Online Auto Insurance
12/12/13	Zubie	Castrol InnoVentures; OPENAIR Equity Partners; Comporium	\$8	Telematics
12/10/13	The Zebra	Swallow Point Ventures; Silverton Partners; Birchmere Labs; Undisclosed Investor(s)	3	Online Auto Insurance
12/04/13	Snapsheet	Undisclosed Investor(s)	10	Auto Claims Tech
11/19/13	Aria Systems	Bain Capital Ventures; Hummer Winblad Venture Partners; InterWest Partners; Tugboat Ventures; Venrock; VMware	40	Billing
10/28/13	Openbay	Andreessen Horowitz; Andrew Palmer; Boston Seed Capital; Google Ventures; Stage 1 Ventures; Individual Investors	na	Auto Repair / Roadside Assistance
10/28/13	Mojio	Relay Ventures; 500 Startups; BDC	2	Telematics
10/18/13	Creditas	Undisclosed Investor(s)	1	Online Finance Mktplaces / Lenders
10/15/13	BlueYield	QED Investors	na	Online Finance Mktplaces / Lenders
09/27/13	Estify	Romulus Capital; ff Venture Capital; Rees Capital; Amplify.LA	1	Auto Repair / Roadside Assistance
06/07/13	Automatic Labs	Western Technology Investment; Andreessen Horowitz; Amicus Capital; Y Combinator; RPM Ventures; Anthemis Group; Lumia Capital; Founders Fund	6	Telematics
04/30/13	Metromile	Undisclosed Investor(s)	10	Online Auto Insurance
02/12/13	Goji	Spark Capital; Thayer Street Partners; Five Elms Capital; Village Ventures	23	Online Auto Insurance
02/11/13	RepairPal	Cars.com; Castrol InnoVentures	13	Auto Repair / Roadside Assistance
02/07/13	Parkmobile USA	BCD Holdings; Parkmobile Group; Fontinalis Partners; Bluefield Investments	6	Payments
02/05/13	CoverHound	RRE Ventures; Blumberg Capital; Bullpen Capital	8	Online Auto Insurance
01/31/13	The Zebra	Undisclosed Investor(s)	2	Online Auto Insurance
12/05/12	Metromile	New Enterprise Associates; Index Ventures; First Round Capital; SV Angel	4	Online Auto Insurance

# Selected Auto FinTech Transactions

## Financing (cont.)



FINANCING				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
09/13/12	CoverHound	Source Interlink Companies	<\$1	Online Auto Insurance
08/28/12	Airbiquity	Alliance of Angels; Ignition Partners; ORIX Growth Capital	12	Telematics
06/10/12	The Zebra	Innovation Works	na	Online Auto Insurance
01/04/12	Snapsheet	OCA Ventures; Pritzker Group Venture Capital; Lightbank	1	Auto Claims Tech
09/01/11	Snapsheet	Lightbank	<1	Auto Claims Tech
08/05/11	RepairPal	Undisclosed Investor(s)	1	Auto Repair / Roadside Assistance
06/03/11	CoverHound	Blumberg Capital	<1	Online Auto Insurance
03/29/11	CoverHound	AngelPad	na	Online Auto Insurance
02/01/11	Aria Systems	InterWest Partners; Hummer Winblad Venture Partners; Venrock	20	Billing
01/01/11	Metromile	Mark Cuban Companies	na	Online Auto Insurance
10/21/10	Rankomat.pl	3TS Capital Partners	4	Online Auto Insurance
08/25/10	Goji	Undisclosed Investor(s)	4	Online Auto Insurance
05/26/10	rateGenius	Undisclosed Investor(s)	2	Online Finance Mktplaces / Lenders
03/03/10	Halo Insurance Services	Bridges Fund Management; Magenta Partners	na	Online Auto Insurance
01/29/10	Parkmobile USA	Fontinalis Partners	na	Payments
01/12/10	Cellcontrol	Undisclosed Investor(s)	<1	Telematics



## ii. M&A

# Selected Auto FinTech Transactions

## M&A



### MERGERS & ACQUISITIONS

Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
12/14/17	Kartuku	Go-Jek	na	Payments
12/14/17	Midtrans	Go-Jek	na	Payments
12/14/17	Mapan	Go-Jek	na	Payments
10/11/17	Willis Towers Watson UBI Assets	Octo Telematics	na	Telematics
09/26/17	automotiveMastermind	IHS Markit	\$392	Dealer Solutions
09/24/17	RateGenius Insurance	Seeman Holtz Property & Casualty	na	Online Auto Insurance
08/02/17	OnSource	Genpact	na	Auto Claims Tech
06/27/17	Halo Insurance Services	Cover-More	na	Online Auto Insurance
06/06/17	The Warranty Group	Assurant	2,500	Auto Service Contracts
06/06/17	ABAX Group	Investcorp	210	Telematics
05/04/17	Omnisure	PayLink Direct	na	Auto Service Contracts
04/27/17	Automatic Labs	SiriusXM	115	Telematics
04/02/17	Kudo	Grab	na	Payments
02/28/17	CCC Information Services	Advent International; Oak Hill Capital Partners; Technology Crossover Ventures	3,000	Auto Claims Tech
01/16/17	PayCash Europe	Daimler	na	Payments
12/28/16	PayByPhone	Volkswagen	na	Payments
10/26/16	BlueYield	Ally Financial	na	Online Finance Mktplaces / Lenders
09/08/16	Wolters Kluwer Indirect LOS	Reynolds & Reynolds	36	Dealer Solutions

# Selected Auto FinTech Transactions

## M&A (cont.)



MERGERS & ACQUISITIONS				
Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
06/30/16	Drivology	Markerstudy	na	Telematics
06/20/16	Parkmobile Group	BMW	na	Payments
10/02/15	Sunhill Technologies	Volkswagen	na	Payments
09/13/15	Solera	Vista Equity Partners	\$6,500	Auto Claims Tech
08/25/15	Rankomat.pl	Bauer Media	na	Online Auto Insurance
07/23/15	MyDrive Solutions	Generali	na	Telematics
06/15/15	Dealertrack	Cox Automotive	4,000	Dealer Solutions
05/05/15	Insure the Box	ANDIE	164	Telematics
02/26/15	FEX DMS	DealerSocket	na	Dealer Solutions
10/21/14	Omnisure	Fortress Investment Group	na	Auto Service Contracts
09/24/14	Facile.it	Oakley Capital	35	Online Auto Insurance
07/07/14	PayLink Direct	Milestone Partners	83	Auto Service Contracts
03/21/14	The Warranty Group	TPG Capital	1,500	Auto Service Contracts
02/05/14	TRACKER	Lysanda	na	Telematics
02/04/14	Octo	Renova	547	Telematics
02/03/14	Ingenie	Quindell	na	Online Auto Insurance
09/26/13	Towquest	Arnold Clark Vehicle Management	na	Fleet Management
09/05/13	Mitchell International	KKR	1,100	Auto Claims Tech

# Selected Auto FinTech Transactions

## M&A (cont.)

AUTO FINTECH



### MERGERS & ACQUISITIONS

Announced Date	Company	Selected Buyers / Investors	Amount (\$mm)	Category
06/12/13	CCC Information Services	TPG Capital	na	Auto Claims Tech
02/01/13	HyperQuest	Solera	na	Auto Claims Tech
12/03/12	Mensaelect	Solera	na	Auto Claims Tech
11/30/12	CCC Information Services	Leonard Green & Partners	\$550	Auto Claims Tech
05/17/12	Chiarezza.it	BlackFin Capital Partners	na	Online Auto Insurance
12/23/11	Innovative Aftermarket Systems (IAS)	Genstar Capital	na	Auto Service Contracts
12/12/11	Sinexia Corporacion Tecnologica	Solera	na	Auto Claims Tech



## VIII. Selected Auto FinTech Company Profiles





## Airbiquity

Telematics



### Company Overview

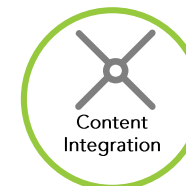
- President & CEO** Kamyar Moinzadeh
- Headquarters:** Seattle, WA
- Founded:** 1997
- Airbiquity provides a suite of cloud-based connected car tools and platforms designed for auto manufacturers and automotive suppliers
  - Through Choreo, Airbiquity's cloud-based service delivery platform, users can integrate an entire spectrum of vehicle systems, devices, networks, content providers and IT systems
    - With open platform architecture, Choreo can facilitate end-to-end service delivery or component level integration into existing services and multi-party clouds
  - Over 42 million vehicles (from manufacturers including Nissan, Ford and Infiniti) have incorporated Airbiquity products / platforms

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
08/12/12	\$12	Acron Ventures, Alliance of Angels, Kirnaf, ORIX Growth Capital, Shell Internet Ventures
01/22/08	25	Acron Ventures, Ignition Venture Partners, Kirnaf, Shell Internet Ventures
06/13/03	9	Acron Ventures, Kirnaf, Shell Internet Ventures

### Products & Services Overview

#### Choreo Services



#### Airbiquity Products



##### Service Management

Automakers can manage every aspect of their program development using private and secure web portals



##### Intelligent Vehicle

Powered by data and analytics, users can utilize context intelligent apps, vehicle health reports, trip reports and more



##### Safety and Security

Features like automatic crash notifications and remote management give drivers accessibility when in danger



##### Electric Vehicle

Empowers drivers with complete range of service for EV operation and ownership



##### Infotainment Delivery

Airbiquity offers high quality infotainment from leading content providers and enhanced SmartDeviceLink integration



##### Software & Data Management

Utilizing Over-The-Air technology, Airbiquity orchestrates / automates updates and data management campaigns

# Selected Auto FinTech Company Profiles

## AutoFi

AUTO FINTECH



Online Finance  
Marketplaces / Lenders



### Company Overview

Co-Founder & CEO: Kevin Singerman

Headquarters: San Francisco, CA

Founded: 2015

- AutoFi operates an online platform helps dealers automate their sales and financing processes by helping consumers finance their car purchases
- AutoFi's platform connects dealers and lenders so vehicles can be purchased and financed in minutes rather than hours
- AutoFi connects lenders directly to online buyers to automate the lending process in a secure and compliant manner

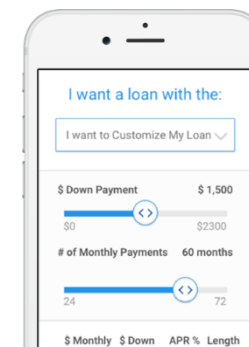
### Selected Financing History

Date	Size (\$ mm)	Investor(s)
08/23/17	\$10	Crosslink Capital; Ford Motor Credit Company; Lerer Hippeau Ventures
01/23/17	NA	Ford Motor Credit Company
05/12/16	17	CrossLink Capital; Laconia Ventures

### Products & Services Overview

#### Next Generation Online Auto Financing

1. Choose a vehicle
2. Apply and get a financing decision
3. Select F&I products
4. Securely sign online and arrange the vehicle pick up



#### Dealers:

AutoFi provides the tools to sell and finance vehicles online



#### Lenders:

AutoFi offers lenders direct access to customer financing



#### Customers:

AutoFi offers customers fast and transparent online services

### Selected Partners





## AutoGravity

Online Finance  
Marketplaces / Lenders



### Company Overview

**CEO:** Andreas Hinrichs

**Headquarters:** Irvine, CA

**Founded:** 2015

- AutoGravity provides a mobile app that consumers can use to receive financing options for new and used car purchases and new car leases
  - The company has partnered with banks, financial services companies and car dealerships to automate and simplify the auto financing process
  - The company is live with real-time dealer inventory
- AutoGravity's services are currently available in U.S. all states except Nevada
- AutoGravity is available for iOS, Android and through a web app
- As of November 2017, AutoGravity is exceeding 1 million consumer app downloads

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
07/06/17	\$30	VW Credit
02/15/17	30	Daimler
11/10/15	20	Daimler

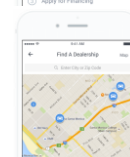
### Products & Services Overview

The AutoGravity app enables consumers to select their desired vehicle, choose a dealership and apply for / receive financing offers.



#### 1. Choose a car

Browse all makes, models and trims of vehicles in an interactive search engine



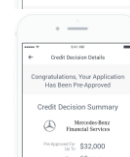
#### 2. Find a dealership

Connect with local partnering dealerships that offer the desired car



#### 3. Apply for financing

Online credit application with up to four financing offers



#### 4. Select financing offer

Select the best rate and lender

AutoGravity's technology is versatile and can offer private label solutions – VW Credit / FJ Drive / Kia Motor Finance are powered by AutoGravity; more to come.



Volkswagen  
Credit



Finance



## AUTOPAY

Online Finance  
Marketplaces / Lenders



### Company Overview

**Founder & Managing Partner:** Jeff Hutcheson

**Headquarters:** Denver, CO

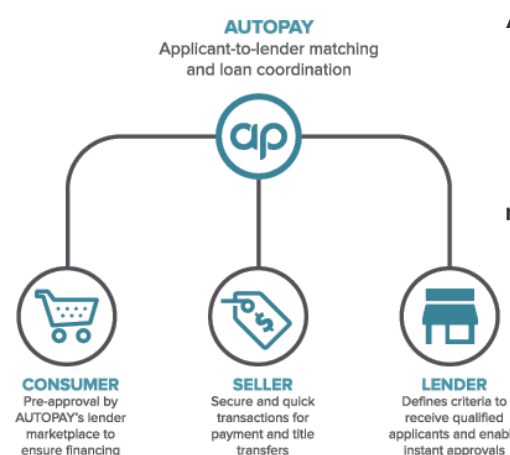
**Founded:** 2007

- AUTOPAY operates a lender marketplace specializing in auto refinance and new vehicle purchase financing
  - AUTOPAY's online platform matches consumers at all ends of the credit spectrum with partnering lenders, offering users competitive rates and terms
  - AUTOPAY has partnered with trusted credit unions, banks and lending institutions nationwide
- AUTOPAY also offers its white-label platform and library of APIs to online and traditional vehicle marketplaces, helping them offer financing to their customers by functioning as a virtual Finance & Insurance office
  - Shift, Instamotor and TRED – all examples of “Next-Gen Dealerships / Marketplaces” – use the AUTOPAY platform to offer financing to their customers

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
01/27/17	NA	Fraser McCombs Capital

### Products & Services Overview



AUTOPAY connects consumers looking for financing with lenders through a systematic and digitized process, matching any credit profile to competitive rates and terms

AUTOPAY supports auto loans for new and pre-owned vehicles, as well as auto loan refinancing



#### Auto Loan:

Helps consumers secure auto loan financing before shopping at a dealership



#### Auto Loan Refinancing:

Enables consumers to refinance their existing auto loans, providing savings through lower monthly payments, lower interest rates or both



### Online Auto Insurance

## BY\_\_MILES

### Company Overview

- Founder & CEO:** James Blackham
- Headquarters:** London, United Kingdom
- Founded:** 2016
- By Miles provides pay-per-mile auto insurance policies to consumers in the United Kingdom
  - By Miles' policies are specifically targeted for low mileage drivers
  - By Miles' monthly subscription covers vehicles when parked and only charges customers for the exact number of miles they drive
  - The product is currently in private beta and is expected to launch soon

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
06/29/17	<\$1	InMotion Accelerator; Hambro Perks

### Products & Services Overview

#### How It Works



User plugs Miles Tracker device into vehicle



By Miles charges per-mile, based on driving distance



App tracks trips and offers other user features

#### Policy Features



Monthly subscription model



Flexible, per-mile pricing



Fully comprehensive policies



Proactive discounts for safe drivers

#### App Features



Detailed monthly bills



24/7 support team



Vehicle reminders



Roadside assistance and location tracking



### Telematics



#### Company Overview

- Founder & CEO:** Bill Powers
- Headquarters:** Cambridge, MA
- Founded:** 2010
- Cambridge Mobile Telematics (CMT) is a leader in mobile data sensing and smartphone telematics
  - CMT offers DriveWell, an advanced mobile-sensing and big data platform that delivers an end-to-end smartphone telematics solution
  - DriveWell is the first telematics platform in the industry to provide both traditional vehicle-centric, usage-based insurance (UBI) and driver-centric, behavior-based insurance (BBI) solutions
  - By accurately measuring driving quality with smartphone and IoT sensors, and providing feedback, DriveWell helps users improve their driving behavior
    - Users see an average reduction of 35% in phone distraction, 20% in hard braking and 20% in at-risk speeding all within 30 days of using the program
  - CMT has over 20 customers across 14 countries

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/03/14	\$3	Undisclosed Investor(s)

#### Products & Services Overview

*CMT's DriveWell program is a mobile telematics solution for extracting actionable insights on driving behavior and promoting safe driving*



DriveWell's white-label mobile app provides drivers with feedback on driving behavior and boosts partner engagement with drivers through app & behavior-based insurance programs



Optional add-on wireless tag provides additional features like crash detection, roadside assistance and forensic reporting

#### Key Features

- Accurate inference of vehicle dynamics and driver distraction from mobile device sensors in arbitrary and changing orientations
- Best-in-class battery-efficiency combined with best-in-class trip recording accuracy and precision telematics
- Powerful behavior feedback and incentives to improve driver safety while increasing user interaction and engagement
- Special features for vehicle fleets to optimize fleet utilization, safety, and productivity
- Scalable telematics processing engine that is agnostic to data source (smartphones, tags, embedded devices, blackboxes, OEM feeds)
- Innovative place-and-go wireless tag device to augment smartphone sensors, providing accurate scoring even when phone is absent
- Behavioral analytics that infers "driver" trips and integrates contextual information, to provide calibrated and customizable scoring models and risk assessments based on real-world statistics and crash/claims data
- Accurate crash detection and robust crash forensics



Online Finance  
Marketplaces / Lenders

# canada drives®

### Company Overview

**Co-CEOs** Cody Green, Mike Galpin

**Headquarters:** Vancouver, BC

**Founded:** 2010

- Canada Drives is a leading Canadian provider of automotive financial products to consumers
- Canada Drives' online platform facilitates auto financing by connecting thousands of under-served consumers to dealer partners that can provide them with the best approval options
- The company works with over 350 partnering auto dealers across every province and territory in Canada
- The company has received over 750,000 applications (as of November 2016)
- Consumers can also access insurance and credit card offers from partners through the Canada Drives website
- Spring Financial, a subsidiary of Canada Drives, provides personal loans to consumers seeking to build their credit

### Management Team



**Cody Green**  
Founder & Co-CEO



**Michael Galpin**  
Co-CEO



**Stephen Brown**  
CFO

### Products & Services Overview

#### Auto Loan Process

##### Lead Generation



Potential customers learn about Canada Drives from online (Facebook, Google, etc.) and offline (Television) advertisements

##### Application



Interested customers can either apply online through the website or call customer support to apply via telephone



The customer completes application (includes basic identification information and monthly budget), which is then reviewed and stored internally

##### Matching



Canada Drives then sends the applicant's information to matching dealerships, where the applicant can continue the vehicle purchase process





### Next-Gen Rental

## canvas

### Company Overview

- CEO:** Ned Ryan
- Headquarters:** San Francisco, CA
- Founded:** 2017
- Canvas, operated by Ford Motor Company, offers consumers short-term, month-to-month leases for pre-owned Ford vehicles
  - Canvas' online platform provides a simple, flexible and transparent alternative to a traditional multi-year auto loan or lease
  - Canvas is built off the technology of Breeze Labs, which was acquired by Ford in February 2017
    - Breeze previously provided an online platform that provided drivers in the ride-sharing, delivery and on-demand economies with access to flexible, short-term car leases
  - The service is currently available in the San Francisco Bay Area

### Selected Financing History (Breeze)

Date	Size (\$ mm)	Investor(s)
03/07/16	\$9	Pivot Investment Partners; Undisclosed Investor(s)
07/08/15	3	Aslanoba Capital; Otter Rock Capital; Undisclosed Investor(s)

### Products & Services Overview

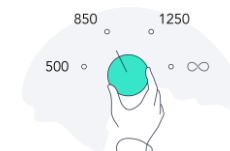
#### User selects vehicle

- Online inventory
- Pre-owned vehicles, less than 3 years old
- Carefully inspected



#### User chooses monthly mileage package

- Packages range from 500 to unlimited miles per month
- Users can upgrade or downgrade packages anytime



#### Schedule delivery

- Flexible delivery available any day of the week
- Delivered by trained rep



#### All-inclusive package

- Subscription comes with maintenance, insurance, warranty, roadside assistance and registration



#### Hassle-free renewal or return

- At month's end, users can choose to return car or renew subscription





### Telematics



### Company Overview

**CEO:** Robert Guba

**Headquarters:** Baton Rouge, LA

**Founded:** 2009

- An early mover in the driver safety and connected vehicle space, Cellcontrol is a leader in solutions that stop distracted driving and improve driver performance
- Cellcontrol's patented distracted driving prevention and driver improvement platform not only prevents access to apps and functionality that cause distracted driving, but also collects a robust set of actionable driver behavior data that fuels UBI and big data projects for insurance, enterprise, academic and government partners across the globe
- The system works in all vehicles, across all mobile carriers and device platforms including Android and is the only enforceable solution for the iPhone and iOS platform
- Cellcontrol's solution is used by drivers across the globe (from consumers and small businesses to Fortune 500 enterprise fleets) as they have traveled more than a billion miles safely and distraction-free
- The solution is sold direct to customers as well as through referral partners and insurance partners such as Allstate, Liberty Mutual, Ohio Mutual, Arch Insurance and others

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
01/12/10	<\$1	Undisclosed Investor(s)

### Products & Services Overview

#### Patented DriveID Device + Cellcontrol Mobile App

Cellcontrol offers its safe driving platform using a hardware device (DriveID) and mobile app



- Solar-powered device that attaches to the windshield of any vehicle
- Can identify driver vs. passengers and know where devices are in the vehicle
- Divides the vehicle into a driver zone and passenger zones, which enables blocking throughout the vehicle or just in the driver zone
- Enforceable and tamper-resistant
- Supports Apple, Android, Windows Mobile and select BREW (flip phones) devices
- Other hardware trigger options are available including: OBD and JBUS

#### DrivePROTECT

##### Distracted Driving Prevention Platform



- Stops texts, email, non-emergency calls, browsing, social media, games, selfies and more, when the vehicle is in motion
- Can protect the whole vehicle or just the driver's seat zone
- Users can customize protection policy at a driver level, to allow for navigation, music or other allowed apps.

#### DrivePERFORMANCE

##### Driver Behavior Monitoring and Improvement /Telematics Platform



- Insight into how employees are driving with driver scoring based on speed, braking, acceleration, cornering and phone use

#### DrivePRO

##### Location-based Services and Analytics Platform



- Insight into where drivers drive and certain actions occur, including driver route history and GPS mapping, speed by street, geofencing, real-time trip reporting and an admin app

# Selected Auto FinTech Company Profiles

## Clearcover



Online Auto Insurance



### Company Overview

**CEO:** Kyle Nakatsuji  
**COO:** Derek Bringham  
**Headquarters:** Chicago, IL  
**Founded:** 2016

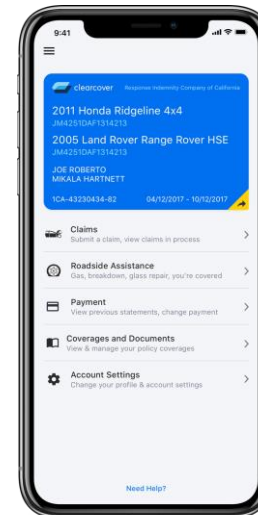
- Clearcover provides the right coverage, when it matters, at the lowest possible cost
- By designing a data-driven model to reach consumers in the moments that matter – the moments that they're actually thinking about insurance – Clearcover minimizes spend in areas like advertising and operations
- Clearcover can save consumers up to 50% off their current policy prices
- Clearcover partners with companies like price comparison, car shopping and personal finance websites to integrate its presence

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/19/17	\$12	Lightbank; American Family Ventures; Greycroft Partners; 500 Startups; Silicon Valley Bank

### Products & Technology Overview

- **Focused on Property & Casualty Insurance:** Launching personal automobile insurance in California in Q1 2018
- **Partner-Driven Approach:** Clearcover's modern technology enables seamless integration with existing systems – in days
- **Artificial Intelligence-Enabled:** The platform uses machine-learning to make customized coverage recommendations, enabling customers to receive personalized policy suggestions in a few minutes
- **Mobile-First:** Clearcover's mobile app will provide all the same services as a traditional agent, including real-time assistance with claim filings and coverage overviews



# Selected Auto FinTech Company Profiles

## Confident Financial Solutions

AUTO FINTECH



Online Finance  
Marketplaces / Lenders



### Company Overview

- CEO & President:** Richard Counihan
- Headquarters:** Boulder, CO
- Founded:** 2012
- Confident Financial Solutions (CFS) is a consumer finance company that offers auto repair financing to service centers and their customers
  - Customers can apply for CFS loans via a smart phone, tablet or computer and receive an instant credit decision
  - The company's products provide an alternative to credit card financing or upfront cash payment
  - The company has funded over \$41 million in loans to approximately 28,700 borrowers
  - The company has over 2,000 dealership partners across the United States

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
02/18/16	\$2	Undisclosed Investor(s)
08/10/15	2	Undisclosed Investor(s)
12/16/14	2*	Undisclosed Investor(s)

### Products & Services Overview

#### CFS for Consumers



#### Auto Repair Loans

- Financing from \$350 - \$7,500
- Flexible terms from 12 - 36 months
- Simple interest

- Online application process
- Instant decision
- 60-Day interest-free program
- No pre-payment penalty
- Great customer support
- Approvals for variety of credit types

#### CFS for Dealers

The CFS finance program enables partnering dealers to offer their customers quick, easy financing options for repairs – increasing service revenue and enhancing overall customer retention.



Larger  
Repair  
Orders



Bonus  
Program



Active  
Account  
Team



Free  
Branded  
Website



Direct  
Deposit

# Selected Auto FinTech Company Profiles

## CoverHound

AUTO FINTECH



Online Auto Insurance

# COVERHOUND®

### Company Overview

**CEO:** Keith Moore

**Headquarters:** Westlake Village, CA

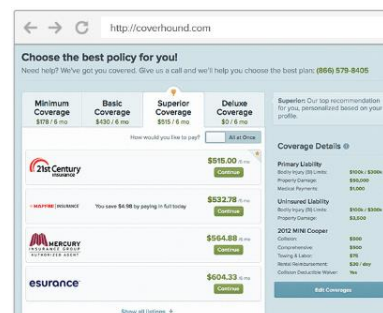
**Founded:** 2010

- CoverHound is a one-stop online insurance agency built to deliver fast, accurate and actionable rates from leading U.S. carriers based on each customer's specific needs
- Unlike price comparison sites that may link consumers to other sites, CoverHound delivers a simple comparison of recommended plans and real rates for immediate purchase

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/22/15	\$33	American Family Ventures; Blumberg Capital; Chubb; Core Innovation Capital; Haystack Partners; Route 66 Ventures; RRE Ventures
03/09/15	14	American Family Ventures; Blumberg Capital; Bullpen Capital; Core Innovation Capital; Route 66 Ventures; RRE Ventures
02/05/13	8	AngelPad; Blumberg Capital; Bullpen Capital; RRE Ventures
09/12/12	<1	Blumberg Capital; Source Interlink
06/03/11	<1	Blumberg Capital

### Products & Services Overview



✓ Accurate rates & curated list of options within 5 minutes

✓ Average CoverHound customer saves \$539 per year

✓ No brokerage fees – CoverHound receives a commission from the carriers based on policy sales & renewals

✓ CoverHound insurance advisors are compensated based on service not sales commission

### Types of Insurance

Auto	Homeowners	Renters	Business
<ul style="list-style-type: none"> <li>- Top Insurance providers including: Progressive; esurance; Safeco Insurance</li> </ul>	<ul style="list-style-type: none"> <li>- Dwelling Coverage</li> <li>- Personal Property Coverage</li> <li>- Other Structure Coverage</li> <li>- Loss of Use Coverage</li> <li>- Liability Insurance</li> </ul>	<ul style="list-style-type: none"> <li>- Rentals property includes: Computers &amp; Electronic; TVs; Clothing; Jewelry</li> <li>- Property stolen from your vehicle</li> <li>- Liability</li> </ul>	<ul style="list-style-type: none"> <li>- BOP</li> <li>- General Liability</li> <li>- Workers' Comp</li> <li>- Commercial Auto</li> <li>- Cyber Insurance</li> </ul>



Online Finance  
Marketplaces / Lenders



### Company Overview

**Founder & CEO:** Sergio Furio

**Headquarters:** Sao Paulo, Brazil

**Founded:** 2012

- Creditas is the only digital lending platform focused on secured loans in Brazil
- Creditas provides auto-backed loans, car financing and home equity loans
- In a country where prime borrowers pay 100%+ APR for a personal loan and 400%+ for credit card financing, Creditas provides the cheapest loans in the industry by using the borrowers' properties as collateral
- Creditas funds its loans through a hybrid model that includes (1) credit funds and securitizations, (2) traditional financial institutions and (3) its own capital

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
12/11/17	\$50	Vostok Emerging Finance; IFC (World Bank); Naspers; QED Investors; Kaszek Ventures; Quona Capital
02/17/17	\$19	IFC (World Bank); Naspers; QED Investors; Redpoint eVentures, Kaszek Ventures; Accion Frontier Inclusion Fund
05/30/16	8	QED Investors; Kaszek Ventures; Redpoint eVentures; Accion Frontier Inclusion Fund
10/18/13	1	Angel Investors

### Products & Services Overview



#### Auto refinancing

- 36-month maturity, average US\$8k
- 25% - 50% APR (basic rate + 14%-39%)
- Prime customers (60% LTV)
- 1<sup>st</sup> lien on car title
- Usage: debt consolidation, purchases and interest rate reduction



#### Auto financing

- 48-month maturity, average US\$10k
- 20% - 40% APR (basic rate + 9%-29%)
- Prime and near-prime customers (80% LTV)
- 1<sup>st</sup> lien on car title
- Usage: car purchase



#### Home Equity loan (1<sup>st</sup> lien)

- 15-year maturity, average US\$50k
- 16% - 24% APR (BR inflation + 12%-20%)
- Prime and near-prime customers (30% LTV)
- 1<sup>st</sup> mortgage
- Usage: debt consolidation, investments, home renovation



### Online Auto Insurance



### Company Overview

**Founder & CEO:** Freddy Macnamara

**Headquarters:** London, United Kingdom

**Founded:** 2014

- Cuvva provides on-demand, “pay-as-you-go” auto insurance through its mobile app
- Cuvva’s insurance platform offers a subscription-based hourly insurance product that enables infrequent drivers to purchase insurance for certain periods of time

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
01/25/17	\$2	Ian Hogarth; Local Global; Nicholas Hungerford; Seedcamp; Techstars; Tekton Ventures
09/01/16	NA	Barclays Accelerator; Techstars
01/05/16	<1	Ian Hogarth, Nicholas Hungerford
05/26/15	<1	Undisclosed Investor(s)

### Products & Services Overview

**Pay-as-you-go**  
insurance you control

✓ A low monthly subscription when parked

✓ Fully comprehensive Cuvva which you switch on when driving

✓ Tailored to the exact hours you’re driving

✓ Flexible and customizable policies, save up to 70%

✓ Cancel at any time with no fees



### Loan Systems

## defi SOLUTIONS

### Company Overview

- Founder & CEO:** Stephanie Alsbrooks
- Headquarters:** Grapevine, TX
- Founded:** 2012
- defi SOLUTIONS provides innovative software solutions for auto lenders, enabling them to grow and compete efficiently
  - defi's industry-leading Loan Origination System (LOS) is a fully configurable SaaS platform that provides customers with the flexibility needed to manage the entire loan application lifecycle
  - The Company's technology platform is affordable, scalable and easily accessible from all devices (PC, mobile, tablet)

### Management Team



- Stephanie Alsbrooks, Founder and CEO**
- Founded defi SOLUTIONS in March 2012
  - Over 18 years experience in the Auto Finance industry



- Georgine Muntz, COO**
- Joined defi SOLUTIONS in April 2014 as CFO & Strategy Leader
  - Over 20 years of expertise in technology across multiple industries and functions

### Products & Services Overview

*Flexible, innovative loan origination software platform for auto lenders*



#### defi LOS

- Loan Origination System software that provides a highly functional and configurable credit decisioning, analytics and reporting platform

#### defi SERVICING

- Flexible, configurable and intuitive loan management and servicing system

#### defi ANALYTICS

- Analytics products that provide actionable insights based on customer data and actual loan performance

#### defi DIGITAL

- Platform that simplifies transfer of loan documents and data

#### defi EXCHANGE

- Online marketplace that brings together sellers and buyers of auto loan portfolios



## DriverUp

Online Finance  
Marketplaces / Lenders



### Company Overview

**President & COO:** Brett Beebe

**Headquarters:** Austin, TX

**Founded:** 2015

- DriverUp operates a financing platform where buyers can browse inventory from qualified auto dealer partners, select a vehicle to purchase and apply for and accept financing terms online
- DriverUp's platform also enables accredited investors to directly participate in auto lending
- The platform is powered by Sierra Auto Finance, a specialty lending company with experience in automotive and consumer finance

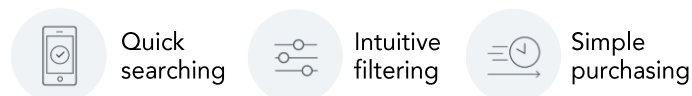
### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/24/15	\$20	Emerald Development Managers; RRE Ventures; SF Capital Group
02/23/15	50	Emerald Development Managers; RRE Ventures

### Products & Services Overview

#### For Car Buyers

Provides easier car buying experience through:



*Online purchase and finance process reduces time spent at the dealership*

#### For Investors



#### Transparent investment decisions:

Make selections with complete access to all details of every loan asset



#### Underwriting and verification diligence:

All loans originated with complete underwriting and verification diligence



#### Servicing and monthly distributions:

Handles all servicing, makes monthly distributions from pool of auto loans and deposits money easily and directly into designated accounts (net of fees)



#### Customizable loan selection:

Provides complete loan details so that performance can be analyzed using any method and can customize selection criteria



### Specialized Data / Analytics



### Company Overview

**CEO:** Chris Metaxas

**Headquarters:** Fort Worth, TX

**Founded:** 2014

- Digital Recognition Network (DRN) provides vehicle location data and analytics for clients in the financial services, insurance and auto recovery industries, helping them optimize their portfolios, reduce losses, detect fraud and manage risk
- DRN uses license plate recognition technology to capture location data through cameras set up around the United States

- DRN is the sister company of Vigilant Solutions, which provides a similar license plate recognition software solution to federal, state and local law enforcement agencies

- The two companies are wholly-owned subsidiaries of holding company VaaS International



### Selected Financing History (VaaS International)

Date	Size (\$ mm)	Investor(s)
01/17/17	\$5	Undisclosed Investor(s)
10/16/15	<1	Undisclosed Investor(s)
04/17/15	61	Undisclosed Investor(s)

### Products & Services Overview

DRN's vehicle data intelligence is mainly used within three end markets:



#### Auto Finance

Helps lenders make loan decisions, detect fraud, improve collections and increase recoveries



#### Insurance

Helps insurers prevent rate evasion and premium leakage, detect fraud and investigate claims



#### Auto Recovery

Helps recovery agencies collect more efficiently and increase recovery rates

### DRN product offerings include:

#### Active Duty Alerts:

- Help maintain compliance by identifying customers who are on active military duty

#### Address Scoring:

- Scores given addresses based on frequency of vehicle sightings

#### Event Links:

- Database of vehicle location sightings used to investigate claims and potential fraud

#### Garage Aware:

- Helps identify where a vehicle is garaged

#### Live Alerts & Location Alerts:

- Detailed notifications and interactive maps help locate vehicles in real-time

#### Loss Alerts:

- Provides alerts and helps reduce losses in the event of impound, salvage, theft or possible fraudulent export

#### Smart Recovery:

- Provides interactive mapping, location alerts and 24/7 live pick-up to increase and quicken recoveries

#### Location Reports:

- Provides optimal addresses for contacting customers



### Telematics



#### Company Overview

- CEO:** Celia Stokes
- Headquarters:** Oakland, CA
- Founded:** 1998
- eDriving is one of the largest providers of online driver training and driver risk management services
    - The company provides basic driving training and education and more advanced driver improvement programs
  - eDriving uses telematics-based mobile apps and other online tools to help users drive safer and reduce their insurance costs
    - The company focuses heavily on the driver and how he or she can improve driving behavior
  - eDriving currently has over a million annual customers and over 700,000 corporate or fleet drivers using its programs worldwide
  - In 2016, eDriving acquired Interactive Driving Systems, a global driver training and risk reduction company to expand its global footprint

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
05/29/12	NA	CIP Capital

#### Products & Services Overview



- Provider of online driver education in the U.S.
- Provides required courses and state certificates to half a million new drivers each year



- Largest U.S. provider of online traffic school
- Easy to use and engaging courses
- Available for addressing court or state requirements or to lower insurance costs



#### Selected Customers:

- Risk Management Solutions
- Online Courses
- Telematics Solutions
- Point Solutions



#### Insurance Solutions

- Acquisition
- Retention
- Risk Reduction
- UBI

#### Partnerships

- Academic Partnerships
- Corporate Partnerships

# Selected Auto FinTech Company Profiles

## EverQuote

AUTO FINTECH



### Online Auto Insurance



#### Company Overview

- Co-Founder & CEO:** Seth Birnbaum
- Headquarters:** Cambridge, MA
- Founded:** 2011
- EverQuote operates an online insurance marketplace for consumers
  - While primarily focused on auto insurance policies, the company has also expanded into home and life insurance
  - EverQuote's data and technology platform helps consumers save time and money during the purchasing process, while also providing carriers and agents with access to high quality leads and potential customers
  - As of October 2016, EverQuote had made over 50 million referrals, with over 5 million people visiting the website each month <sup>(1)</sup>

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
02/22/17	\$36	Savano Capital Partners; SecondAlpha; Link Ventures; Stratim Capital; Oceanic Partners; T Capital Partners
04/30/15	2	Undisclosed Investor(s)

#### Products & Services Overview

##### Products

EverQuote provides online insurance quote comparison services for:



Auto



Life



Home

##### How It Works

**Provide Information:** Users fill out online form, providing personal information and details on their insurance needs.



**Get Connected to Insurers:** EverQuote connects users with local agents who help with finding an insurance policy. EverQuote can also match users with carriers that provide direct online quotes.



**Find the Best Rate:** Users can choose appropriate policies based on price and coverage.



##### Partners

EverQuote works directly with leading auto insurance carriers, including:

esurance

MERCURY  
INSURANCE

FARMERS  
INSURANCE

State Farm

Nationwide

Allstate  
You're in good hands.

PROGRESSIVE

Liberty Mutual  
INSURANCE

EverQuote also works with regional agencies and broker networks, providing them with high quality leads generated from the EverQuote website.



### Next-Gen Rental



### Company Overview

**Founder & CEO:** Scott Painter

**Headquarters:** Santa Monica, CA

**Founded:** 2016

- Fair provides a mobile platform where consumers can shop, get approved and pay for a car
- Fair's pay-as-you-go monthly subscription model provides an alternative to rentals and fixed-term vehicle loans or leases
  - Fair customers can drive their vehicle as long as they want and return it anytime, with five days' notice
- Fair offers pre-owned and certified pre-owned cars through a network of 74 dealerships
- As of October 2017, the company is active in Los Angeles; it plans to expand to the rest of California by the end of 2017 and to select markets nationwide through 2018

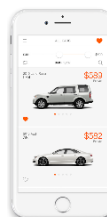
### Selected Financing History

Date	Size (\$ mm)	Investor(s)
10/20/17	\$1,000*	BMW i Ventures; Penske Automotive Group; Mercedes Benz; Sherpa Capital; Undisclosed Investors
09/07/17	16	Javelin Venture Partners; Charles River Ventures; Foundation Capital; Sherpa Capital; Moonshots Capital

### Products & Services Overview

#### Fair for Consumers

##### How it Works:



1. Scan Driver's License
2. Get Monthly Payment Range
3. Choose Car
4. Sign For & Pick Up Car
5. Return & Repeat

*Fair tailors monthly payment range based on user finances*

*Entire transaction is completed within the mobile app*

##### Includes:



##### "Zero-Term"

With monthly subscription model, users can return vehicle anytime

#### Fair for Dealers

The Fair app allows consumers to pre-order a pre-owned or certified pre-owned car from partnering dealership, sign for it on their phone, and pick it up in person.

##### Benefits:

- Offer customers a more flexible alternative to purchasing or leasing a used car
- Build deeper relationships with customers by meeting them more often (for service or when turning in cars)
- Acquire customers for free – Fair covers all advertising and promotional costs and offers one-day funding for every transaction



### Auto Title Loans



#### Company Overview

- CEO:** Gregory Keough
- Headquarters:** Palm Beach Gardens, FL
- Founded:** 2015
- Finova Financial operates an online lending platform for fast, affordable emergency loans based on the equity in a customer's car
  - A Finova equity line of credit provides instant capital, costs up to 70% less than the national average and offers a 12 month payback plan
  - Users can get instant approval decisions and same day cash funding through an entirely online process
  - Finova provides clients with a personalized financial dashboard, allowing them to view their financial health in real-time
  - Finova allows customers to make payments from any computer or mobile device, along with 32,000 US retail locations

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
10/18/17	\$103*	CoVenture; Undisclosed Investor(s)
08/10/16	53*	500 Startups; Al Hamra Group; Compound Ventures; MHS Capital; Refactor Capital; CoVenture
01/28/16	na	500 Startups, CoVenture

#### Products & Services Overview

##### How to Apply

- 1 Fill out online questionnaire
- 2 Provide details about car
- 3 Receive instant pre-approval
- 4 Log in and fill application form
- 5 Receive approval and cash out

##### Benefits

-  Get pre-approved instantly
-  Transparent rates and fee structure
-  Lower monthly payments
-  Helps improve credit score

- 30% Maximum APR
- Pay off at any time with no prepayment penalty / fee
- Part of each payment goes towards the principal
- Online / mobile payments or pay at Walmart or MoneyGram locations
- Available to nonprime consumers





## First Associates

### Loan Systems



### Company Overview

- CEO:** David Johnson
- Headquarters:** San Diego, CA
- Founded:** 1986
- First Associates is a consumer loan servicing firm with over 30 years of experience in the finance industry
  - First Associates' solutions include loan servicing, rehabilitation of defaulted private student loans, portfolio management, solar lease and PPA servicing, cloud based servicing platform, contract verifications, document custodial and paying agent / collateral management services
    - The company also offers back-up servicing on all consumer lending assets for private and public securitizations and lending facilities
  - First Associates is an experienced industry leader in the automotive space, providing turnkey origination / servicing solutions and support for other functions such as verification calls and remarketing
  - First Associates' clients include top-tier money center banks, regional banks, large investment banks and hedge funds in the U.S., credit unions, regional finance companies and trade schools

### Products & Services Overview

#### Solutions

- **Loan and Lease Servicing**

**Scalability** – Cloud-based infrastructure is built to grow as fast as the clients

**Flexibility** – Service a range of new and innovative financial products

**Security** – Industrial strength technology

**Compliance** – Extensive compliance experience

**SSAE 16 II** – Rigorous third party process audits to manage and monitor performance

- **Delinquency Management**

- **Backup Servicing**

- **Support Services**

#### Asset Classes

- **Automotive**
- **Marketplace Lending / P2P**
- **Solar /Energy-Efficiency**
- **Unsecured Consumer Lending**
- **Powersports**
- **Education**
- **Others**



### Auto Service Contracts



### Company Overview

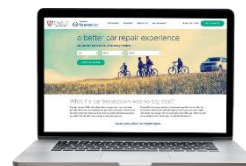
<b>CEO:</b>	Mark Hodes
<b>Headquarters:</b>	Chicago, IL
<b>Founded:</b>	2011
<ul style="list-style-type: none"> <li>ForeverCar operates an online marketplace for car repair protection plans</li> <li>ForeverCar lets customers compare plans, receive quotes and purchase the plan that best fits their needs and budgets</li> <li>Plan costs are based on vehicle age, make, model and mileage on the odometer – additional pricing varies depending on the coverage, from bumper-to-bumper to catastrophic</li> <li>In September 2016, the company announced a strategic partnership with CUNA Mutual Group; it released a co-branded website and marketing platform in October</li> </ul>	

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/05/17	\$15*	CMFG Ventures; Method Capital; Undisclosed Investor(s)
10/26/16	10	CMFG Ventures; KDWC Ventures; Undisclosed Investor(s)
10/25/13	<1	American Auto Shield; Lincoln Park Capital

### Products & Services Overview

#### Apply Online



- 1 Select make, model and year of the car
- 2 Pick a plan based on coverage needs and price point
- 3 ForeverCar will price match any cheaper plan and take another \$500 off

### Benefits



Largest Marketplace of Vehicle Services Contracts



98% Customer Satisfaction



ForeverCar will coordinate repairs, tows, rentals and payments

### Auto Dealers

- Ability to sell vehicle service contracts on the digital self-service platform
- Dealers can collect up to \$250 in commission per contract sold through the platform



### Online Auto Insurance



#### Company Overview

- CEO:** Peter Breitstone
- Headquarters:** Boston, MA
- Founded:** 2007
- Goji operates an online insurance agency, providing customers with an easy way to compare insurance quotes and purchase insurance products
  - Goji provides a personalized level of service through teams of licensed agents that help customers understand their insurance needs and match them with the right policies
  - Goji has partnered with a network of leading U.S. carriers

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
11/15/17	\$15	Hudson Structured Capital Management
06/28/16	19*	Undisclosed Investor(s)
04/15/14	14	Five Elms Capital; Spark Capital; Thayer Street Partners; Village Ventures
02/12/13	53	Charles River Ventures; Five Elms Capital; Spark Capital; Thayer Street Partners; Village Ventures
08/25/10	4	Undisclosed Investor(s)

#### Products & Services Overview

Types of Insurance:



Auto



Homeowners



Motorcycle



Renters



Umbrella

1

Customer provides information to Goji agent through free, personal consultation

2

Agent finds personalized quotes within minutes

3

Agent recommends the best policy for the customer

4

If customer wants to switch, Goji agent guides them through the entire process

Goji associates compare real quotes from a network of trusted providers



# Selected Auto FinTech Company Profiles



## Grab

On-Demand  
Transportation



### Company Overview

- Co-Founder & CEO:** Anthony Tan
- Headquarters:** Singapore
- Founded:** 2012
- Grab is Southeast Asia's leading on-demand transportation and mobile payments platform
  - Grab operates in eight markets across the region: Singapore, Indonesia, Philippines, Malaysia, Thailand, Vietnam, Myanmar and Cambodia
  - In October 2017, Grab hit the 1 billion-ride milestone

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
07/24/17	\$2,000	SoftBank; Didi Chuxing; Macquarie; Toyota
12/12/16	NA	Honda
12/01/16	NA	Tokyo Century
09/20/16	750	SoftBank
08/19/15	350	Coatue Management; China Investment Corporation; Didi Chuxing
12/03/14	250	SoftBank
10/20/14	65	Tiger Global Management; GGV Capital, Vertex Ventures; Qunar; Hillhouse Capital
05/28/14	15	GGV Capital, Vertex Ventures; Qunar
09/19/13	5	Vertex Ventures; 500 Startups

### Products & Services Overview



Grab offers convenient, safe and reliable transportation solutions for drivers and passengers.

Through the app, passengers can choose from a diverse selection of transportation services, such as:



GrabTaxi



GrabShare



GrabFamily



GrabCar



GrabCoach



JustGrab



GrabHitch



GrabShuttle



GrabRentals



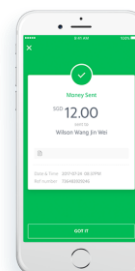
Grab's proprietary mobile payments platform, GrabPay, offers mobile payment solutions for Grab riders, drivers and merchants.

Services offered by GrabPay include:

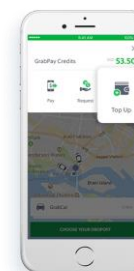
Ride  
Payments



P2P  
Payments



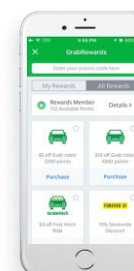
Top-Up  
Services



In-Store  
Payments



Rewards  
Program



### Next Gen Dealership



#### Company Overview

- Founder & CEO:** Nathan Hecht
- Headquarters:** New York, NY
- Founded:** 2015
- Honcker is a marketplace platform that connects customers looking to lease a vehicle with dealerships; Honcker handles the leasing process on both sides
  - Honcker has partnerships with some of the largest dealerships in the U.S., enabling it to provide a personalized and final price to each customer directly on the app
    - Currently has a network of over 200 dealer-partners
  - All leases are “No Money Down” – the customer only pays for the first month lease, bank fee and DMV fees at signing
    - Customer can also roll the fees into their monthly payment
  - Honcker offers complimentary delivery if located in an urban area or 25 miles from a dealership; the dealer will contact customer for pick up if they are out of the delivery range

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
10/23/17	\$4	Evolution Corporate Advisors; Lead Edge Capital

#### Products & Services Overview



##### Search and Browse

Honcker runs smart analytics on all its cars to provide the best possible price – the prices are personalized and final



##### Choose Car

The app allows customers to shop, compare, browse and review with 360° close up views of the exterior and interior of the cars



##### Submit the Lease

Customers digitally fill in information and upload licenses and insurance to complete the contract; Honcker will contact the customer for pick up or delivery

# Selected Auto FinTech Company Profiles

## Innovative Aftermarket Systems (IAS)

AUTO FINTECH



### Auto Service Contracts



#### Company Overview

- President & CEO:** Patrick Brown
- Headquarters:** Austin, TX
- Founded:** 1984
- IAS markets, administers and underwrites finance and insurance (F&I) solutions to dealerships throughout the United States
  - IAS offers its products to automobile dealers through a network of independent agents; its clients include many of the top 100 dealer groups
  - IAS is currently owned by private equity firm Genstar Capital, who acquired the company from CIVC Partners in December 2011
    - CIVC had previously acquired the company in February 2008

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
03/31/16	NA	Genstar Capital
02/18/14	NA	Genstar Capital

#### Products & Services Overview

##### F&I solutions and services offered include:



- Anti-theft, dent protection, environmental protection, GAP, key replacement, prepaid maintenance, TAP, trade assurance, tire, wheel & windshield repair / replacement products



- Comprehensive suite of vehicle service contract programs
- IAS handles administration in-house through relationships with major insurance carriers



- F&I management teams that work closely with dealerships to enhance department performance and establish best practices



- F&I software suite for dealers to enhance customer experience while maintaining quality products, legal compliance and profitability



- Hands-on sales and management training for dealership / F&I department staff



- Allows dealers to reinsure all aftermarket products offered by IAS



### Online Auto Insurance



#### Company Overview

**Founder & CEO:** Snejina Zacharia

**Headquarters:** Cambridge, MA

**Founded:** 2013

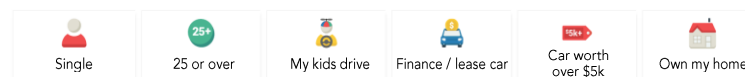
- Insurify provides an online auto insurance quote comparison platform, helping simplify the auto insurance purchasing experience
- Insurify's artificial intelligence insurance chatbot, Evia, uses predictive modeling and advanced analytics to help customers
  - Evia enables users to quickly compare car insurance quotes from dozens of carriers within Facebook's Messenger app
  - Users can upload pictures of their license plates and share other key information with the chatbot, which will then show various insurance policy quotes and make recommendations

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
03/16/17	\$5	MassMutual Ventures; Nationwide Ventures; Rationalwave Capital Partners; Undisclosed Investor(s)
01/28/16	2	Rationalwave Capital Partners
02/20/15	2	Rationalwave Capital Partners; Undisclosed Investor(s)

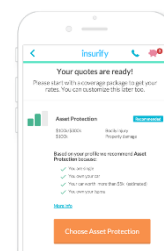
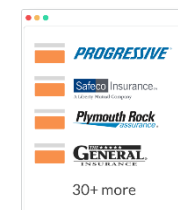
#### Products & Services Overview

Compare car insurance with quick price and coverage calculator



#### Real, accurate quotes

See quotes you can trust, because Insurify works directly with the insurance companies to get them for you

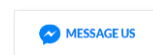


#### Recommendations, tailored to you

Get personalized recommendations based on your unique needs and preferences

#### Your personal insurance agent

Send a photo of your license plate on Facebook Messenger, compare quotes, get advice and sign up for rate alerts





### Online Auto Insurance



### Company Overview

**CEO:** Crispin Moger  
**Headquarters:** Peterborough, UK  
**Founded:** 2006

- Marmalade provides affordable auto insurance for every stage and step of the driving journey
- Marmalade's offerings for drivers includes:
  - Learner Driver Insurance:** Instant online insurance from 1.84 per day (30,60 or 90 day policy)
  - New Driver Insurance:** Black box insurance for before and after license test
  - Student Driver Insurance:** Short-term insurance on a family member or friend's car; instant coverage for full license holders
  - Cars For Young Drivers:** Exclusively for 17-24 year-olds, 12 months free insurance with purchase of a new car (affordable finance options available)
- Marmalade's drivers are 3 times safer on the road than the national average, based on Marmalade policies inception April 2015 – March 2016

### Products & Services Overview

#### Car & Insurance for Young Drivers

for every step of the driving journey



#### 1 Learn to drive

Affordable coverage while you are learning to drive in a family car or in your own car



#### 2 Buy a car

Buy brand new wheels with 12 months free insurance – covering you before and after your test



#### 3 Get driving

Annual insurance after you've passed on your car or parent's, and short term cover for students

### Learner Driver Insurance



Comprehensive Cover



10% Discount on Student Driver Insurance



Protect Owner's No Claims Bonus



Rated Excellent



Flexible Cover



Practice Makes Perfect



Instant Cover

### New Driver Insurance



Earn your own no claims discount



Full or provisional license



Black box technology



No curfews, drive 24/7



#### Family Car



No risk to the owner's No Claims Discount  
Comprehensive cover



#### Your Car



Our best price upfront  
Instant comprehensive cover



### Online Auto Insurance



### Company Overview

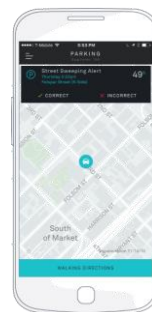
- CEO:** Dan Preston
- Headquarters:** San Francisco, CA
- Founded:** 2011
- Metromile provides per-mile car insurance products and services, such as claims services, roadside assistance and accidents claims
  - Offers mileage-based pricing by calculating users' insurance costs each month based on the actual miles they drive
  - Per-mile insurance is enabled by Metromile Pulse, a free wireless device that plugs into a vehicle's diagnostic port, allowing Metromile to track user mileage in real-time
  - Per-mile insurance is currently available in California, Illinois, New Jersey, Oregon, Pennsylvania, Virginia and Washington

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/21/16	\$50	China Pacific Insurance
02/16/16	103	First Round Capital; Index Ventures; Intact Financial Corporation; Mitsui & Co. Global Investment; New Enterprise Associates; SV Angel
12/31/14	38	Undisclosed Investor(s)
04/29/13	10	First Round, Felicis Venture
07/09/12	4	New Enterprise Associates; Index Ventures; First Round Capital; SV Angel

### Products & Services Overview

#### The Smart Driving App



#### Vehicle Tracking

Always know where your car is parked and the ideal path to get there

#### Trip Optimization

Optimize trips by seeing how speed varies on each trip, how much gas is spent and how long the drive takes

#### Car Health

Get a diagnosis of your car's running condition and even contact a mechanic with any questions.

#### Alerts

Get street sweeping alerts to avoid future tickets (in select cities)

Metromile covers every step of the claim process



#### Collect Information



#### File A Claim



#### Appraisal & Repair



#### Get Back to Driving

AVA, an artificial intelligence claims assistant, helps verify claims and guides users through the process

Once a claim is filed, customers are matched with a dedicated Metromile claims professional who helps them resolve the claim

Metromile acquired an insurance carrier in September 2016, enabling it to underwrite its own policies and manage the entire claims process



## Nauto

### Fleet Management



### Company Overview

- Founder & CEO:** Stefan Heck
- Headquarters:** Palo Alto, CA
- Founded:** 2015
- Nauto is an artificial intelligence-powered safety system that makes any commercial vehicle safer and smarter
    - By monitoring and analyzing external road conditions, vehicle data, and driver behavior, Nauto detects distracted driving and coaches drivers to develop safer habits in real-time to avoid collisions before they even occur
  - Outside of the vehicle, safety leaders and fleet managers can further improve fleet safety by easily identifying risky driver behavior with Nauto's proprietary VERA Score, and streamline insurance claims with bi-directional video recordings automatically uploaded to the cloud
  - The company has partnered with commercial fleets, insurers, technology firms, and automotive original equipment manufacturers (OEM), around the globe and has offices in the U.S., Europe and Japan

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
06/30/17	\$159	Allianz Digital Corporate Ventures, BMW i Ventures, Draper Nexus Venture Partners, General Motor Ventures, Greylock Partners, Playground Global, SoftBank Vision Fund, Toyota AI Ventures
03/28/16	12	Allianz Digital Corporate Ventures, BMW i Ventures, Draper Nexus Venture Partners, Index Ventures, Playground Global, Toyota Research Institute

### Products & Services Overview

#### The Nauto Device

Nauto's AI-powered safety device and data platform monitors distractions and risky maneuvers, detects collisions, and tracks driver behavior in real time



#### Bi-directional Video

Automatically detects, records and uploads collisions, helping fleets cut claim costs and reduce driver risk and liability



Automatic Driver Identification



VERA Score™:  
Driver Scoring and Evaluation



Live Map & Driving History

#### Industry Applications



#### Commercial Fleets:

Improve driver safety and reduce collisions



#### Insurance:

Handle claims faster and optimize pricing



#### Tech:

Integrations and APIs offer endless avenues for collaboration



#### Automotive:

Power smart and autonomous vehicles

# Selected Auto FinTech Company Profiles

Octo



## Telematics



### Company Overview

**Founder & CEO:** Fabio Sbianchi

**Headquarters:** London, United Kingdom

**Founded:** 2002

- Octo is a top global provider of telematics and data analytics solutions for the auto insurance industry
- Octo collects contextual driver and vehicle data and turns the information into actionable solutions to benefit auto insurers and policyholders
- Currently, Octo has over 4.8 million connected users and over 60 insurance partners
- Octo keeps a database of telematics data, which has over 146 billion miles of driving data, having analyzed over 379,000 crashes and insurance events

### Selected Transaction History

Date	Type	Size (\$ mm)	Acquirer / Investor(s)
11/25/14	Financing	NA	Pamplona Capital Management
02/04/14	Buyout	\$547	Renova Group
04/02/10	Buyout	NA	Charme Capital Partners; Amadeus Capital Partners; Keensight Capital

### Products & Services Overview

#### For Drivers

*Monitor key driving metrics to calculate an accurate personal score for insurers*



Location Duration Direction Distance Collision Cornering Braking Condition

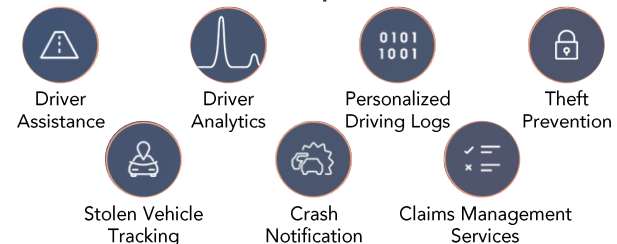
#### Car Rental & Fleet

*Track vehicles and monitor performance in real time*



#### Automotive

*Connect customers with potential auto insurers*





## Openbay

Auto Repair / Roadside Assistance



### Company Overview

- Founder & CEO:** Rob Infantino
- Headquarters:** Cambridge, MA
- Founded:** 2011
- Openbay provides a mobile application for auto repair and maintenance services
  - Through its online marketplace, Openbay helps consumers find, book and pay for service from certified local auto repair shops
  - Openbay does not charge repair shops any upfront or monthly fees; instead, it charges shops a percentage fee on all services completed
  - Openbay recently announced the launch of an on-demand roadside assistance product, available through its mobile app

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
02/20/15	\$6	Koa Labs, Undisclosed Investor(s)
10/28/13	NA	Andreessen Horowitz, Boston Seed Capital, Google Ventures, Stage 1 Ventures, Undisclosed Investor(s)

### Products & Services Overview

#### How it works:



- 1. Choose or describe service:**  
Users select what services they need or maintenance level; can also describe vehicle symptoms to request a diagnosis



- 2. Browse shops and review quotes:**  
Local repair shops in the Openbay network review service requests and provide quotes; users can compare quotes by location, ratings and price



- 3. Book an appointment:**  
Appointments can be easily scheduled through the user's account; Openbay handles payment after service is completed

#### Openbay Guarantee:



- Repair shops on the Openbay network are extensively screened for high quality and customer experience
- Repair shops are required to review any pricing changes from the initial quote with the customer, prior to initiating incremental services
- At certified repair shops, customers can pay for service through Openbay's secure payment system



### Payments



### Company Overview

<b>President, CEO &amp; Chairman:</b>	Don Frieden
<b>Headquarters:</b>	Houston, TX
<b>Founded:</b>	2012
<ul style="list-style-type: none"> <li>P97 Networks provides cloud-based mobile commerce and digital marketing solutions for the retail fuel industry</li> <li>P97 provides a white-label mobile payments and loyalty marketing platform, helping fuel companies develop apps their customers can use to pay for fuel and goods and receive targeted offers</li> <li>P97 has established several strategic partnerships with prominent players in the payments space, including Chase, Mastercard and Verifone</li> <li>P97 first launched its PetroZone product in 2014</li> <li>Brands currently using the PetroZone platform include Phillips 66, Conoco, 76, Gulf Oil and Sinclair Oil Corporation</li> </ul>	

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
07/14/15	\$9	Emerald Technology Ventures; ATAPCO

### Products & Services Overview

**PetroZone** – cloud-based mobile commerce and digital marketing platform for retail gas stations



- Provides consumers with the ability to pay for gas and for goods with their smartphones, increasing convenience and security, and in-store spend
- Leverages consumer, proprietary and third-party data to deliver personalized deals to consumers
- Integrates with existing POS and electronic payment systems
- Innovative connected car app with Honda and auto manufacturers
- Supports many payment choices from proprietary cards, branded debit and credit cards, fleet cards, private label ACH and integrations to front-end processors, payment networks and mobile wallets

**Guides consumers through the entire retail gas and convenience store shopping experience from beginning to end**



App provides GPS navigation to nearest brand-preferred gas station



Users use their smartphones to quickly and securely purchase gas



Users receive geo-targeted, personalized digital offers for products and fuel discounts



Users use their smartphones to securely purchase goods in-store, increasing CPG spend and traffic



## PointPredictive

### Loan Systems



### Company Overview

- CEO & Chairman:** Tim Grace
- Headquarters:** San Diego, CA
- Founded:** 2013
- PointPredictive builds and delivers innovative predictive risk management and consumer solutions for the auto lending, consumer lending, mortgage lending, online retail, real estate and consumer rental markets
    - The company's primary markets are auto lending, mortgage lending and online retail
  - PointPredictive combines modern technology platforms, extensive business experience and advanced data science to develop solutions for business problems
  - PointPredictive has established the Automotive Lending Fraud Consortium, a partnership between thirteen lenders (representing more than a third of U.S. auto lending originations) to share patterns of fraud in their auto lending data

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
07/05/17	NA	Mosaik Partners; Undisclosed Investor(s)

### Products & Services Overview

*PointPredictive provides artificial intelligence-based predictive solutions for:*



#### Automotive Lending Risk Management

- Helps finance companies and banks detect dealers with risky behavior
- Delivers powerful predictive analytics, reporting and case management capabilities



#### Mortgage Lending Risk Management

- Helps mortgage lenders detect fraud and early payment default risk in each application
- Combine each lender's own data with a fraud consortium to build the best model



#### Retail Transaction Risk Management

- Helps retailers detect Card Not Present schemes and other forms of fraud
- Leverage both internal retailer data and external consortium data to build the best model



#### Consumer Alternative Lending / Vacation Rental Screening

- Helps vacation home landlords screen tenants for identity, credit and fraud risk
- Simple, intuitive and inexpensive screening app



# Selected Auto FinTech Company Profiles

## rateGenius

AUTO FINTECH



Online Finance  
Marketplaces / Lenders



### Company Overview

**CEO:** Chris Brown  
**Headquarters:** Austin, TX  
**Founded:** 1999

- rateGenius is a nationwide online auto loan refinancing platform
- rateGenius matches customers with competitive interest rates to refinance their cars, trucks and SUVs through a network of more than 160 lenders
- As of September 2017, rateGenius had funded over \$7 billion in auto refinance loans since inception
- In October 2017, rateGenius divested its insurance business unit to Seeman Holtz Property & Casualty, a Florida-based national insurance agency

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
05/26/10	\$2	Undisclosed Investor(s)

### Products & Services Overview



#### Auto Refinance

Works with over 150 lenders to provide competitive refinance rates



#### Vehicle Products

Provides other vehicle-related products such as GAP waivers and vehicle service contracts

#### 1. Apply for refinancing

- Customer provides:
  - Current loan information (name of current lien holder, current monthly payment)
  - Vehicle information (make, model, style, mileage, VIN)
  - Contact information (phone number, email address, employment)

#### 2. Find a loan

- rateGenius works with its network of banks and credit unions and finds the best qualifying interest rate and monthly payment
- rateGenius compares customer options and helps customer choose

#### 3. Complete the refinancing

- rateGenius will negotiate on the customer's behalf and provide loan documents for review
- Customer signs the appropriate paperwork
- rateGenius' fulfillment team manages the final steps of the refinancing process



## RepairPal

Auto Repair / Roadside Assistance



### Company Overview

- CEO:** Art Shaw
- Headquarters:** San Francisco, CA
- Founded:** 2007
- RepairPal is a leading auto repair website that connects consumers with auto repair shops across the United States
  - RepairPal has built a nationwide network of over 1,900 certified repair shops
    - Repair shops in the network undergo a rigorous approval process, ensuring that the shops are offering high-quality work from expert technicians at a fair price
  - Over 4 million people per month use the RepairPal platform to find high quality auto repair shops

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
11/11/14	\$6	USAA
02/11/13	13	Cars.com, Castrol InnoVentures
08/05/11	1	Undisclosed Investor(s)
12/16/09	7	Tugboat Ventures

### Products & Services Overview

#### Price Estimator



- Provides personalized, instant fair price estimates for auto repair work
- Estimates are based on customer car make, model and year as well as national averages and costs in the customer's area
- Covers nearly every car built since 1990

#### RepairPal Certified Shops



- Certified shops agree to honor a price guarantee, where the cost of repairs cannot exceed the estimated range provided by RepairPal
  - RepairPal guarantees a refund if the price exceeds the estimate
- Certified shops also offer a minimum 12-month / 12,000-mile warranty on repairs
- Shops must pass a rigorous approval process including high customer satisfaction before becoming certified



## Root

### Online Auto Insurance

# ROOT

### Company Overview

- Co-Founder & CEO:** Alexander Timm
- Headquarters:** Columbus, OH
- Founded:** 2015
- Root is an insurance company that provides telematics-based auto insurance policies through a mobile app
  - While other insurers focus on more traditional demographic data such as age, gender, marital status and occupation, Root's underwriting process focuses on driving behavior data collected through its mobile app
    - The app turns a user smartphone into a telematic device that gathers data on driving behaviors
    - Factors measured include how fast a driver accelerates / brakes, tailgating patterns, swerving, braking patterns, changing lanes, distracted driving and other related data
  - Root operates direct-to-consumer – through the mobile app, users can obtain quotes, purchase policies and file claims

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
10/25/16	\$4	Drive Capital
03/25/15	3	Drive Capital

### Products & Services Overview

#### How it works:



1. Download the Root App



2. Take a Test Drive



3. Choose and Pay for a Policy

#### Features



Invite Family Members to Drive with Root



View Your Insurance Card at Anytime



Cancel Your Current Policy and Receive Refunds



Request Roadside Assistance



Report a Claim



## RouteOne

### Dealer Solutions



### Company Overview

- CEO:** Justin Oesterle
- Headquarters:** Farmington Hill, MI
- Founded:** 2002
- RouteOne was formed in 2002 by Ally Financial, Ford Motor Credit, TD Auto Finance and Toyota Financial Services to improve the F&I process for automobile dealers and their customers
  - RouteOne's platform delivers a comprehensive suite for F&I solutions across multiple channels: in store, online and via third-party solutions
    - The platform connects thousands of consumers, finance sources and dealers in North America
  - eContracting, credit applications, compliance and online & mobile retail services are several of its flagship products

### Selected Management Team



Justin Oesterle  
CEO



Janice Basile  
CFO



Brad Rogers  
COO

### Products & Services Overview



#### Digital Retail Services: *Streamline vehicle buying process*

- Embedded online credit application
- Mobile point-of-sale app
- eSign
- Compliance



#### eContracting: *Speed up contract funding*

- Automate contract process
- Mobile eContracting application
- Integrated paper faxing and imaging
- Integrate with leading DSPs
- Supports retail and lease products as well as traditional and SPOT delivery sales



#### Menu: *Customizable Sales and Closing Tools*

- Present aftermarket products
- Real-time eRating
- Best-matched, unbiased products matched to customers' profiles
- Customizable reports



### On-Demand Transportation



#### Company Overview

**Co-Founder & CEO:** Rob Sadow

**Co-Founder & CPO:** Jon Sadow

**Headquarters:** San Francisco, CA

**Founded:** 2015

- Scoop brings commuters together to enjoy a smooth carpooling experience - unlocking new opportunities to create friendships, improve their well-being and make the most of their time
- Scoop is operational in the Bay Area, Seattle, and is coming to more cities in 2018
- Scoop is frequently offered as an employee benefit by top employers
  - Key partners include LinkedIn, Symantec, Workday, Applied Materials, Bishop Ranch, and more
- Scoop has partnered with cities and transportation groups like BART (Bay Area Rail Transit)
- As of October 2017, there were 100,000+ commuters on the Scoop platform and nearly 2 million carpool trips taken to date

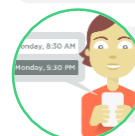
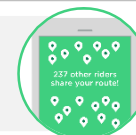
#### Selected Financing History

Ann. Date	Size (\$ mm)	Investor(s)
11/09/17	\$31	G2VP; Index Ventures
11/08/17	11	Index Ventures; Signia Venture Partners; BMW i Ventures
05/24/16	5	Signia Venture Partners; Index Ventures; BMW i Ventures; Workday Ventures
10/02/15	NA	Signia Venture Partners; Index Ventures; Workday Ventures; Undisclosed Investor(s)

#### Products & Services Overview

##### How It Works

**Be part of the community:** Download and meet Scoop carpoolers who are heading the same way. Get free Carpool Credits when you choose Scoop.



**Schedule a carpool:** Separate AM and PM trips to fit your work schedule. Ride or drive to meet your daily needs.

**Get matched:** Scoop's algorithm identifies the most efficient trip based on the fastest route, nearby carpoolers, carpool lanes, and more.



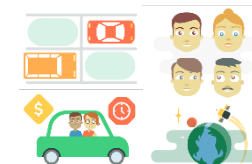
**Enjoy a smooth commute:** Meet new people, have more energy every day, and make the most of your time.

##### Scoop for Employers

The Managed Carpool Program enables employers to implement an impactful commute solution for employees. The program includes customized engagement, reporting & analytics and ongoing account management to hit your organization's objectives.

##### Benefits:

- SOV Reduction, every day
- Attract and retain talent
- Happier, more connected employees
- Hit your sustainability goals





## Scope Technologies

### Telematics



#### Company Overview

**CEO:** Monty Nussbaum

**Headquarters:** NA

**Founded:** 1999

- Scope Technologies provides advanced, industry-grade telematics and related end-to-end solutions to insurance providers, fleet operators and aftermarket service providers
  - Scope's DriverProfile solution enables insurers to better manage client risk, encourage safe driving and provide lower policy costs
  - Scope's telematics solutions help fleet operators reduce costs and run vehicles more efficiently
  - Scope's "Connected Car" solution helps auto servicing centers and consumer service providers offer a variety of useful applications to their clients
- Scope has customers in more than 50 countries across 5 continents, including established companies like Mazda, Shell, Toyota and Vodafone

#### Products & Services Overview

##### DriverProfile Usage-Based Insurance



- Integrated Driver Scoring Technology
- Advanced design, integration, deployment and support
- Self-calibrating Advanced Pattern Recognition

##### Fleet Focused ERP Systems



- Cost analysis of wear and tear, driver time, idle time
- Proactive vehicle maintenance and cost management
- Driver behavior and route monitoring
- Workforce optimization
- Tracking and analyzing fleet factors including fuel and driver overtime

##### Aftermarket Connected Car Solutions



- Preventative maintenance alerts and scheduling
- Automatically-generated records for complete transparency between consumers and service providers
- Reckless driving alerts for family members
- Location traction for parked cars
- Driving and fuel optimization benchmarking

# Selected Auto FinTech Company Profiles

## Snapshot

AUTO FINTECH



### Auto Claims Technology



#### Company Overview

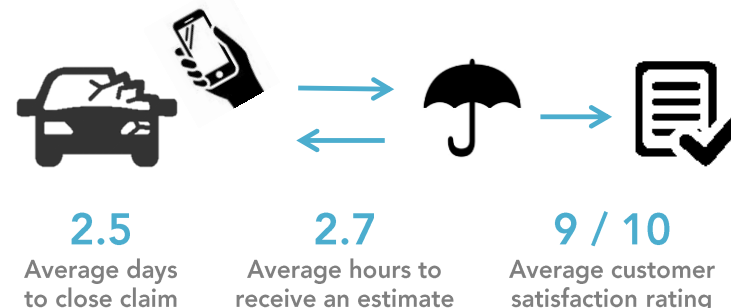
- Founder & CEO:** Brad Weisberg
- Headquarters:** Chicago, IL
- Founded:** 2010
- Snapshot's mobile insurance claims solution streamlines the process of getting an estimate and settling a claim
    - The mobile app is a self-service, white-label claims solution for auto insurance carriers
    - Through the mobile app, users can upload photos of any damage and receive an estimate from their insurer
  - Snapshot's virtual claims process involves powerful workflows that streamline and coordinate communication between carriers, customers, and repair facilities
  - Snapshot has partnered with a number of major auto insurance providers to increase its user base

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
06/13/17	\$12	Tola Capital
10/14/16	20	F-Prime Capital; IA Capital Group; Liberty Mutual Strategic Ventures; Intact Ventures
08/16/13	10	Undisclosed Investor(s)
01/05/12	1	Lightbank; OCA Venture Partners; Pritzker Group Venture Capital
09/27/11	<1	Lightbank

#### Products & Services Overview

##### INSURANCE CUSTOMERS



##### INSURANCE CARRIERS



#### Adjusters

Make adjusting simpler and reduce cycle time



#### Technology

Optimize virtual claims operations



#### Training

Customer support and real-time analytics



##### REPAIR FACILITIES



#### Seamless Supplement Process

Snapshot provides a dedicated shop support team to communicate with shops, adjusters, and customers





### Telematics



### Company Overview

**CEO:** Kevin Weiss

**Headquarters:** Irvine, CA

**Founded:** 2002

- Spireon provides a leading connected vehicle platform that helps customers convert driving data into actionable insights
  - Businesses and consumers use the platform to track, manage and protect their mobile assets
- Spireon's platform now supports more than 3 million active subscribers across the U.S.
- In 2011, Bertram Capital acquired and merged ProconGPS, Procon Fleet Services and EnfoTrance to create one corporate entity; this company changed its name to Spireon in 2012

### Selected Transaction History

Date	Size (\$ mm)	Investor(s)
07/11/12	\$8	Undisclosed Investor(s)
02/18/11	NA	Bertram Capital Management

### Products & Services Overview

#### Fleet Management Software



#### Stolen Vehicle Recovery

*With Spireon SkyLink*

- ✓ 24/7 theft protection
- ✓ GPS / cellular technology
- ✓ No subscription fees
- ✓ Fully transferable
- ✓ Coast to coast coverage

#### GPS Vehicle Tracking

*With NSpire Platform*

- ✓ Also available on mobile
- ✓ Reliable coverage and connections
- ✓ Virtually 100% tracking capability
- ✓ Flexible solutions can scale up or down
- For used car dealers
- For new car dealers
- For fleet businesses
- For trailer tracking

#### Workforce Management

*With ServiceVision*

- ✓ Easily manage techs at a glance
- ✓ Monitor progress in the background
- ✓ Measure team productivity
- ✓ Fast, accurate customer billing
- ✓ Increase quote approval rate

#### Fuel Management

*With Spireon WatchCard*





## SpringboardAuto

Online Finance  
Marketplaces / Lenders



### Company Overview

- Founder & CEO:** Jim Landy
- Headquarters:** Irvine, CA
- Founded:** 2015
- SpringboardAuto operates an online direct auto finance platform that helps consumers obtain financing and navigate the vehicle purchase process
    - The company offers faster decisions, increased transparency, personalized loan terms and support throughout the loan process
    - The company leverages data and analytics to provide real-time credit decisions to its customers
  - SpringboardAuto has partnered with CUNA Mutual Group to provide auto loans to consumers who are unable to get vehicle financing through their credit unions

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
02/23/16	NA	CUNA Mutual Group

### Products & Services Overview

#### Transactions Supported



**Private Party Purchases:** offers loans for customers looking to purchase a vehicle from a private party seller



**Dealer Purchase:** offers direct loans for customers looking to purchase a vehicle from a dealership



**Auto Loan Refinancing:** offers loans for customers looking to refinance existing auto loans

#### SpringboardAuto Features:

- Personalized Loan Terms:** loan sizes range from \$7,500 – 45,000, with the customer able to customize loan terms to fit their needs
- Pre-Qualification and Quick Decisions:** online application allows customers to check if they pre-qualify, without affecting their credit
- Inspection:** customers can have the vehicle they wish to purchase inspected at the seller's convenience
- Closing:** on closing day, a closing agent will meet the customer and seller to help sign all relevant paperwork
- Payment:** SpringboardAuto issues payment to the seller electronically, upon closing

### Dealer Solutions



#### Company Overview

- President:** Patrick DeMarco
- Headquarters:** Dallas, TX
- Founded:** 1998
- Tail Light provides software solutions to the retail automotive market
  - Tail Light's software-as-a-service platform is used by dealerships to increase productivity and profitability within their finance and sales departments
  - Tail Light also offers clients a branded app and accompanying OBD device, with several features that help dealerships maintain and strengthen relationships with their customers

#### Management Team



**Patrick DeMarco, President**

- Joined Tail Light in 2005
- Experience in the auto space working at J.D. Power and Associates, Nissan and Ford



**Todd Proctor, Chief Financial Officer**

- Joined Tail Light in 2009
- Previously COO and CFO at CLB Partners

#### Products & Services Overview

##### Dealer F&I Solutions



**Reporting:** Monitor and manage finance and sales department productivity and production



**Offerings:** Configure transactions, engage customers and seamlessly facilitate empowered presentations



**Commerce:** Facilitate core business tasks associated with electronic rating, contracting and remittance

##### Consumer App / OBD Device



Provides dealerships with a branded mobile app that they can offer to their customers



Optional adapter unlocks enhanced app features



Request Appointments



Multiple Vehicles



Custom Care Plans



Targeted Marketing



In-App Notifications



Driving History



Real-Time Insights



Service Alerts



Vehicle Location



Service Requests



## The Floow

### Telematics



THE FLOOW

### Company Overview

**Founder & CEO:** Aldo Monteforte

**Headquarters:** Sheffield, United Kingdom

**Founded:** 2012

- The Floow utilizes user smartphone sensors and contextual analysis to provide an advanced risk management solution to the automotive and motor insurance industries
- Using large-scale geo-data collection, analysis and integration, The Floow accurately reevaluates risk factors (such as driver behavior, speed in context and circumstances) when considered for pricing
- The Floow's telematic services also provide specific safety recommendations for drivers to improve personal driving performance
- The Floow's platform includes an integrated crash notification and emergency response feature for drivers in an accident

### Selected Financing History

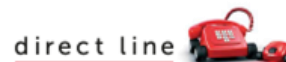
Date	Size (\$ mm)	Investor(s)
03/06/17	\$16	Fosun Capital Group, Direct Line Group, United Electronics Company
07/08/14	NA	Direct Line Group

### Products & Services Overview

#### Unique Attributes

- Fully autonomous telematic apps for Android and iOS
- Full compatibility with any telematic data source including fitted modules, OBD devices and original equipment
- Contextual data enhancement via proprietary 'big data' techniques resulting from decades of academic research
- Automated generation of actuarial insights regarding scoring, premiums, claim management and fraud prevention
- Integrated e-learning modules grounded in the psychology of driver behavior
- Personalized coaching program run created by Dr. Lisa Dorn and proven to significantly improve scores and claims experience
- Integrated rewards platform to engage the good drivers

#### Select Clients



# Selected Auto FinTech Company Profiles

## The Zebra

AUTO FINTECH



### Online Auto Insurance



#### Company Overview

**CEO:** Keith Melnick  
**Headquarters:** Austin, TX  
**Founded:** 2012

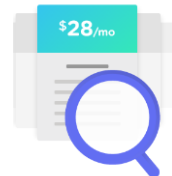
- The Zebra is an online auto insurance comparison platform, which compares more than 200 of the nation's top auto insurance carriers and provides consumers with real-time quotes
- The Zebra is licensed in almost every state and has the ability to give both low-risk and high-risk drivers competitive rates

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
09/19/17	\$40	Accel Partners
01/26/16	13	Ballast Point Ventures; Daher Capital, Silverton Capital
12/05/13	3	AlphaLab; Birchmere Ventures; FLOODGATE Fund; Innovation Works; Silverton Partners; Swallow Point Ventures
01/31/13	2	AlphaLab; Birchmere Ventures; FLOODGATE Fund; Innovation Works; Silverton Partners; Swallow Point Ventures

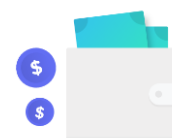
#### Products & Services Overview

##### Compare Real Quotes



- The Zebra compares quotes from over 200 insurance companies at once
  - 24x times the average insurance agent
- Comparison engine automatically simplifies options by matching customer needs with the best car insurance companies near the customer's location

##### Find Big Savings



- Prevents customers from overpaying for insurance with less coverage
- Provides real time quotes from top insurance companies in 90 seconds

##### Customized Coverage



- Coverage is customized to meet specific customer needs
- Ensures customers have the coverage they need while keeping their wallet secure

✓ Four million drivers have saved an average of **\$368** per year on car insurance

✓ **68%** of drivers save between **\$250 – 486** annually

### Telematics

## TrueMotion

### Company Overview

- CEO:** Ted Gramer
- Headquarters:** Boston, MA
- Founded:** 2012
- Formerly known as Censio, TrueMotion provides a technology-enabled platform that accurately captures driver behavior and enables insurance companies to distinguish between risky and safe drivers
  - The TrueMotion app uses sensors in a user's phone to track each trip the user takes, score the trip based on how distracted the driver was (i.e. focused on the road vs. dialing the phone or texting) and provide feedback for how to improve
  - Insurers on the platform can offer rewards and discounts to safe drivers, resulting in money saved on policy payments and an overall reduction in accidents on the road

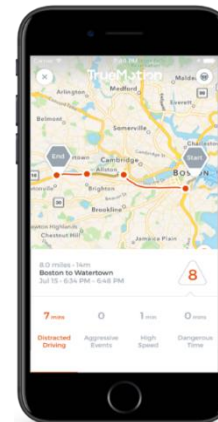
### Selected Financing History

Date	Size (\$ mm)	Investor(s)
10/06/15	\$10	General Catalyst Partners, Bain Capital Ventures, Lakestar

### Products & Services Overview



- The TrueMotion app offers a user-friendly dashboard that includes a breakdown of a users driving history on occurrences such as:
  - Distractions
  - Aggressive Events
  - High Speeding
  - Dangerous Times
- The app also provides a TrueMotion Family platform, where families can sign up together and track the driving capabilities of each family member



- Each trip is scored on a scale of 0 to 100
- The app provides precise feedback on where the driver did well and where the driver can improve
- Overall, drivers have reduced distracted driving by 75% by using TrueMotion**



## Zendrive

Telematics



Zendrive

### Company Overview

**Co-Founder & CEO:** Jonathan Matus

**Headquarters:** San Francisco, CA

**Founded:** 2013

- Zendrive provides a data and analytics platform that utilizes smartphone sensors to gather data on driver behavior and detect collisions
- Zendrive's platform is completely software-based and can be easily integrated into a company's existing driver app
- Zendrive has established partnerships with leading companies in the space, including:
  - GasBuddy, a provider of real-time, crowdsourced information on fuel prices and gas stations, to develop new uses for its AI technology and driver analytics platform
  - Atlas Financial Holdings, a leading passenger fleet insurance company, to identify and reduce risky driving behavior and prevent collisions for its fleet and transportation drivers
  - Milliman, an actuarial firm, to develop a predictive risk model up to 6x better than other leading UBI models

### Selected Financing History

Date	Size (\$ mm)	Investor(s)
02/05/16	\$15	Sherpa Capital, BMW i Ventures, Collaborative Fund, Expansion Venture Capital, First Round Capital, Fontinalis Partners, IT-Farm Corporation, Nyca Partners
08/29/13	2	First Round Capital, Undisclosed Investor(s)

### Products & Services Overview

Zendrive's software can be integrated into a fleet's own driver app, adding the following features:



#### Zenfleets

Dashboard interface where managers can measure and optimize fleet safety and efficiency



#### Collision Detection

Detects when a collision has occurred, prompting a response (such as notifying emergency services, roadside assistance and/or emergency contacts)

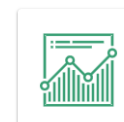
*Zendrive also provides its proprietary driving behavior data to auto insurers, helping them better measure and price risk*

### How it works:



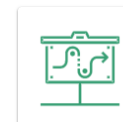
#### Measure data

Zendrive measures driving behavior events and risk-related contextual data through app



#### Score results

Proprietary algorithms calculate predictive safety scores and insights



#### Improve behavior

AI identifies risky patterns and coaches drivers for improved behavior



### Telematics



#### Company Overview

- CEO:** Gary Tucker
- Headquarters:** Charleston, SC
- Founded:** 2012
- Zubie provides a hardware device that connects vehicles to the internet to deliver insights on real time location, trip history, maintenance alerts, engine diagnostics and driving behavior
  - Zubie's connected car devices are used by consumers, insurers, small businesses, large fleets and auto dealers
  - Zubie was founded in 2012 as a joint venture between Best Buy and OPENAIR Equity Partners

#### Selected Financing History

Date	Size (\$ mm)	Investor(s)
05/24/16	\$6	Melody Capital Partners, OPENAIR Equity Partners, Castrol InnoVentures, Comporium, Nokia Growth Partners, BP Ventures, Magna
06/04/15	2	Nokia Growth Partners
08/11/14	8	Nokia Growth Partners, Magna, OPENAIR Equity Partners, Castrol Innoventures, Comporium
12/12/13	10	Castrol InnoVentures, OPENAIR Equity Partners, Comporium

#### Products & Services Overview

##### Zubie Key



Hardware device that plugs into a vehicle's OBD-II port, enabling it to connect to the internet

Premium version also offers in-car WiFi connectivity through partnership with Verizon



**After plugging in the Zubie key, users can access Zubie features through its mobile app or web interface**

#### Consumer Features

##### For consumers / families, Zubie offers:

- Detailed trip history and real-time location tracking
- Alerts on bad driver behavior (i.e. hard braking) and insights on how users can improve driving habits
- Maintenance alerts, engine diagnostics, low / dead battery alerts and on-demand roadside assistance
- "Zubie Perks": customized automotive discounts on insurance, maintenance, parts and services

#### Enterprise Features

##### For businesses / enterprises, Zubie offers:

- Reports and dashboards on driver performance
- Fleet tracking with real-time alerts and trips history
- Scheduled service alerts that detect engine and battery problems and check fuel levels



## IX. Selected Transaction Profiles

# Selected Transaction Profiles

## Selected Auto FinTech Transactions

AUTO FINTECH



Announced Date	Company	Transaction Overview	Research Profile
11/27/17	 radius <small>Payment Solutions</small>	Radius Payment Solutions Raises £150 million in Financing	<a href="#">VIEW</a>
11/15/17	 Goji	Goji Raises \$15 million in Financing	<a href="#">VIEW</a>
11/15/17	 易鑫集團 YIXIN GROUP	Yixin Group Completes its IPO, Raising Approximately \$867 million	<a href="#">VIEW</a>
10/18/17	 ASSURANT®  the warranty group	Assurant Acquires The Warranty Group for \$2.5 billion	<a href="#">VIEW</a>
05/11/17	 易鑫集團 YIXIN GROUP	Yixin Group Raises Approximately \$579 million in Financing	<a href="#">VIEW</a>
04/27/17	 ((SiriusXM))  AUTOMATIC	SiriusXM Acquires Automatic Labs for \$115 million	<a href="#">VIEW</a>
02/28/17	 Advent International GLOBAL PRIVATE EQUITY  CCC INFORMATION SERVICES INC.	Advent International Acquires CCC Information Services	<a href="#">VIEW</a>
01/09/17	 第一车贷 chedai	Diyi Chedai Raises Approximately \$52 million in Financing	<a href="#">VIEW</a>
10/28/16	 ally  BlueYield	Ally Financial Acquires BlueYield	<a href="#">VIEW</a>
09/21/16	 metromile	Metromile Raises \$191.5 million & Acquires Mosaic Insurance Co.	<a href="#">VIEW</a>
05/23/16	 微贷网 weidai.com.cn	Weidai Raises \$153 million in Series C Financing	<a href="#">VIEW</a>
09/22/15	 COVERHOUND®	CoverHound Raises \$33 million in Series C Financing	<a href="#">VIEW</a>
09/14/15	 VISTA EQUITY PARTNERS  Solera	Vista Equity Partners Acquires Solera for \$6.5 billion	<a href="#">VIEW</a>
06/15/15	 COX AUTOMOTIVE®  Dealertrack	Cox Automotive Acquires Dealertrack Technologies for \$4 billion	<a href="#">VIEW</a>



## X. Overview of FT Partners

# Overview of FT Partners

## FT Partners is the Advisor of Choice for Leading FinTech Companies

AUTO FINTECH



### FinTech Unicorns / Multi-Billion Dollar Deals

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as  
strategic and financial advisor to

**Heartland**

in its sale to

**globalpayments**

for total consideration of

**\$ 4,500,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to

**liquidnet**

in its financing for approximately

**\$ 250,000,000**

valued at approximately

**\$ 1,800,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as  
strategic and financial advisor to

**MERCURY**

in its cash sale to

**vantiv**

for total consideration of

**\$ 1,650,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its  
exclusive role as advisor to

**BLACKROCK**

in its 100% acquisition of

**FutureAdvisor**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to

**ally**

in its acquisition of

**BlueYield**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to

**NOMURA**  
subsidiary  
**INSTINET**

in the sale of its stake in

**CHIX EUROPE**

to

**BATS**

for total consideration of approximately

**\$ 305,000,000**



The Only Investment Bank  
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Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as  
strategic and financial advisor to

**TRANSFIRST**

in its sale to

**Vista Equity Partners**

from

**WCAS**

**\$ 1,500,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as  
exclusive strategic and financial advisor to

**square trade**

in its sale to

**Allstate**

for total consideration of

**\$ 1,400,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as  
sole strategic and financial advisor to

**CAYAN**

in its sale to

**TSYS**

for total consideration of approximately

**\$ 1,050,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as advisor to

**capitalG**

in its lead investment in

**credit karma**

with additional participation from

**TIGER** **SIG** **Ribbit Capital**

for approximately

**\$ 85,000,000**



The Only Investment Bank  
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Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its role as advisor to

**CIBC**

in its strategic investment in

**Delta**

with additional participation from

**MasterCard** **Bain Capital Ventures** **Advent Capital Management**

for total consideration of approximately

**\$ 70,000,000**



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Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole debt capital advisor to

**jack henry & ASSOCIATES INC.**

in its acquisition of

**iPay Technologies**

for total consideration of approximately

**\$ 300,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive  
role as financial advisor to

**GreenSky**

in its minority investment from

**DST ICONIQ**

**TPG** **MANAGEMENT**

for total consideration of

**\$ 300,000,000**



The Only Investment Bank  
Focused Exclusively on Financial Technology

Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to

**square trade**

in its recapitalization by

**BainCapital** **BainCapital**

PRIVATE EQUITY VENTURES

of approximately

**\$ 238,000,000**



The Only Investment Bank  
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Financial Technology Partners LP  
FTP Securities LLC

is pleased to announce its exclusive role as  
sole strategic and financial advisor to

**avidexchange**

in its Series F minority financing from

**mastercard**

**TEMASEK**

**THIEL**

**\$ 300,000,000**



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# Overview of FT Partners

AUTO FINTECH



## FT Partners' History of Success Working with Public Companies

FT Partners has a longstanding history working with public companies across the FinTech ecosystem

### Public Clients

**Heartland**  
in its sale to  
**globalpayments**  
\$ 4,500,000,000

**Verifone**  
in its financing for the  
acquisition of  
**Lipman**  
\$ 540,000,000

**cardconnect.**  
in its sale to  
**First Data**  
\$ 750,000,000

**jack henry**  
& ASSOCIATES INC.  
in its acquisition of  
**iPay Technologies**  
\$ 300,000,000

**CORILLIAN**  
in its sale to  
**CheckFree**  
\$ 245,000,000

**ally**  
in its acquisition of  
**BlueYield**

**RDM**  
Transforming Payments  
in its sale to  
**DELUXE**  
C\$ 129,000,000

**BLACKROCK**  
in its acquisition of  
**FutureAdvisor**

### IPOs

**OPX**  
in its  
Initial Public Offering  
valuing the equity at  
approximately  
A\$ 480,000,000

**EllieMae**  
in its  
Initial Public Offering  
valuing the equity at  
approximately  
\$ 146,000,000

**ENVESTNET**  
in its  
Initial Public Offering  
valuing the equity at  
approximately  
\$ 300,000,000

**Verifone**  
in its  
Initial Public Offering  
valuing the equity at  
approximately  
\$ 650,000,000

### Public Buyers

**MERCURY**  
in its cash sale to  
**vantiv**  
\$ 1,650,000,000

**CUSTOM HOUSE**  
in its sale to  
**WESTERN UNION**  
\$ 370,000,000

**eliza**  
in its sale to  
**hms**  
\$ 170,000,000

**square trade**  
in its sale to  
**Allstate**  
\$ 1,400,000,000

**FLEET ONE**  
in its cash sale to  
**wex**  
\$ 369,000,000

**CAYAN**  
in its 100% cash  
sale to  
**TSYS**  
\$ 1,050,000,000

**Cambridge**  
Global Payments  
in its sale to  
**FLEETCOR**  
C \$900,000,000

**CARDINAL COMMERCE**  
in its sale to  
**VISA**  
\$ 300,000,000

**GiftCards.com**  
in its sale to  
**BLACKHAWK NETWORK**  
\$ 120,000,000

**CentralPayment**  
in its strategic  
investment by  
**TSYS**  
\$ 700,000,000

**TouchCommerce**  
in its sale to  
**NUANCE**  
\$ 215,000,000

**AUTOMATIC**  
in its sale to  
**SiriusXM**  
SATELLITE RADIO  
\$ 115,000,000

# Overview of FT Partners

## Significant Experience Advising Large Financing Rounds and “Unicorns”

AUTO FINTECH



FT Partners has a history of advising on some of the largest financing transactions in the FinTech space

Representing numerous FinTech “Unicorns” above \$1 billion valuations

Company	Amount Raised	Selected Prominent Investors in FT Partners Led Rounds			
MERCURY®	\$420,000,000+	8VC	Accel	ADAMS STREET PARTNERS	
GreenSky™	300,000,000+	BainCapital PRIVATE EQUITY	BainCapital VENTURES	BBVA	
Avidxchange	300,000,000	BV Battery Ventures	Caisse de dépôt et placement du Québec	CIBC	
Avidxchange	253,000,000	capitalG	DST	edbi	
liquidnet	250,000,000	Great Hill PARTNERS	ICONIQ	ING	
square trade®	238,000,000	KeyBank	khosla ventures	mastercard	
nmi	150,000,000+	maveron	nyca	PARthenon CAPITAL PARTNERS	
ADDEPAR	140,000,000	PayU®	QED INVESTORS	QUESTMARK PARTNERS	
Kabbage®	135,000,000	RCP REVERENCE CAPITAL PARTNERS	Santander InnoVentures	Scotiabank	
Remitly	115,000,000	SILVERLAKE	SUMMIT PARTNERS	TEMASEK	
TradingScreen SIMPLIFYING GLOBAL MARKETS®	110,000,000+	THIEL	TPG	VALOR EQUITY PARTNERS	
YAPSTONE® POWERING PAYMENTS	110,000,000	VISA	WELLINGTON MANAGEMENT®	YUAN CAPITAL	
CHROME RIVER	100,000,000				
credit karma	85,000,000				
earnest	75,000,000				
taulia®	65,000,000				

Note: FT Partners represented investors in Dynamics (CIBC) and Credit Karma (Google Capital); some transactions include a combination of equity and smaller amount of debt financing.





## FT Partners Advises Goji on its Financing

### Overview of Transaction

- On November 15, 2017, Goji announced it has raised \$15 million in financing led by Hudson Structured Capital Management Ltd., doing business as HSCM Bermuda
- Founded in 2007 and headquartered in Boston, MA, Goji is the country's leading independent online personal lines insurance agency
  - Goji's data-driven home and automobile insurance platform enables Goji agents to seamlessly match the optimal coverage needs of its preferred buyers with Goji's integrated network of more than a dozen insurance carriers
- HSCM Bermuda was founded in 2015 and invests in reinsurance and insurance-linked assets across all lines of businesses through an array of innovative structures that allow risk transference, including from the life and property/casualty sectors, to the capital markets
- Goji's existing investors include: Thayer Street Partners, a tech-enabled financial- and business services-oriented private investment firm, Matt Coffin's Coffin Capital & Ventures, and Five Elms Capital, a Kansas City-based growth capital investment firm focused on tech-enabled companies

### Significance of Transaction

- The investment allows Goji to benefit from HSCM Bermuda's sophisticated knowledge of insurance and its strong access to the insurance and reinsurance markets
- Additionally, the investment will drive accelerated growth at Goji

### FT Partners' Role

- FT Partners served as a strategic and financial advisor to Goji and its Board of Directors
- This transaction underscores FT Partners' successful track record generating highly favorable outcomes for leading InsurTech companies

## Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its role as  
strategic and financial advisor to*

# Goji

*in its financing led by*



**HSCM BERMUDA**  
MANAGEMENT COMPANY

*for total consideration of*

# \$ 15,000,000



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# Overview of FT Partners



## FT Partners Advises Automatic on its Sale to SiriusXM

### Overview of Transaction

- On April 27, 2017, Automatic Labs (“Automatic” or the “Company”) announced that it has been acquired by SiriusXM (“Sirius”) for a purchase price of approximately \$115 million
- Automatic provides a data-driven platform that enables vehicle owners to be safer and drive smarter; The Company’s proprietary Automatic Pro and Automatic Lite connected car adapters provide vehicle diagnostic alerts, emergency services, fuel monitoring, access to parking information, vehicle location and much more
  - Automatic also works with insurance carriers to enable usage-based savings and teen driver coaching, and works with automotive dealers to provide tools that help manage their vehicle inventory and customer service relationships
- Headquartered in New York, NY, SiriusXM holds a unique position in the connected vehicle space, offering unparalleled audio entertainment and data services in vehicles from every major carmaker

### Significance of Transaction

- The acquisition deepens and expands SiriusXM’s connected vehicle offerings for drivers nationwide and the industry’s leading carmakers
  - SiriusXM’s position will be further strengthened with data collection and analytical tools that will ultimately enrich key elements of the connected vehicle experience

### FT Partners’ Role

- FT Partners served as exclusive strategic and financial advisor to Automatic
- This transaction demonstrates FT Partners’ continued success advising the highest quality FinTech companies and achieving outstanding results in the Insurance Technology sector

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



**AUTOMATIC**

*in its sale to*



*for total consideration of approximately*

**\$ 115,000,000**



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## FT Partners Advises SquareTrade on its Sale to Allstate

### Overview of Transaction

- On November 28, 2016, SquareTrade announced its \$1.4 billion all-cash strategic sale to the Allstate Corporation
- Headquartered in San Francisco, CA, SquareTrade offers top-rated protection plans trusted by millions of consumers for electronics and appliances
  - SquareTrade's branded products are sold through major retailers
- Allstate is the largest publicly held personal lines property and casualty insurer in America serving more than 16 million households nationwide
- More details available in Allstate's transaction [press release](#) and [investor presentation](#)

### Significance of Transaction

- This transaction expands Allstate's protection offering to consumer electronics, connected devices and appliances
- SquareTrade substantially increases Allstate's customer relationships while providing both strong near-term and long-term growth opportunities

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to SquareTrade and its Board of Directors
- This transaction demonstrates FT Partners' continued leadership position as the "advisor of choice" to the highest quality FinTech companies
- FT Partners represented [SquareTrade in its \\$238 million strategic growth investment with Bain Capital and Bain Capital Ventures](#)
- FT Partners also recently represented Bain Capital Ventures' portfolio company [Enservio in its sale to Solera](#) demonstrating our long-term trusted relationship

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



*for total consideration of*

**\$ 1,400,000,000**



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## FT Partners Advises Cambridge on its Sale to FLEETCOR

### Overview of Transaction

- On May 1, 2017, Cambridge Global Payments (“Cambridge” or the “Company”) announced that it has entered into a definitive agreement to be acquired by FLEETCOR (NYSE:FLT) for C\$900 million
- Headquartered in Toronto, Canada, Cambridge is a leading provider of integrated, B2B cross-border payment services
  - Cambridge is one of the largest privately-owned, non-bank international payment specialists worldwide
- FLEETCOR is a leading global provider of fuel cards and workforce payment products to businesses
  - FLEETCOR's payment programs enable businesses to better control employee spending and provide card-accepting merchants with a high volume customer base that can increase their sales and customer loyalty

### Significance of Transaction

- The acquisition of Cambridge enables FLEETCOR to enter the B2B cross-border payments market, a \$145 billion global revenue market opportunity
- Additionally, the acquisition also enhances FLEETCOR's global corporate payment capabilities, allowing FLEETCOR to pay both domestic and international AP payments for the same client

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to Cambridge in this transaction
- This transaction demonstrates FT Partners' continued success advising leading FinTech companies and generating highly successful outcomes in the International Payments space

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



*for total consideration of*

**C \$900,000,000**



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## FT Partners Advises Ally on its Acquisition of BlueYield

### Overview of Transaction

- On October 26, 2016, Ally Financial (“Ally”) announced its acquisition of BlueYield
- Ally (NYSE: ALLY), previously known as General Motors Acceptance Corporation, is a leading digital financial services company and a top 25 U.S. financial holding company offering financial products to consumers, businesses, automotive dealers and corporate clients
- BlueYield is a Southern California-based direct auto lending platform with unique technology that brings efficiency to the direct auto finance marketplace by creating an environment where lenders, lead sources, affinity groups and consumers can transact seamlessly

### Significance of Transaction

- BlueYield’s underlying infrastructure and direct auto lending platform will enhance Ally’s capabilities and increase speed to market in new channels
- The combination of Ally’s substantial resources and BlueYield’s unique technology positions the Company extraordinary well to further its leadership position in the auto finance marketplace

### FT Partners’ Role

- FT Partners served as exclusive strategic and financial advisor to Ally Financial in this transaction
- Transaction demonstrates FT Partners’ continued success advising leading companies and generating highly successful outcomes in the Alternative Lending space

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its role as  
exclusive strategic and financial advisor to*



*in its acquisition of*



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# Overview of FT Partners

## FT Partners Advises Breeze on its Sale to Ford

AUTO FINTECH



### Overview of Transaction

- Breeze, now re-launched as Canvas, announced its sale to Ford Motor Co.
- Headquartered in San Francisco, California, Canvas provides an online platform for month-to-month car subscriptions as an alternative to traditional vehicle ownership
  - Canvas offers pre-owned Ford vehicles on a monthly subscription basis, which includes bundled registration, insurance, maintenance, roadside assistance and warranty coverage
  - Canvas is aimed at providing choices for consumers who want a simpler, more flexible and transparent alternative to car ownership
- Ford Motor Co. is backing the Company through its Ford Motor Credit Co. division, the dealer and consumer financing arm of the U.S. automaker

### Significance of Transaction

- The acquisition of Breeze provides Ford Credit with an online platform along with short-term leasing technology and expertise
- The transaction also provides Ford with a new source of revenue and a new way to manage off-lease vehicles

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to Breeze in this transaction
- This transaction demonstrates FT Partners' deep domain expertise and experience across the rapidly evolving and expanding Auto FinTech space

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



FINANCIAL  
TECHNOLOGY  
PARTNERS

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# Overview of FT Partners

## FT Partners Advises Fleet One on its Sale to Wex



### Overview of Transaction

- Fleet One ("Fleet One") announced its \$369 million cash sale to WEX (NYSE: WXS)
- Fleet One, formerly a portfolio company of LLR Partners and FTV Capital, is a leading provider of fuel cards and fleet management services available at more than 60,000 fuel and maintenance locations throughout the U.S.
- WEX (fka: Wright Express) is a global provider of value-based business payment processing and information management solutions with operations in six countries

### Significance of Transaction

- Represents the combination of two of the leading providers of fuel cards
- High-profile transaction with significant interest from leading strategic partners and private equity firms
- Achieves highly-attractive outcome for Fleet One and WEX
  - Fleet One able to monetize ownership at a strong valuation while combining with a preferred partner in fuel card space
  - WEX able to gain control of a leading competitor within the fuel card industry and recognize meaningful synergies
- Expands WEX's offering with the addition of Fleet One's industry-leading Over-the-Road and Local platforms

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to Fleet One and its Board of Directors
- FT Partners developed a detailed and comprehensive set of marketing materials and financial analyses to highlight the unique value of Fleet One and help navigate a thorough investor diligence process

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its sale to*



*for total consideration of approximately*

**\$ 369,000,000**



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## FT Partners Advises World Fuel on its Acquisition of Multi Service

### Overview of Transaction

- World Fuel Services (NYSE:INT) announced its \$137 million acquisition of select assets of Multi Service Corporation ("Multi Service")
- World Fuel, a fuel logistics company, engages in marketing, selling and distributing aviation, marine and land fuel products and related services worldwide
- Multi Service is a global transaction management company specializing in fleet, government and commercial payment programs primarily through closed-loop networks
- World Fuel will finance the transaction principally through existing bank credit facilities

### Significance of Transaction

- Achieved highly-attractive outcome for both World Fuel and Multi Service
  - World Fuel able to benefit from Multi Service's technology-enabled fuel card / corporate payments platform and other commercial services and solutions
  - Multi Service able to combine with a globally-recognized partner in the fuel industry in order to grow and expand

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to World Fuel
- FT Partners leveraged its deep industry expertise to provide critical advisory services throughout the transaction
- FT Partners' second fuel card-related transaction of the year and thirteenth payments processing transaction highlights its continued history of success as a trusted advisor within the financial technology sector

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its acquisition of select assets of*



*for total consideration of approximately*

# \$ 137,000,000



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## FT Partners Advises Safe-Guard on its Sale

### Overview of Transaction

- On December 21, 2012, Safe-Guard Products International, LLC ("Safe-Guard" or the "Company") announced its acquisition, in partnership with management, by an affiliate of Goldman Sachs
- Safe-Guard, a portfolio company of H.I.G. Capital ("H.I.G."), is a leading provider of finance and insurance ("F&I") solutions to the automotive industry
- H.I.G. is a leading global private investment firm with over \$10 billion of assets under management across many sectors and industry verticals
- Goldman Sachs Group, Inc. (NYSE: GS), through its affiliates, is a global leader in private equity focusing on large, high quality companies across a broad range of industries and geographies

### Significance of Transaction

- Achieves highly attractive outcome for both the buyer and selling shareholders
  - Buyer able to gain control of a highly attractive company while retaining and motivating management
  - Sellers able to monetize majority of ownership at an attractive valuation
- Positions Safe-Guard to capitalize on the substantial growth opportunities across its platform of ancillary F&I program solutions

### FT Partners' Role

- FT Partners served as strategic and financial advisor to Safe-Guard
- FT Partners leveraged its deep knowledge, extensive experience and broad insurance industry relationships to help achieve a highly favorable outcome for stakeholders
- Highlights FT Partners' continued success in advising leading companies across the insurance services and technology sector

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
strategic and financial advisor to*

# SAFE-GUARD

*in its sale to an Affiliate of*



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## FT Partners Advises Enservio on its Sale to Solera

### Overview of Transaction

- On July 19, 2016 Enservio, Inc. ("Enservio" or the "Company") announced it has entered into a definitive agreement to be acquired by Solera
- Headquartered in Needham, Massachusetts, Enservio is the largest U.S. provider of SaaS-based software and services to the property contents insurance marketplace
  - Existing investors include Bain Capital Ventures and Matrix Partners
- Solera Holdings ("Solera") is a leading provider of digitally-enabled risk and asset management software and services to the automotive and property marketplace
  - Acquired by Vista Equity Partners for \$6.4 bn in Sept. 2015

### Significance of Transaction

- Enservio's proprietary database of more than \$10 billion in property contents information will add another component to Solera's Digital Home platform
- Move signals accelerated expansion of Solera's asset management and risk protection technologies for life's most important assets
- Acquisition leverages Solera's unique Invent & Acquire ("I&A") strategy
- Highly-attractive outcome for both Enservio and Solera

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to Enservio and its Board of Directors
- Transaction demonstrates FT Partners' continued success advising top-tier companies and achieving outstanding results within the Insurance IT and Services sector

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*

**enservio**

*in its sale to*

**Solera**

FINANCIAL  
TECHNOLOGY  
PARTNERS

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## FT Partners Advises Insureon on its Minority Financing

### Overview of Transaction

- On October 21, 2015 Insureon ("Insureon" or the "Company") announced a \$31mm Series B minority investment round
  - Investment round led by Oak HC/FT ("Oak")
  - Existing investor Accretive LLC ("Accretive") also participated
- Insureon is the leading insurance online marketplace for small and micro businesses
  - Serves retail clients directly and also supports banks, brokerages and insurance companies through a wholesale offering
  - Coverage provided for 175,000+ small businesses
- Oak HC/FT is a \$500mm venture capital fund focused on investing in healthcare and financial services technology companies
- Accretive is a leading private investment firm specializing in the creation of disruptive technology companies

### Significance of Transaction

- Creates opportunity for Insureon to accelerate its growth in the small business insurance sector
- Enables Insureon to increase its investment in technology development, and enhance its sales and marketing capabilities

### FT Partners' Role

- FT Partners served as exclusive strategic and financial advisor to Insureon and its Board of Directors
  - Follows FT Partners' role advising Insureon on its 2014 acquisition of Insurance Noodle from Willis
- Transaction demonstrates FT Partners' continued success advising top-tier companies and achieving outstanding results within the Insurance IT and Services sector

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its exclusive role as  
sole strategic and financial advisor to*



*in its equity capital raise led by*



*for total consideration of*

**\$ 31,000,000**



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### Overview of Transaction

- On January 14, 2016, Taulia (or “the Company”) announced \$46mm in Series E financing led by Zouk Capital (“Zouk”)
- New strategic and institutional investors joined the round, which included all existing institutional investors
- Taulia provides cloud-based invoice, payment, dynamic discounting and supplier finance solutions to corporations and their suppliers
- Zouk is a UK-based private equity and infrastructure fund manager with €600mm under management that seeks to capitalize on the global shift to greater resource efficiency

### Significance of Transaction

- Taulia is seeing global demand increase exponentially; the Company will use this financing round to meet this demand and to further accelerate its rapid global expansion
- The funding follows another record year for Taulia, which continues to grow its top-line by more than 100%
- The Series E round brings Taulia’s total funding to over \$130 million

### FT Partners’ Role

- FT Partners served as exclusive financial advisor to Taulia and its Board of Directors
- FT Partners continued its long-term relationship with Taulia, having previously advised Taulia on its Series D round
- FT Partners leveraged its deep knowledge of Taulia and the industry to help the Company manage investor interest and ensure a highly successful outcome

### Financial Technology Partners LP FTP Securities LLC

*is pleased to announce its  
exclusive role as financial advisor to*



*in its Series E financing led by*



*for total consideration of approximately*

**\$ 46,000,000**



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# Overview of FT Partners

## Award-Winning Investment Banking Franchise

AUTO FINTECH



**Institutional Investor**  
Institutional Investor  
Annual Ranking

2017  
2015 - 2016  
2006 - 2008

- Ranked #1 Most Influential Executive on Institutional Investor's FinTech 35 List – 2017
- Steve McLaughlin Ranked Top 5 on Institutional Investor's FinTech 35 List
- Consecutively Ranked (2006, 2007 and 2008) among the Top Bankers on Institutional Investor's "Online Finance 40"

**I** The Information

2016

- Ranked #2 Top Technology Investment Banker on The Information's "Silicon Valley's Most Popular Dealmakers"



M&A Advisor  
Awards

2015 - 2017

2010 - 2014

2004 - 2007

- Investment Banker of the Year – 2017
- Investment Banking Firm of the Year – 2016
- Cross Border Deal of the Year - 2016
- Dealmaker of the Year – 2015
- Technology Deal of the Year – 2015
- Equity Financing Deal of the Year - 2014
- Professional Services Deal of the Year, Above \$100 mm – 2014
- Dealmaker of the Year – 2012
- Professional Services Deal of the Year, Above \$100 mm – 2012
- Boutique Investment Bank of the Year – 2011
- Deal of the Decade – 2011
- Upper Middle Market Deal of the Year, Above \$500 mm – 2010
- IT Services Deal of the Year, Below \$500 mm – 2010
- Cross-Border Deal of the Year, Below \$500 mm – 2010
- Dealmaker of the Year – Steve McLaughlin – 2007
- Business to Business Services Deal of the Year - 2007
- Computer and Information Technology Deal of the Year, Above \$100 mm – 2007
- Financial Services Deal of the Year, Above \$100 mm – 2007
- Investment Bank of the Year – 2004



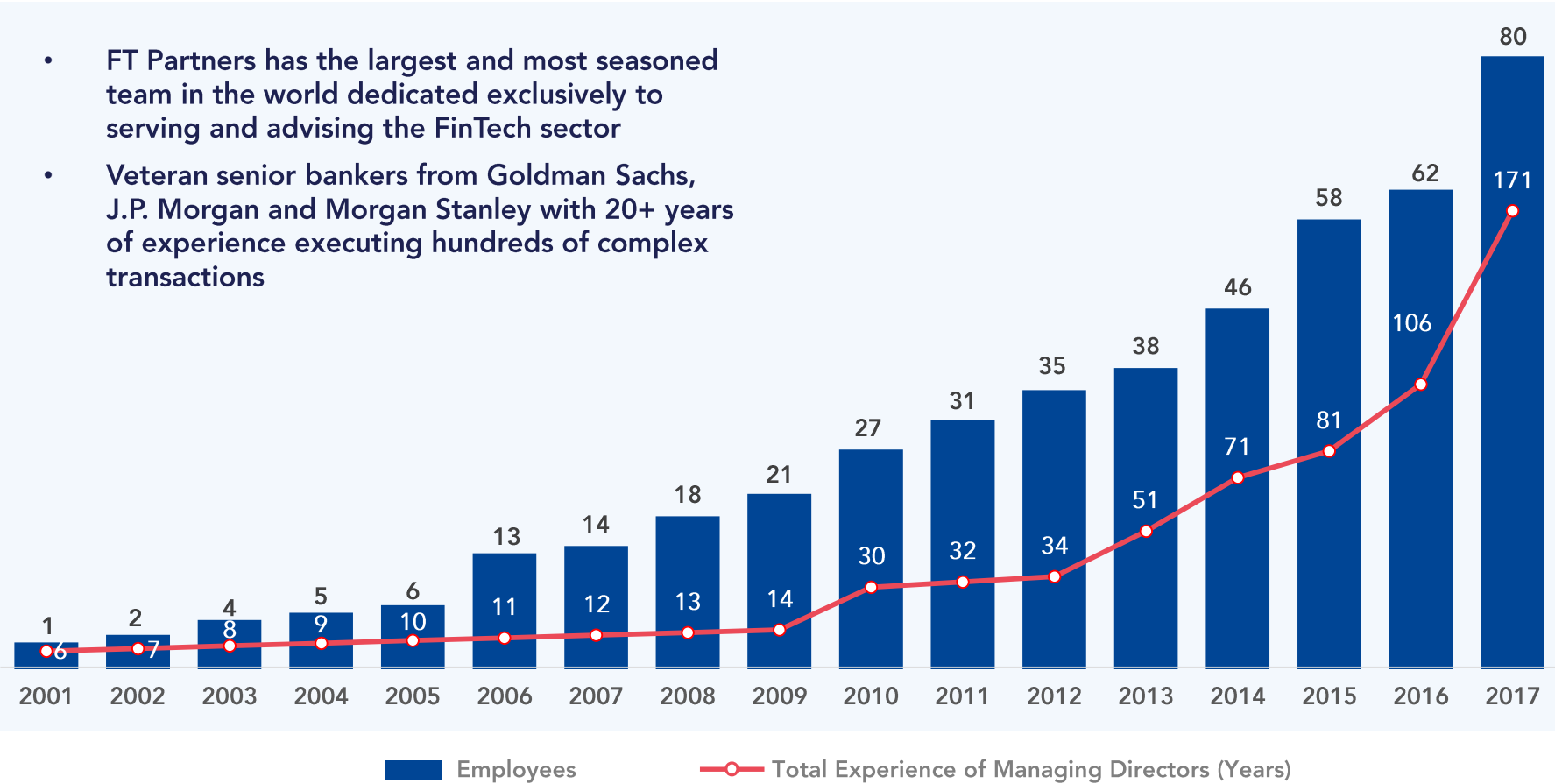
Middle Market  
Financing Awards

2006 - 2008

- Equity Financing Dealmaker of the Year – Steve McLaughlin – 2008
- Information Technology Deal of the Year – 2008
- Financial Services Deal of the Year – 2008
- Financing Professional of the Year – Steve McLaughlin – 2006

# Overview of FT Partners

## Platform of Choice for Clients and Bankers Alike



Average Experience of Managing Directors (Years)





# Overview of FT Partners

## The FT Partners Senior Banker Team

AUTO FINTECH



Name / Position	Prior Background	Experience / Education	Years of Experience
<b>Steve McLaughlin</b> <i>Founder, CEO and Managing Partner</i>		<ul style="list-style-type: none"> <li>Formerly with Goldman, Sachs &amp; Co. in New York and San Francisco from 1995-2002</li> <li>Former Co-Head of Goldman Sachs' Financial Technology Group (#1 market share)</li> <li>Wharton M.B.A.</li> </ul>	22
<b>Paul VanderMarck</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Former Chief Product Officer at Risk Management Solutions, a global technology business in the catastrophic risk space</li> <li>25+ years of experience as an InsurTech operating executive</li> <li>Experienced advisor and investor in the InsurTech space</li> </ul>	25
<b>Larry Furlong</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Formerly with Goldman, Sachs &amp; Co. in New York, London and Los Angeles beginning in 1995</li> <li>Wharton M.B.A.</li> </ul>	22
<b>Greg Smith</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Formerly award winning Equity Research Analyst at Merrill Lynch / J.P. Morgan / Hambrecht &amp; Quist</li> <li>20+ years of experience covering FinTech as both an Analyst and Investment Banker</li> </ul>	21
<b>Osman Khan</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Former Managing Director / Head of FIG M&amp;A at Alvarez &amp; Marsal</li> <li>15+ years FIG deal, consulting and assurance experience at PwC</li> <li>40 Under 40 M&amp;A Advisor Award Winner in 2013</li> <li>LSE (BSc w/Honors), MBS (MBA w/Distinction), ICAEW (FCA)</li> </ul>	20
<b>Steve Stout</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Former Global Head of Strategy at First Data</li> <li>Formerly Led J.P. Morgan Payments Investment Banking</li> <li>Former Equity Research Analyst on #1 ranked team at UBS and Economist at the Federal Reserve Bank</li> </ul>	19
<b>Tim Wolfe</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>Formerly with Goldman, Sachs &amp; Co. beginning in 2000</li> <li>Started at FT Partners in 2002</li> <li>40 Under 40 M&amp;A Advisor Award Winner 2013</li> <li>Harvard M.B.A.</li> </ul>	15
<b>Timm Schipporeit</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>11+ years with Morgan Stanley, Senior Executive Director of European Technology Investment Banking Team in London</li> <li>Formerly a Venture and Growth Investor focused on FinTech at Index Ventures</li> </ul>	14
<b>Andrew McLaughlin</b> <i>Managing Director</i>		<ul style="list-style-type: none"> <li>20+ years experience executing / implementing financial and operational strategy</li> <li>Formerly with Deloitte Consulting</li> </ul>	11