



AUTOMOTIVE VENTURES

AUTO INTEL REPORT \ \ OCTOBER 2021

Steve Greenfield \ \ 1922 Wildwood PL NE, Atlanta, GA 30324 \ \ steve@automotive.ventures \ \ (678) 576-9972

WANTED: DEALER GROUP CO-INVESTORS

Automotive Ventures is looking for automotive dealership family offices to co-invest into early-stage automotive and mobility companies.

We meet hundreds of early-stage companies raising capital, and we love having dealerships co-invest alongside us. Let us know if you'd like visibility into our deal flow.

More information here:

www.automotiveventures.com/vc-fund

WELCOME TO THE



AUTOMOTIVE VENTURES INTEL REPORT

OCTOBER 2021

In this issue, we begin coverage of a whole new Mobility Landscape.

This is the start of an evolution of the Automotive Ventures brand and this Intel Report.

We will continue to provide a lot of focus on the auto dealership and OEM space. But, in addition we are going to start examining the mobility landscape more broadly.

I look forward to hearing what you think of this latest Intel Report, and your feedback on other areas of interest we should showcase in future editions.

As always, please send me a note if there's anything I've missed, or that comes to mind while reviewing this month's content.

Many thanks and have a great month!

Steve Greenfield
steve@automotiveventures.com

>> CONTENTS

- 05 WHITEPAPERS AVAILABLE
- 06 IN THE NEWS
- 08 THEY SAID IT
- 09 POINT OF VIEW
- NEW** 13 MOBILITY TECH LANDSCAPE
- 15 SEGMENTS TO WATCH
- 18 COMPANY VALUATIONS
- 22 DEALERSHIP AUTO TECH LANDSCAPE
- 24 AUTO TECH TRANSACTIONS
- 32 KEY TRANSACTION OVERVIEW
- 36 COMPANIES TO WATCH
- 40 AUTOTECH'S GOT TALENT

>>> WHITEPAPERS AVAILABLE

AUCTION DISRUPTORS



Confidential material provided by Automotive Ventures LLC ©2021

13

FREE TO DOWNLOAD ↓

WHOLESALE AUCTIONS

AUCTION CHANNELS AND MARKET SHARE

AUCTION CHANNELS and MARKET SHARE

Market Share by Channel
















High

Medium

Low

None

Consignor Type

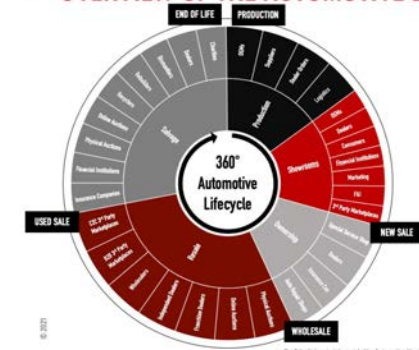
Wholesale Channel	Description	Examples	OEM Captive Finance	Financial Institution (Repo)	Fleet	Franchise Dealers	Independent Dealers
Upstream Online	<ul style="list-style-type: none"> Off-lease cars listed for sale online, closed OEM dealer & open options Car is on dealer's lot 	 	40%	0%	0%	0%	0%
Dealer-to-Dealer/Trade-ins	<ul style="list-style-type: none"> Direct-to-dealer, dealer-to-dealer or between dealers & wholesalers Car location can vary 		0%	0%	80%	20%	55%
Digital Trade Network	<ul style="list-style-type: none"> Online or mobile live auction for dealers, primarily franchise Car is on dealer's lot 	   	0%	0%	0%	10%	1%
Online Pre- & Post-Auction Sales	<ul style="list-style-type: none"> Online sales with buy now or bid sale before and/or immediately after auction Car at dealer lot, in-transit, or at auction 	  	5%	5%	0%	10%	5%
Simulcast	<ul style="list-style-type: none"> Live stream of physical auction Remote buyers for cars in the lane 	  	25%	40%	10%	30%	9%
Physical Auction	<ul style="list-style-type: none"> Traditional in-person auction Car is in the lane 	 	30%	55%	10%	30%	30%
Total			100%	100%	100%	100%	100%

Source: Automotive Ventures Estimates

FREE TO DOWNLOAD ↓

AUTO INDUSTRY OVERVIEW

>>> OVERVIEW OF THE AUTOMOTIVE LIFECYCLE

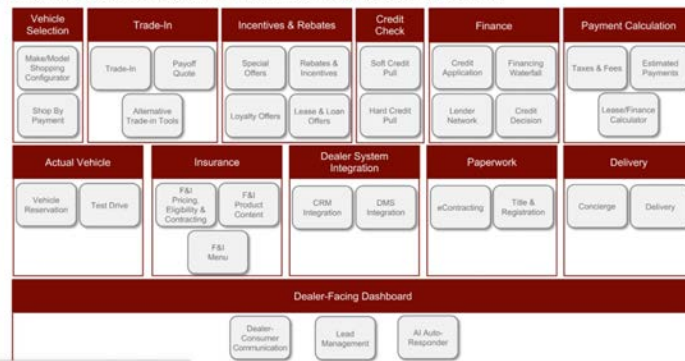


THE AUTOMOTIVE LIFECYCLE IS MULTI-FACED AND SUPPORTS THOUSANDS OF RELATED COMPANIES

FREE TO DOWNLOAD ↓

DIGITAL RETAILING

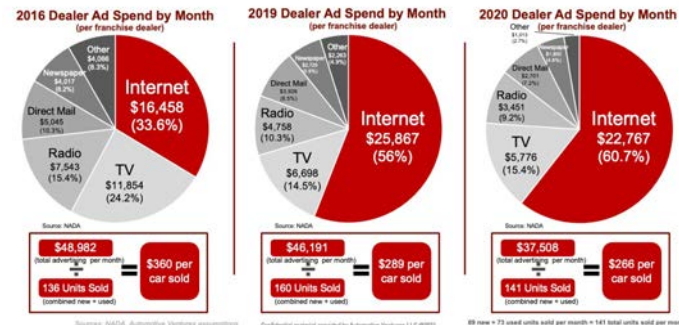
DIGITAL RETAILING: MULTIPLE BUILDING BLOCKS



FREE TO DOWNLOAD ↓

AUTOMOTIVE ADVERTISING

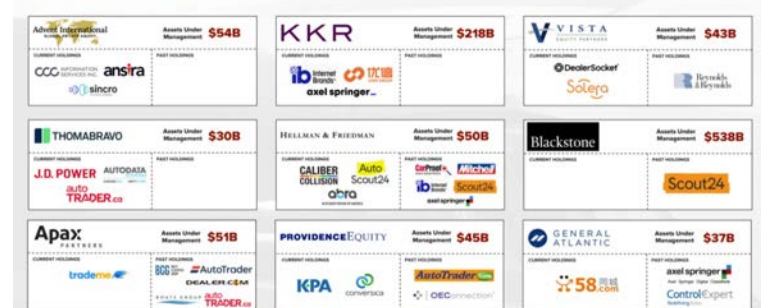
>>> WHERE DO DEALERS SPEND AD DOLLARS?



FREE TO DOWNLOAD ↓

INVESTORS IN AUTO TECH

>>> PRIVATE EQUITY PLAYERS FOCUSED ON AUTOMOTIVE



FREE TO DOWNLOAD ↓

IN THE NEWS



>>> IN THE NEWS

Chip shortage will cost industry \$210B,
7.7M units in 2021, Alix Partners says

Sept 23, 2021

Automotive News

Car Companies Buckle Up for Extended
Chip Shortage

Sept 30, 2021

Automotive News

The latest numbers on the microchip shortage:
Loss projection passes 10M

Sept 27, 2021

Automotive News

Market slumps 17% as chip
crunch spreads

Sept 1, 2021

Automotive News

New Car Sales Are Plummeting Because Automakers
Can't Make Enough Cars

Sept 29, 2021

 **edmunds**

Powell Says Fed Faces 'Difficult Trade-
Off' if Inflation Doesn't Moderate

Sept 30, 2021

THE WALL STREET JOURNAL.

Dow drops 500 points on September's final day,
S&P 500 suffers worst month since March 2020

Sept 29, 2021

 **CNBC**

GM to halt production at nearly all North America
assembly plants due to new chip problem

Sept 2, 2021

Detroit Free Press

Critics Sound The Alarm Ahead Of Possible
Retroactive Capital Gains Tax Hike

Sept 7, 2021

Forbes

Stocks extend decline as inflation
fears persist

Sept 30, 2021

 **REUTERS**

Debt ceiling worries start to rattle Wall Street

Sept 29, 2021

 **REUTERS**

Cat At Miami College Football Game
Survives Fall

Sept 12, 2021

npr

»»»THEY SAID IT



“By 2030, chips will make up 20% of the components of premium cars – five times more than their proportion in 2019.”

Quotes

- Intel CEO Pat Gelsinger



GREENFIELD'S POINT OF VIEW

GREENFIELD'S POINT OF VIEW

Expanding Our World View

While I spend most of my time examining dealership and OEM technology solutions, as a venture capital investor we also see a growing number of companies across the mobility landscape.

Mobility Segment Overview

The mobility industry represents a large ecosystem of startup-driven technologies that address both transportation-related problems stemming from urbanization—such as congestion and emissions—and

the increased demand for affordable, convenient, and environmentally friendly transportation. While ridesharing, micromobility, and carsharing startups generally connect people to vehicles through mobile and digital platforms, industrial startups are manufacturing new types of vehicles, such as e-bikes, scooters, autonomous cars, electric cars, and even flying cars. Another startup subset is designing enablement technologies to power and support these new mobility ecosystems.

Over the past year, the mobility tech industry experienced increased

investment flows as the COVID-19 crisis exposed many underlying problems within existing transportation systems. The growing focus on climate change also drove investment, as consumers increasingly demand electric vehicles and governments pass more decarbonization initiatives.

Encouraged by these developments, venture investors injected billions of dollars into mobility tech startups so far in 2021—putting the year on pace to break the record for mobility investing. Additionally, a flurry of mobility tech companies listed publicly or

GREENFIELD'S POINT OF VIEW

announced plans to do so via reverse mergers with special purpose acquisition companies (SPACs).

Expanding Beyond Retail Automotive

The automotive retail channel is facing an enormous amount of change that will affect retail dealerships, automakers as well as the wholesale vehicle remarketing players. Automotive Ventures will continue to monitor these areas and report on news and important M&A transactions for our readers. In addition,

this month we introduce a new Automotive Ventures technology landscape that examines Mobility more broadly.

We believe demand for low-cost, convenient, and environmentally oriented mobility tech solutions will continue to drive long-term industry growth. Industry support from governments and investors—as well as growing consumer demand—is boosting adoption of mobility tech services, while autonomous, connected, and electric vehicle (EV) technologies are making significant advancements. We estimate the market

for emerging mobility tech solutions is substantial; we forecast that an additional \$250 billion in venture capital will be invested in related technologies and services by 2025.

Each month we will examine a few of these areas more deeply. This month we highlight ***Battery Technology*** and ***Teleoperations***.

I hope you enjoy this new content, and I appreciate you being on this journey with us as we evolve Automotive Ventures' coverage of the mobility landscape.

»»»» GREENFIELD'S POINT OF VIEW

It's an exciting time to be in an industry that is going to see more change in the next 10 years than it's seen in the past 100. No matter where you are in the ecosystem, I look forward to taking this journey with you.

Thank you for your continued support.



Steve Greenfield
CEO and Founder
Automotive Ventures





MOBILITY TECH LANDSCAPE

MOBILITY TECHNOLOGY LANDSCAPE



14

PUBLIC MOBILITY SOLUTIONS

Shuttle, Bus & Multimodal Booking

BUBUP, hip, moovit, Shuttl, SWI, migo, whim, wingz

Transit Infrastructure

EUROLEOP, NEVOMO, hyperloop, skyTran, TRANSPOD, HARDT

Transit System Software

Routematch by Uber, Citymapper, WhereIsMyTransport, Swiftly

ADVANCED AIR MOBILITY

eVTOL Passenger Aircraft

JAUNT, Aurora, Joby, Volocopter, Pipistrel, MagniX, eCirc, HeliFly, HeliJet, HeliFly, HeliJet

Electric Propulsion & Motors

Whisper Aero, MagniX, Pipistrel, MagniX, Pipistrel, MagniX, Pipistrel

Drones & eVTOL Air Logistics

3DR, BETA, DroneDeploy, zipline, Skydio, Airobotics, Elroy Air, Iris Automation, MATRNET

eCTOL Aircraft

ZUNUM Aero, AMPAIRE, Wright, AeroSpace, EVIATION

Air Mobility Services

NETJETS, OPENJET, VICTOR, BLADE, VISTAJET

Autonomous Autopilot & Airspace Mgmt

SAFEDRONE, AIRMAP, SKYGRID, XWING, RELIABLE ROBOTICS

AUTO COMMERCE

P2P Carsharing

TURO, getaround, car2go, iCarshare, fluidtruck, RVshare, Outdoorsy

Financing & Subscription

CARRO, FINN, lendbuzz, fair, NXCR, Carvolution, MotoRefi

Digital Marketplaces

Autotrader, CARSCOPE, cars.com, KAVAK, CarGurus, CARZOO

Online Car Rental

ENVOY, kovi, kyte, SILVERCAR by Airt, roadsterf, Zoomcar, VIRTUO

Repair & Maintenance

TRACABLE, pitstop, spiffy, openbay, UUVY, Click-Ins, BOOSTER, WRENCH, FIXICO, foreveer

RIDEHAILING

Ridehailing Platforms

cabify, Gett, BlaBlaCar, BLACKLANE, DiDi, gojek, OLA, Bolt

LAST-MILE DELIVERY

Delivery

instacart, GORILLAS, zomato, SWIGGY, FLINK, JOKR, LALAMOVE, gopuff

MICROMOBILITY

Network Operators

voio, gogoro, TIER, superpedestrian, FENIX, VOGO, DiDi

Subscription Services

BUZZBIKE, DOCKR, Dance, Grover, Movs Technology Group, MUTE, MUVO, Scootaround

Vehicle Suppliers

ATHER, VANMOOF, BOOSTED, UNAGI, unu, Razor, EATCOOTERS

Mgmt & Analytics Platforms

Wunder Mobility, Joyride, luna, Fantasma, Ride Report, LATTIS, POPULUS, ZOBIA, evulog, zygg

VEHICLE SYSTEMS & DATA

Security (Cyber, Data, Monitoring)

escript, ottopia, THALES, ARGUS, CYMOTIVE, Crypta Labs, REGULUS, ATESKALABS

Connectivity/Network (V2X, IoT, Telematics)

COMODUL, thingco, CUBIC, kapsch, continuat, AutoPi, REVOS, ULU, kee, The Flow, SOLUTIONS, RightTech

Urban/City Management

door2door, ioxi, ROAD XS, MOTIONTAG, COORD, VIANOVA, IMMENSE, podaris, VEO MO, POPULUS, TERALYTICS, TagMaster, PTV, GROUP

Mapping (HD Maps, Route Optimization)

mappy, Sygic, TAVI, Mapillary, waze, MapQuest, ViaMichelin, TOMTOM

Data Management (Traffic, Location, Parking)

PARKI, ampido, cloud Parc, TIBO, PARKING, HUMATICS, way, PARK, parknav, Parclick, Trimble, PARKIO, wejo

Equipment (Maintenance, Charging, Sensors)

cyclotax, blink, padPOINT, energy, EcoG, EVBOX, Hebasito, -chargepoint-, Swabbee, perch, AMPLE, pushme, EVgo

AUTONOMOUS SOFTWARE

Full Stack

CRUISE, DiDi, in mobileye, WAYMO, SafeAI, ZOOX, ARGO, nuob, woobi

Perception Software

scale, RECOGNI, cortica, PHANTOM AI, STRADVISION, Zong, Mu, PROPHESSEE

Teleoperation

DriveU.auto, vav, REMNAV, Formant, Phantom Auto, designated driver

Localization/Mapping

mapbox, Civil Maps, DEEPMAP, MapmyIndia, pointOne, waze, swift, CAMERA

Simulation/Dev Tools

EDGE CASE RESEARCH, cognata, Polysync, Applied Intuition, RENOV AUTO, FORESIGHT AI, parallel domain, heex, foretellix

AUTONOMOUS HARDWARE

Lidar

LUMOTIVE, BARAJA, LeddarTech, HESAI, SEUL ROBOTICS, VYANT PHOTONICS, INSIGHT LIDAR

Radar

Autoroad, GPR, METAWAVE, vayyar, ECHODYNE, LUNEWAVE, ZENDAR, UHNDER, OCULII

Cameras

nodar, FORESIGHT, SEEVA, GEO Semiconductor, OWL, TRIEVE, Seek Thermal, ADASXY, ITD Lab

V2X

KYMETA, Autotalks, commsignia, RoboCV, tts, VENIAM, WORLD OF SENSING

Processors

Valens, TTFech, WAVE COMPUTING, indie, Horizon Robotics, cerebras MYTHIC, SambaNova, GRAPHCORE, SEMDRIVE

ELECTRIC VEHICLES

Consumer BEVs

MULLEN, WELTMEISTER, RIVIAN, ENOVATE, LIGHTYEAR, ICONIQ, YOUXIA, HYDORIS

Commercial BEVs

TERRA MOTORS, indigo, VOLTA TRUCKS, BOLLINGER MOTORS, change, XOS

BEV Motors & Powertrains

PROTEAN, YASA, HYLION, MAGNAX, paice

Hydrogen EVs

HYZON, REFIRE, CellCentric, BlueWorld, Hydrogen In Motion, ULEMCO, 宁德时代, Horizon

Batteries, Battery Tech & Materials

CUBERG, RECURRENT, PREMIER, northvolt, Sion Power, REDWOOD MATERIALS, MANDO, ENEVATE, SILA

EV Charging

chargepoint, WiTricity, AMPLY, SparkCharge, CHARGE LAB, ELECTRIC ERA, swiftmile

FLEET MGMT & CONNECTIVITY

Fleet Management

lytx, CAMBRIDGE MOBILE TELEMATICS, G7, nauto, SmartDrive, GREENROAD, samsara, wise systems

Connectivity & Data Management

here, 斑马, RIDECELL, JOYNEXT, ecarx, Gigamon, INRIX, STREETLIGHT, cubic telecom

Auto Cybersecurity

Green Hills, excelcore, AUTOCRYPT, KNOX, MOCANA, Upstream, GUARD

Passenger Safety

cipia, nexar, SAFETY VISION, ENVISICS, owlcam, WAYRAY

Parking

kipka, Parkopedia, SPOT HERO, ParkMobile, PARKING, Streetline, PARK+, INRIX ParkMe, arrive, REEF

Maintenance & Inspection

DISCOUNT TIRE, tankyou, RoboTire, spiffy, BELRON, MONRO, UUVY, fixter, Firestone, NUBRAKES



SEGMENTS TO WATCH

>>> KEY SEGMENT OVERVIEW: BATTERY TECHNOLOGY

SEGMENT OVERVIEW

Several startups pursuing battery tech opportunities are raising significant funding from VC investors. Electric vehicle passenger car sales are expected to rise from 4.5% of global car sales in 2020 to 15.6% in 2025, which will drive demand for improvements in battery monitoring, thermal management, charging, and recycling.

Recurrent provides independent, CARFAX-like reports on the health of used electric car batteries to dealerships and consumers. Recurrent has developed a machine learning model to statistically predict battery health and range for car dealers selling used EVs.

Premergy is a US-based startup developing battery management and control systems that extend the range of passenger and commercial EVs by more than 20% by moderating battery heat.

Electric Era is developing lithium-based battery cells that pair with fast charging stations to buffer the power draw on electrical grids, which helps charging stations avoid large fees from utility operators during high-demand periods.

Li-Cycle takes manufacturing scrap, extracts materials such as lithium, cobalt, nickel, and graphite, processes the materials, and then sells them back to the battery supply chain. Li-Cycle uses a shredding method that minimizes energy intensity and emissions while maximizing recovery rates.

Batteries, Battery Tech & Materials: Key Players



>>> KEY SEGMENT OVERVIEW: TELEOPERATIONS

OVERVIEW OF TRANSACTION

Teleoperation, or the remote monitoring and control of vehicles, is becoming more prominent as vehicles become increasingly autonomous. In situations such as construction zones or severe weather conditions, wherein autonomous vehicles become stuck or unable to drive autonomously, teleoperators can remotely take over and safely guide the vehicle.

Remotely operated mobility services could set the stage for telecommunications companies to take a more prominent role in the future of mobility, as reliable, low-latency networks will be critical for enabling remote operation. Global telecommunications carriers will likely seek to leverage their 5G networks to enable mobility services.

Halo recently announced a pilot with T-Mobile to enable remotely operated on-demand carshares. Through the pilot, electric cars ordered through the Halo app are piloted by remote operators and delivered directly to consumers. The vehicles are fitted with cameras, radar, and ultrasonic sensors and integrated with T-Mobile's 5G network for low-latency remote operation, with automatic emergency braking as a failsafe.

Remotely operated carshares could disrupt the dynamics of the mobility industry by offering the convenience of on-demand ridehailing with the flexibility of carsharing.

Teleoperation: Key Players

ottopia

DriveU.auto

Phantom Auto

REMNAV

Formant

Halo

designated
driver

vay



COMPANY VALUATIONS

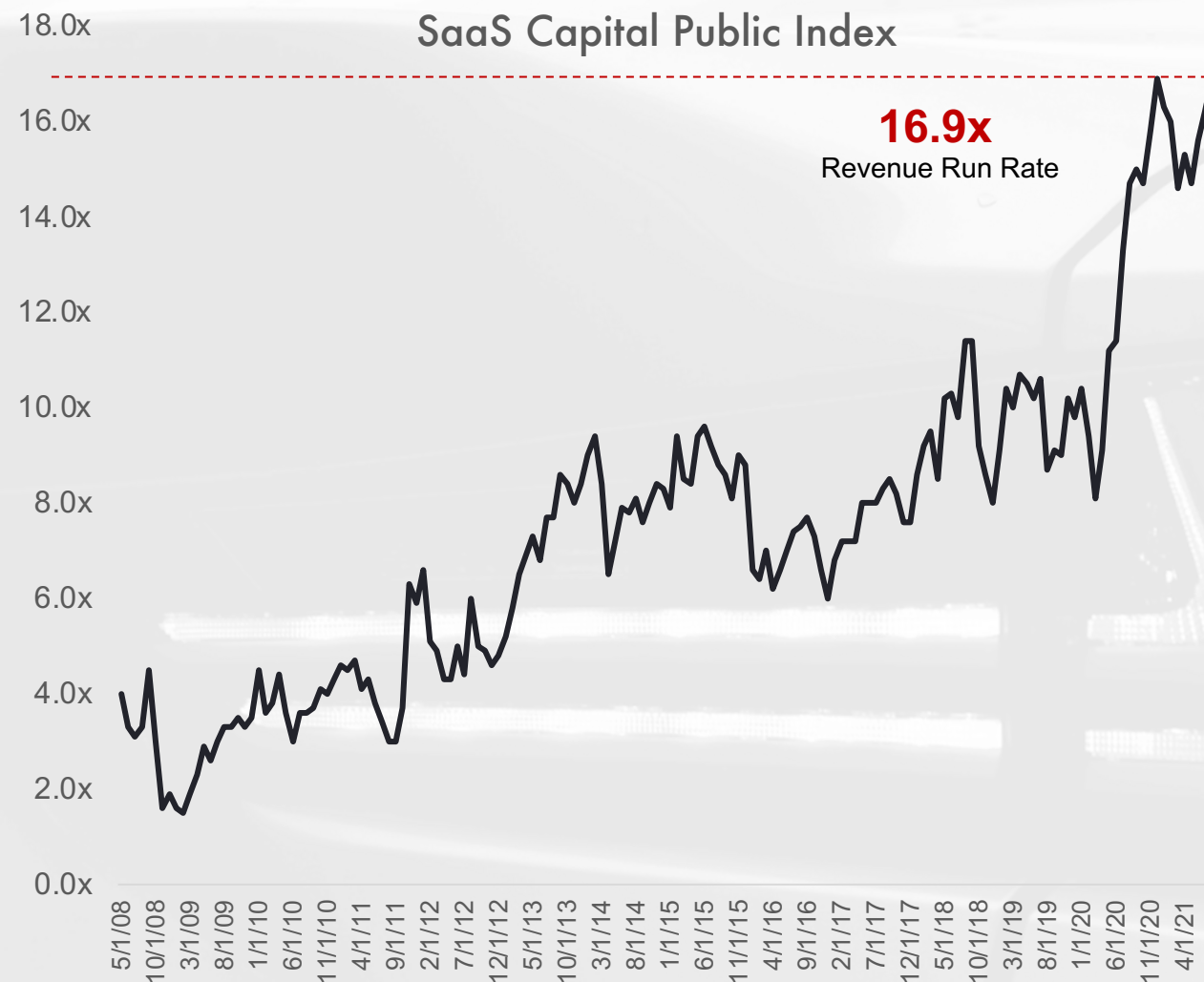
FUNDING LEVELS

(Categories are rough estimates only)

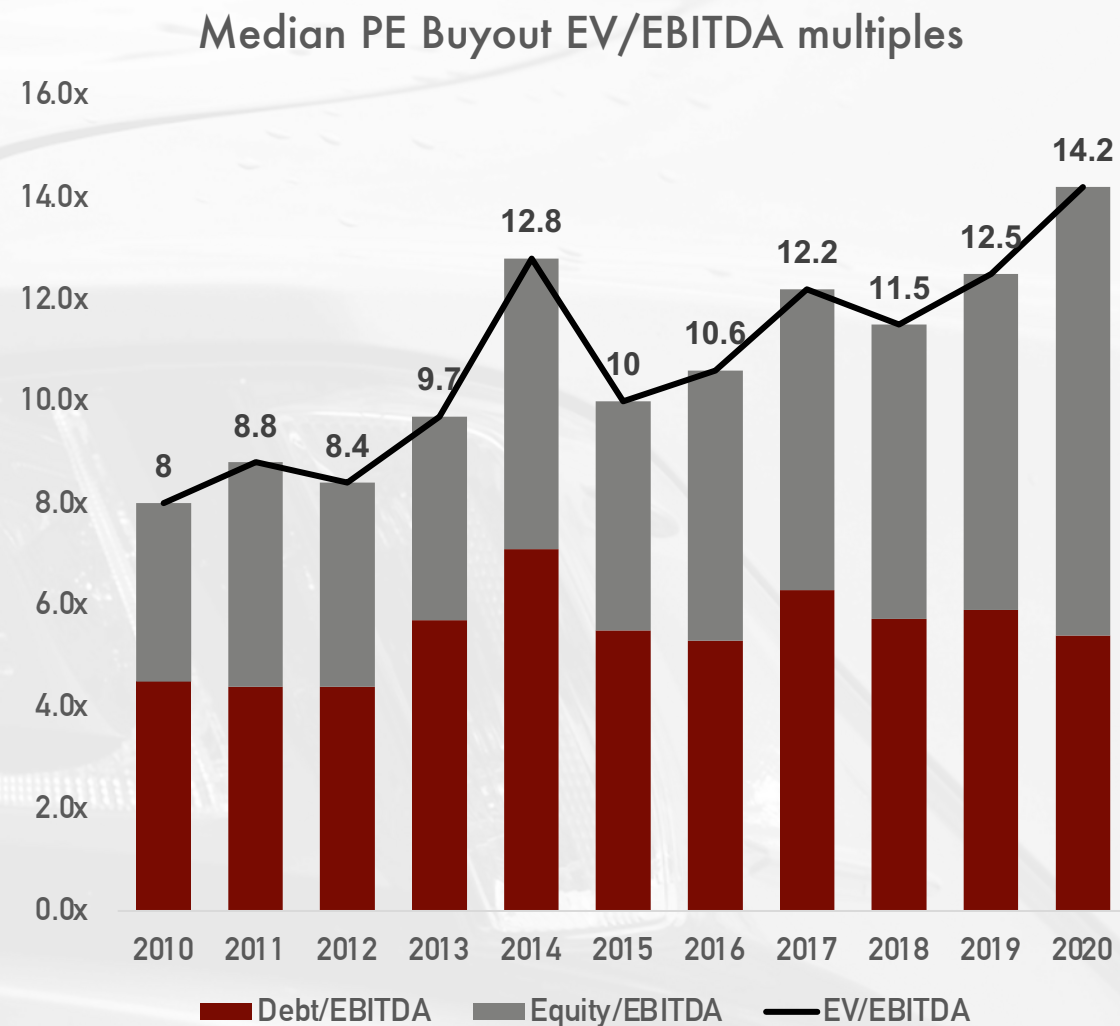
Source: Christoph Janz at Point Nine Capital

	PRE-SEED	SEED	SERIES A	SERIES B	SERIES C
ARR	\$0	\$0 - \$200k	\$1m - \$1.5m	\$3m - \$5m	\$10m+
ARR GROWTH (Y/Y)	NA	300%	300%	250%	200%
VALUATION	\$1m - \$3m	\$4m - \$11m	\$15m - \$40m	\$50m - \$140m	\$100m+
ROUND SIZE	\$200k - \$500k	\$1m - \$4m	\$5m - \$14m	\$15m - \$40m	\$20m+
INVESTORS	Friends, Family, Angels	Angels, Micro VCs	VCs	VCs	VCs, PE
TEAM	Smart, committed team with relevant experience	Strong fit between founders' skills and market need	Proven ability to attract and manage great hires	Experienced leaders in most functions; Proven ability to recruit senior people	Complete senior management team
PRODUCT/MARKET FIT	Market research indicates strong need for the project	Product is loved by early users; strong engagement & stickiness	High usage, low churn; passionate customers; large TAM	Increasing evidence of strong product/market fit in huge market	Clear and increasing evidence of product/market fit
SALES/MARKETING & UNIT ECONOMICS	Understanding best practices; good ideas	Signs of organic traction	Early evidence of a repeatable, scalable, profitable sales model; CAC payback <12 months	Short sales cycle relative to ACV; Net dollar retention >100%; LTV:CAC >3:1	Predictable, profitable, scalable sales/marketing machine
TRACTION	Growing waiting list of first pilot customers	Engaged first users; adding a few \$k in MRR per month	Get from 0 to \$100k MRR within 12 – 18 months; Growing 300%/year	Growing 250% per year	Growing 200% per year; negative net MRR churn
DEFENSIBILITY	None	Speed to market	Brand is emerging; evidence of unique data asset	First signs of a successful brand, platform or data play	Strong signs of a successful brand, platform or data play
MARKET POTENTIAL	Belief in \$10M+ ARR potential	Conviction there's \$100m - \$300m+ ARR potential	Increasing evidence of \$500m+ ARR potential	Increasing confidence in exit potential	Increasing confidence in strategic buyer or IPO potential

>> PUBLIC MARKET SAAS AND PE BUYOUT MULTIPLES



Source: The SaaS Capital Index



Source: PitchBook

>>> AUTOMOTIVE TECHNOLOGY TRANSACTION MULTIPLES

Business Model	Definition	Revenue Multiple
Pure SaaS	Uses software to provide customers with a service. Creates, develops, hosts, and updates the product. Has access to a global market and can scale without increasing product delivery costs.	10.0x+
Tech-Enabled Services	Brings new or innovative user-experiences using existing technologies to the market. Consumes and/or creates technology (physical infrastructure, hardware or software) designed and configured into a solution delivered to an end user customer.	3.0x-5.0x
Pure Services	A business that generates income by providing services instead of selling physical products.	1.0x-2.0x

Multiples higher for companies that have:

1. Predictable, recurring revenue
2. Low churn
3. High gross margins
4. High growth rates
5. High annual revenue growth
6. Strong upsell opportunities



DEALER AUTO TECH LANDSCAPE

DEALERSHIP AUTO TECH LANDSCAPE

TRAFFIC GENERATION (awareness & direct-response)

Traditional Media

Lee Enterprises, CBS RADIO, GANNETT, Entercom, TEGNA, HEARST, RAYCOM Media, Clear Channel, COX, Dow Jones, Cumulus, Gatehouse Media, abc, digitalfirst, iHeart, NBC, RADIO, Cumulus

Digital Advertising

BRING A TRAILER, OfferUp, Letgo, eBay, R. LICK, Google, Autotrader, cars.com, CarGurus, Google AdWords, AUTOLIST, TRADER, TrueCar, autoweb, CAR-DRIVER, carzing

Advertising Agencies

SOKAL, M, C-4 Analytics, GSM, stream, naked, lime, TURNKEY, RAYCOM, DEALER WORLD, Appearance, STRATEGIC MARKETING, MOORE & SCARRY

Advertising Technology

HEARST, tapscios, Outsell, HELIX, Appearance, SPINCAR, Epsilon, SPEED, Dealer, 3birds, V12, eBizAutos, DIGITAL AIR STRIKE, TECUBI, AutoSweet, COAT

CONVERSION (converting consumer traffic to sale)

Mystery Shopping

Maritz RESEARCH, J.D. POWER, imyst, PLADOOGLE, INTELLI SHOP, DealerSynergy, PIED PIPER

In-Store Training

PR2ACTIVE, NADA, CORMOSLEY, ncm, DealerSynergy, Automotive Dealership, J.D. POWER, kain, DealerSolutions, David Lewis & Associates, Inc.

RETENTION (retain as service/repeat customer)

Customer Retention Tools

TeamVelocity, DataClover, Experian, DealerSocket, elead, automotiveMastermind, Digital Air Strike, iprecheck, Spireon, ooxtime, HELIX, Affinitiv, AutoLoop, 3birds, Outsell, AutoAlert

SOFTWARE

Social / Reputation Management

SOCIAL DEALER, reputation.com, SNAP, DealerRate, SureCritic, ActivEngage, PODIUM, MXS

Dealer Websites

DEP, DEALERINSPIRE, nabthat, fusion24, sincro, DealerSocket, DEALER.COM, eBizAutos

Vehicle Acquisition / Auctions

ACV, Manheim, Accu-Trade, VAN, AUCTION EDGE, CARFAX, boost acquisition, TradeRev, KAR, BACKLOT CASE, CARWAVE, otolone, VETTX, CMF DealerSource

E-Contracting

eOriginal, CDK, Dealertrack

Email Handling & Chat

Auto Labs, CarNow, conversica, 360, Matador, Pulsar AI, propel, DIGITAL AIR STRIKE

Service & Parts

singlethread, ADVISOR, DealerFX, Sunbit, RapidRecon, Revolution Parts, Promise, Solego, DealerSocket, eAdvisor, Dignifi, mykoarma, truvideo, Synatron, RECONTRACT, PAL, mykoarma, truvideo, Synatron, RECONTRACT

Workforce Management

DrivingSales, auto, ADP, Hireology

F&I Technology

SE, Dignifi, P-E-N, MAXIMTRAK, ZURICH, DARWIN, DealerScience, RouteOne, Dealertrack, VisionMenu, eLEND SOLUTIONS

Automotive Data

JATO, EVX IMAGES, alg, CCC, autodata, xoxo, Chrome Data, izmocars, dataone, RM, Motive Retail, IHS Markit, OFFERLOGIX, EQUIFAX, TransUnion

Vehicle Subscription

fair SIXT+, Hertz, REVOLVE, PASSPORT, LESS, Audi select, Subscribe, MOBILITI, CARE BY VOLVO, DriveAway, ACCESS, FreshCar, LMP SUBSCRIPTIONS

Desking

CDK, VinSolutions, Dealertrack, elead, ProMax, DS DEALER SPECIALTIES

Inspections

VINTEK, Kcite, PAVE, DS DEALER SPECIALTIES

Merchandise Support

REDLINE, WheelsTV, CarStory, SnapCell, SPINCAR, UNITYWORKS, TRU IMAGES, EVN, HomeNet, BLACKWIDOW, MAX DIGITAL

Digital Retailing

PRODIGY, Gubagoo, CAR240, DEP, PAI EXPRESS, AUTO NAVIGATOR, WebBuy, CCK, Gubagoo, ActivEngage, Dealertrack, digitalmotors, ROADSTER, DARWIN, clearline, POP, TAB RAIL, model, autohub, trd Payments, fastlane, CarSaver, MOTINSIGHT, go2live, Gomo

Inventory Management

Lotz, eBizAutos, TECH, REDLINE, Kite, dealercue, eBizAutos, TECH, REDLINE, Kite, dealercue

Online Retailing

CARIMAX, gettacar, CARVANA, SHIFT, vroom

Vehicle History

VinAudit, DMVdesk, CARFAX

Registration & Titling

ATC, Dealertrack, TITLE DIRECT, DLRdmy, FIVE64, CVA, TitleTec, REVIVER, STATE ONLY

Dealer Management System (DMS)

Reynolds & Reynolds, ADVENT, QUORUM, CDK, Autosoft, Dealertrack, DealerBuilt, PBS, Adam, TEKION

Dealer Website Engagement

ROADSTER, Gubagoo, CAR240, DEP, PAI EXPRESS, Kite, dealercue, Gubagoo, ActivEngage, Dealertrack, digitalmotors, ROADSTER, Gubagoo, CAR240, DEP, PAI EXPRESS, Kite, dealercue

Process Improvement

Hireology, KPA, vAuto, auto, PowerDealer, nextup, TRUE SPOT, A2Z, SYNC, DealerDOC, Lotz, Strategic Source, xoxo, WerrCloud, frogdata, DEALEROPS, REVERSE, access, CDC, Credit Bureau Connection, STROLID, TRAWER, esuresale

Peer-to-Peer (P2P)

cars.com, CanGurus, TRED, OfferUp, blinker, Autotrader

Vehicle Imaging

BLACKWIDOW, MONK, Click-ins, RAIN, UVEYE

Outsourced BDC

STROLID, TRAWER, Paramount

Vehicle Insurance

DEALER POLICY, SURE, gabi, COVERHOUND

Customer Relationship Management (CRM)

DriveCentric, crmsuite, MOMENTUM, DealerPeak, Reynolds & Reynolds, Plogic, DealerSocket, elead, CDK, DealerMINE, Affinitiv, VinSolutions, Dominion, ProMax, VOTENZA, Safety Automation

Media Attribution

Semcasting, VistaDash, HELIX, J.D. POWER, 020, el toro, AutoID, experian, foureyes, DRIVEN DATA

Phone Call Management

Car Wars, CALLREVV, CallSource, Marchex, Interactivevel, Calldrip, Who's Calling, PHONE NINJAS

P2P Rentals

RVshare, Relys, Outdoorsy, TURO, getaround

Connected Car

LYNKD, LoJack, REVIVER, CarIQ, TRUE SPOT, Spireon

Accessories

NSIONIA GROUP, AC, AUTO AUDIO CONFIGURATOR, autodata, ADD THE SOCKS, INTERACTIVE GARAGE, ICON MEDIA

Key Systems

KEY CONTROL SYSTEMS, SECURITY VEHICLE AUTOMATION, MATRIX, KEYTRAK, TRUE SPOT, KEY-BOX, SHAREBOX, PINPOINT LOCAL SERVICES, SOUTH WEST SOLUTIONS GROUP, MOORE WATSHAMMS, KEYTRAK, TRUE SPOT

Vehicle Appraisal

CLAVIN GENIUS, MAX DIGITAL, Accu-Trade, eAuto Appraise, autohub, Kite, Black Book, TRADEPENDING

Floor Planning

ally, AFC, US AUTO CREDIT, CITY AUTO FINANCE, AFS, Westlake, BANK OF AMERICA, CarBucks, NEXTGEAR, CHASE, AUCION CREDIT

Remote Service

REPAIR SMITH, SIMPLETIRE, SparkCharge, spiffy, YOSHI

Vehicle Management

RECON, Velocity, LoJack, TRUE SPOT, AR RAPIDRECON, MDL

Vehicle Transportation

DRIVER, ACERTUS, Quickride, REDCAP, hopdrive, AUTO DUBRO, BEZCAR



2021 TRANSACTIONS

SEPTMBER 2021 TRANSACTIONS

 REDWOOD MATERIALS \$50m Investment 	 Salty. Acquired by 	 momenta \$300m Investment 	 LIGHTYEAR \$110m Financing coöperatie DELA	 CLARK COUNTY AUCTION Acquired by XLerate GROUP	 Acquired by XLerate GROUP	 XLerate GROUP Acquired by 	 TRADEHELPER Acquired by Block	 ryd €10m Financing 	
 ASSET TRACK GPS Acquired by Advantage	 Just \$8m Funding CROSS CUT VENTURES	 foretellix \$32m Series B 	 DEEPRROUTE.AI \$300m Investment 	 WRENCH 10% acquired by BRIDGESTONE Bridgestone Americas, Inc.	 PIT CREW Acquired by spiffy	 ACCURE Battery Intelligence \$8M Series A BLUE BEAR CAPITAL	 SD STRATEGIC DIVERSIFIED Acquired by APCO HOLDINGS	 kevala \$21m Series A CS CAPITAL	
 CYBELLUM \$240m Acquisition 	 BATTERY RESOURCES \$70m funding HITACHI Inspire the Next	 KAVAK \$700m Series E GENERAL CATALYST	 EDGE CASE RESEARCH \$12m Series A yabeo	 CarDoor \$3m CAD Seed framework venture partners	 OCULII Undisclosed Investment 	 TRITIUM \$40m AUS Investment Cigna	 CallSource Acquired by CALLREVU	 CARSOME \$170m Funding MEDIATEK	 caocao \$589m Series B
 BLACK SESAME TECHNOLOGIES Investment by 	 Cargamos \$7m funding nazca	 SPIER'S NEW TECHNOLOGIES Acquired by Cox AUTOMOTIVE	 BridgeLinx \$10m Financing 20VC	 gogoro \$2.3b SPAC PRINCEVILLE CAPITAL	 AIMEXPERTS Acquired by AUTOVERIFY	 marshmallow \$85m Series B passion capital	 CarNow \$30m Financing Battery	 cazana Acquired by CAZOO	 RENOVO .AUTO Acquired by woven planet
 haydenAI \$20m Series A 	 AUCTO \$3.7m funding NfX	 TRANSFIX Series A 	 VOLTA TRUCKS €37m Financing LUXOR CAPITAL	 AVIVA \$26.5m Financing MARVELL	 CARS 24 \$259m Financing DST GLOBAL	 tricolor auto \$90m Investment BlackRock	 TECHLANTIC Acquired by TRADE X	 VisionNav Robotics Series C Funding ByteDance	

>>> 2021 TRANSACTIONS: JAN - MAR

Jan 2021

CRESTA Investment by PORSCHE VENTURES	Faraday Future \$3.4b SPAC	autozen \$4.2m Financing	AUTO 1 GROUP \$1.2b IPO
FREEWIRE \$50m Series C RIVER STONE	carlotz SPAC Acamar Partners	EVgo FAST CHARGING \$2.6b SPAC CLIMATE REAL IMPACT SOLUTIONS	PROTERRA \$1.6b SPAC ARCLIGHT CLEAN TRANSITION
UV EYE Investment by HYUNDAI	FUSE AUTOTECH Financing PICO / partners	CRUISE \$2.0b Investment Microsoft	R3E \$3b-\$4b SPAC
CameraMatics €4.0m Financing	TACTILE MOBILITY Investment by nexteer AUTOMOTIVE	loop \$3.25m Seed freestyle.vc	RIVIAN \$2.65b Financing T.RowePrice
BlueDriver Acquired by asTech	BAYIQ Acquired by AutoVitals	oxbotica \$47m Series B bp ventures	KEEPS Investment by SSM PARTNERS
DrivenBrands IPO	LUXOR Acquired by COX AUTOMOTIVE	FYUSION Acquired by COX AUTOMOTIVE	
VERUSEN Series A BMW i Ventures	kyte. \$9.0m Investment DN Capital	SocialAuto \$1.5m Seed Overline	
SILA NANOTECHNOLOGIES \$590m Series F BMW GROUP DAIMLER	AEVA \$200m Financing	MotoRefi \$10m Financing MODERNE VENTURES	

Feb 2021

DIESEL MINNESOTA Acquired by DICKINSON FLEET SERVICES	pony.ai \$100m Series C Extension	microvast \$3b SPAC THC	otonomo \$1.4b SPAC SOFTWARE ACQUISITION GROUP
LUCID \$12b SPAC CHURCHILL CAPITAL IV	volta \$2b SPAC Tortoise Acquisition Corp. II	getta car \$25m Financing 3L LUXOR CAPITAL	metropolis \$41m Financing 3L
nextmv \$8.0m Series A FIRSTMARK CAPITAL	HYZON \$2.7b SPAC DCRB+	Acquisition by Sonic Automotive	LOT VANTAGE Acquisition DIGITAL AIR STRIKE
RECOGNI \$48.9m Funding WRVI CAPITAL	AKASOL acquired by BorgWarner	carbiz Acquisition by Sonic Automotive	BestRide Acquisition DIGITAL AIR STRIKE
AEYE \$2b SPAC CANTOR Pitzgerald	swift NAVIGATION \$50m Series C NEA	DEALERPOLICY \$30m Series B 3L 44	
TRADEPENDING Recapitalization by CAPSTREET	PlusAi \$200m Series B	CCC \$6.5b SPAC DRAGONEER	
SBD SWEETIE BOY DELIVERS Investment by CIT GAP FUNDS CENTER FOR INNOVATIVE TECHNOLOGY	XOS \$2.0b SPAC NextGer Acquisition Corporation	adasThink Acquisition by asTech	
ENEVATE \$81m Series E Fidelity	SmartHop \$12m Series A USV	SQUARE ROOT \$25m Acquisition CDK Global	

Mar 2021

BATON \$10.5m Series A 8VC MAERSK Growth	PRODIGY THE FUTURE OF AUTOMOTIVE RETAIL acquired by Upstart	CAZOO \$7b SPAC	Lightyear \$A48m Financing
CH! ChargerHelp! \$2.75m financing TRUCKS	SERVICE MY CAR \$10m Seed Bahwan IT	ACV \$414m IPO	ParkMobile acquired by easypark
CARPAY \$9.9m Series A AUTOTECH VENTURES	digitalmotors. \$10m Series A DN Capital	ZEGO \$150m Series C DST GLOBAL	BARAJA \$31m Series B
REFRACTION AI \$4.2m Seed	Lo/Jack acquired by Spireon	remix Acquisition by VIA	optibus \$107m Series C
momenta \$500m Funding SAC MOTOR TOYOTA BOSCH	CUBERG acquired by northvolt	flexclub Drive your way \$5m Financing Kindred VENTURES	CLUTCH \$60m Financing Canaan
MIDWEST FACILITIES, INC. acquired by AKG	CarCapital TECHNOLOGIES \$8.8m Series A FM CAPITAL	DEALER-FX \$200m acquisition Snap-on	RED Diagnostics Acquired by asTech
voyage acquired by CRUISE	RVN \$15m Series A KAR GLOBAL	PERRONE ROBOTICS \$10m funding CAPSTONE holdings	
\$2m Funding	RUMBLE ON Combines with RIPENOW	DONLEN \$891m Acquisition ATHENE HOLDING	

>>> 2021 TRANSACTIONS: APR - JUN

Apr 2021

May 2021

Jun 2021

<div><div>ottopia</div><div>\$9m Funding</div><div></div></div>	<div><div>SES</div><div>\$139m Investment</div><div></div></div>	<div><div>Jerry</div><div>\$28B Series B</div><div>GOODWATER CAPITAL</div></div>	<div><div>TRITIUM</div><div>\$1.2b SPAC</div><div>DCRC+</div></div>	<div><div>irp systems</div><div>\$31m Series C</div><div></div></div>	<div><div>Lender Compliance Technologies</div><div>\$4.15M Series A</div><div>AUTOMOTIVE</div></div>	<div><div>WeRide 文远知行</div><div>\$310M Fundraising</div><div>YUTONG</div></div>	<div><div>TRACTABLE</div><div>\$60M Series D</div><div>INSIGHT PARTNERS GeorgianPartners</div></div>	<div><div>CARRO</div><div>\$360M Series C</div><div>SoftBank Vision Fund</div></div>	<div><div>Mister CAR WASH</div><div>Filed To Go Public</div><div></div></div>	<div><div>buser</div><div>\$138M Fundraise</div><div></div></div>
<div><div>CRUISE</div><div>\$2.75b Funding</div><div>Walmart</div></div>	<div><div>KAVAK.COM</div><div>\$485m Funding</div><div></div></div>	<div><div>Pulsar AI</div><div>Acquired By</div><div>SPINCAR</div></div>	<div><div>PDM AUTOMOTIVE</div><div>\$4m Fundraising</div><div>FUSE</div></div>	<div><div>wejo</div><div>\$1b SPAC</div><div>VIRTUOSO</div></div>	<div><div>Woabi</div><div>\$83.5M Series A</div><div>khosla ventures</div></div>	<div><div>locoNav</div><div>\$37M Series B</div><div>QUIET/CAPITAL</div></div>	<div><div>CABANA CRAFT</div><div>\$10M Series A</div><div>GOLDREEST CAPITAL</div></div>	<div><div>kodiak</div><div>Investment by</div><div>BRIDGESTONE</div></div>	<div><div>northvolt</div><div>\$2.75B Fundraising</div><div>FORSTA AP-FONDEN OMERS</div></div>	<div><div>Auto Exchange</div><div>Acquisition by</div><div>AA</div></div>
<div><div>nuvo cargo</div><div>\$12m Series A</div><div>QED INVESTORS</div></div>	<div><div>lyft Level 5</div><div>\$550m Acquisition by</div><div>woven planet</div></div>	<div><div>E/NRIDE</div><div>\$110m Series B</div><div></div></div>	<div><div>OCULII</div><div>\$55m Series B</div><div>CATAPULT CONDUCTIVE</div></div>	<div><div>InnoVusion</div><div>\$64m Series B</div><div>TEMASEK</div></div>	<div><div>DEEPMAP</div><div>Acquisition By</div><div>NVIDIA</div></div>	<div><div>Zong Mu</div><div>\$190M Series D</div><div>mi xiaomi</div></div>	<div><div>QUANERGY</div><div>SPAC Merger</div><div>CITIC CAPITAL 中信资本</div></div>	<div><div>IoTecha</div><div>\$13.2M Financing</div><div>bp ventures</div></div>	<div><div>GoMechanic</div><div>\$35M Series C</div><div>TIGERGLOBAL</div></div>	<div><div>ELECTRA</div><div>\$3.6M Seed Round</div><div>LIFT</div></div>
<div><div>BlaBlaCar</div><div>\$115m Financing</div><div>UNU GLOBAL</div></div>	<div><div>polestar</div><div>\$550m Funding</div><div></div></div>	<div><div>WeaveGrid</div><div>\$15m Series A</div><div></div></div>	<div><div>AuctionFrontier</div><div>Acquisition by</div><div>KAR GLOBAL</div></div>	<div><div>Solid Power</div><div>\$130m Series B</div><div></div></div>	<div><div>CRUISE</div><div>\$5B Line of Credit</div><div>gm FINANCIAL</div></div>	<div><div>ELECTRIC ERA</div><div>\$3M Seed Round</div><div>REMUS CAPITAL</div></div>	<div><div>LOCUS</div><div>\$50M Series C</div><div>Qualcomm ventures</div></div>	<div><div>DRIVEN DATA</div><div>\$4.5M Series Seed B</div><div></div></div>	<div><div>noblr</div><div>Acquisition by</div><div>USAA</div></div>	<div><div>wallbox</div><div>SPAC</div><div>KENSINGTON</div></div>
<div><div>INNOVIZ TECHNOLOGIES</div><div>IPO</div><div></div></div>	<div><div>IDELIC</div><div>\$20m Funding</div><div>HIGHLAND AXA CAPITAL PARTNERS Venture Partners</div></div>	<div><div>ROCSYS</div><div>\$6.3m Fundraising</div><div>FORWARDone Advancing your innovations</div></div>	<div><div>Affectiva</div><div>Acquired by</div><div>smart eye</div></div>	<div><div>TWAICE</div><div>\$26m Series B</div><div>ENERGIZE VENTURES</div></div>	<div><div>EMBARK</div><div>SPAC Merger</div><div>Northern Genesis</div></div>	<div><div>KEEP TRUCKIN</div><div>\$190M Series E</div><div>G2 VENTURE PARTNERS</div></div>	<div><div>WhereIsMyTransport</div><div>\$14.5 Series A Ext.</div><div>NASPERS Cathay Atrinvest Innovation Fund</div></div>	<div><div>Aa</div><div>Aramisauto IPO</div><div></div></div>	<div><div>lendbuzz</div><div>\$60M Series C</div><div>WELLINGTON MANAGEMENT</div></div>	<div><div>DriveltAway</div><div>Investment From</div><div>Knightsgate</div></div>
<div><div>EASY MILE</div><div>\$66m Series B</div><div>SEARCHLIGHT</div></div>	<div><div>WaveSense</div><div>\$15m Fundraising</div><div>RHAPSODY IMPOSSIBLE VENTURES</div></div>	<div><div>WeRide 文远知行</div><div>Series C Funding</div><div></div></div>	<div><div>MotoRefi</div><div>\$45m financing</div><div>Goldman Sachs</div></div>	<div><div>VIRTUO</div><div>\$96m Funding</div><div>AXA Venture Partners</div></div>	<div><div>PocketExpert</div><div>Acquisition By</div><div>mykaarma</div></div>	<div><div>brumbrum</div><div>€65M Fundraising</div><div>GIP</div></div>	<div><div>TRED</div><div>\$3M Fundraising</div><div></div></div>	<div><div>满帮 Full Truck Alliance</div><div>\$20B IPO</div><div></div></div>	<div><div>ROADSTER</div><div>\$336M Acquisition by</div><div>CDKGlobal</div></div>	
<div><div>edmunds</div><div>\$404m Acquisition</div><div>CARMAX</div></div>	<div><div>AxleHire</div><div>\$20m Series B</div><div>AJAX STRATEGIES</div></div>	<div><div>AUTOPAY</div><div>Merger</div><div>rategenius</div></div>	<div><div>DealerSocket</div><div>Acquisition by</div><div>Solera</div></div>	<div><div>Omnitracs</div><div>Acquisition by</div><div>Solera</div></div>	<div><div>Solid Power</div><div>Potential Merger</div><div>DCRC+</div></div>	<div><div>Justos</div><div>Raised \$2.8M</div><div>Kaszek VENTURES</div></div>	<div><div>Joyride</div><div>\$3.7M Financing</div><div></div></div>	<div><div>mobiletechrX</div><div>Acquisition by</div><div>asTech</div></div>	<div><div>eDriving</div><div>Acquisition by</div><div>Solera</div></div>	
<div><div>tu simple</div><div>\$1.35b IPO</div><div></div></div>	<div><div>oxbotica</div><div>\$13.8m Investment</div><div>ocado GROUP</div></div>	<div><div>Passport SIXTH STREET GROWTH</div><div>\$90m Funding</div><div></div></div>	<div><div>monoDrive</div><div>Acquisition By</div><div>nl</div></div>	<div><div>cinch</div><div>£1bn Fundraising</div><div>CONSTELLATION AUTOMOTIVE GROUP</div></div>	<div><div>HESAI</div><div>\$300M Series D</div><div>ventures</div></div>	<div><div>sennder</div><div>\$80M Series D</div><div>BAILLIE GIFFORD</div></div>	<div><div>Exeter</div><div>Acquisition by</div><div>WARBURG PINCUS</div></div>	<div><div>CREDR</div><div>\$6.5M Financing</div><div>YAMAHA</div></div>	<div><div>WAYMO</div><div>\$2.5B Funding</div><div></div></div>	
<div><div>CarCapital</div><div>\$20m Credit Line</div><div>NP</div></div>	<div><div>CarTrade.com</div><div>Filed for IPO</div><div></div></div>	<div><div>carsales</div><div>Acquiring 49% of</div><div>TRADER INTERACTIVE</div></div>	<div><div>mileauto</div><div>\$10.3m Seed Round</div><div></div></div>	<div><div>electriphi</div><div>Acquisition by</div><div>Ford</div></div>	<div><div>motorway</div><div>\$67.7M Series B</div><div>Index Ventures</div></div>	<div><div>FLixmobility</div><div>\$650M Series G</div><div></div></div>	<div><div>Gubagoo</div><div>Acquisition by</div><div>Reynolds & Reynolds</div></div>	<div><div>trustworthy ai</div><div>Acquisition by</div><div>WAYMO</div></div>		

>>> 2021 TRANSACTIONS: JUL - AUG

Jul 2021












Aug 2021

DARWIN AUTOMOTIVE Acquired by J.D. POWER	NAVMATIC Acquired By superpedestrian	SONATUS \$35m Series A Translink CAP.TAL	Aurora SPAC IPO Reinvent TECHNOLOGY PARTNERS	RECARGO \$25m Acquired by EVgo	FleetMaster Acquired by COX AUTOMOTIVE™	DEALERPOLICY \$110m Financing Goldman Sachs	iLendingDIRECT \$35m Financing FIRST EAGLE INVESTMENT MANAGEMENT	TURO Filed for IPO	BEAR FLAG \$250m acquisition JOHN DEERE	YAA \$4.2m Seed FLYBRIDGE CAPITAL PARTNERS	CARWAVE \$450m Acquisition KAR GLOBAL
garasepeti Acquired by KAVAK	MOONX Acquired by WeRide	olive SPAC IPO M-D-H MDH Acquisition Corp.	CAMERA Acquired by woven planet	netradyne \$150m Series C SoftBank Vision Fund	SES \$3.6b SPAC IPO IVANHOE CAPITAL ACQUISITION CORP.	LOOP \$2.5m Seed UBIQUITY VENTURES	underpeak \$3m Investment GEWEKE	RIVIAN Filed for IPO	THIRD WAVE \$40m Series B NORWEST VENTURE PARTNERS	CARZEUS \$400k Acquisition autoweb	OCRAFT \$100m Series A+ Capital
FIXCRAFT \$1m Equity/Debt ubiQUITY	LUCID SPAC IPO CHURCHILL CAPITAL IV	TRANSPLACE \$2.25b Acquisition Uber Freight	Lightico \$27m Series B CAPITAL ONE VENTURES	NOTRAFFIC \$17.5m Series A Nilsen Ventures	SPINNY \$100m Series D TIGERGLOBAL	Hdvi \$32.5m Series B WEATHERFORD SERVICES	waycare \$61m acquisition REKOR AI DRIVEN DECISIONS	carputty \$7.2m Seed KICK START	veoneer \$4.6b acquisition Qualcomm	Bolt €600m financing SEQUOIA	DigiSure \$13.1m pre-Series A morado venture partners
FLOCK \$17m Series A SOCIALCAPITAL	Venti Technologies \$8m Financing LOV RESEARCH PARTNERS	bipi €100m Acquisition RCI BANK AND SERVICES	LULA \$18m Series A FOUNDERS FUND khosla ventures	Employ/Us/ Acquired by Hireology	MAXDIGITAL \$60m Acquired by ACV	shotl Acquired by SWL	HopSkipDrive \$25m Series C e- ENERGY IMPACT PARTNERS	voi. \$45m financing RAINE	INCEPTIO TECHNOLOGY \$270m Series B 京东物流 JD Logistics	MotoRefi \$5m financing Cred	DeepMotion \$77m Acquisition mi xiaomi
REDWOOD MATERIALS \$700m Series C T.Rowe Price INVEST WITH CONFIDENCE	R3E SPAC IPO 10X CAPITAL	has-to-be eMobility €250m Acquired by -chargepoint+	algolux \$23m CAD Series B FORTE VENTURES Drive Capital	widewail your partner in online engagement™ \$1.5m Seed Funding	tru Payments Acquired by PURECARS	ample \$160m funding Shell REPOL	InnoFusion \$66m Series B+ 國泰君安國際 GUOTAI JUNAN INTERNATIONAL	BLACKBUCK \$67m Series E TRIBE CAPITAL	ELROY AIR \$40m Series A LOCKHEED MARTIN	Instacart \$23m Series B EJ-VENTURES SPONSOR TOGETHER	Upstream \$62m Series C Mital Santhosh Insurance
allego \$3.14b SPAC Merger Spartan Acquisition Corp. III	RIVIAN \$2.5b Funding THE CLIMATE PLEDGE	UVEYE VEHICLE INSPECTION SYSTEMS \$60m Series C CARMAX	caura \$4.2m Financing TWINFOCUS	ABN "AUTOMOTIVE" BROADCASTING NETWORK Acquisition by spectrio	REPAIR SMITH \$42m funding CAPITAL	CHAMPtitles \$8.5m Series A Eos Venture Partners	FUSE AUTOTECH \$10m Series A TARGET GLOBAL	Niron Magnetics \$21.3 Financing SPAC	ClearRoad \$2.35m Seed SPACE CAPITAL	VIA \$450m Acquisition Ideanomics	
ONTO \$175m Series B Alfvén & Didrikson	Faraday Future SPAC IPO	iCar Asia \$200m Acquisition CARSOME	freetech \$100m Series A CLIF 中國互聯網投資基金 China Internet Investment Fund	LACUNA TECHNOLOGIES \$16m Series A XPLORER CAPITAL	canadadrives \$100m CDN funding HONOR VENTURES	HAGERTY \$3.13b SPAC ALDEL FINANCIAL	VIRICITI €75m Acquisition -chargepoint+	freightify \$2.5m pre-Series A NORDIC E&E VENTURE CAPITAL	Udrive anywhere, everywhere \$5m financing	TRADE \$10m Financing cuhoVC	
TRADE \$44m CAD Financing AIMIA	COBLI \$35m Series B SoftBank	shopmonkey \$75m Series C BESSEMER VENTURE PARTNERS Index Ventures	MotorDocs Acquisition by keyloop	Griip Minority Investment PORSCHE VENTURES	canadadrives \$100m CDN funding HONOR VENTURES	FIX CAPITAL \$7.2m financing TACTICO	CarIQ \$25m Series B FORTE VENTURES	CEPTON SPAC IPO GROWTH CAPITAL ACQUISITION CORP.	OCTANE \$52m Series D PROGRESSIVE	Gatik \$85m Series B KOCH DISRUPTIVE TECHNOLOGIES	
RODO \$18m Series B Holman STRATEGIC VENTURES	RELAY \$60m Series C	imove €16M Series A Auto Scout24	LIQUIDMOTORS POWERED BY AUTOPARTS GROUP BY SUEZ Acquisition by elerate GROUP	GHOST \$100m Series D SUTTER HILL VENTURES	kovi \$104m Series B VALOR CAPITAL PARTNERS	NE Nanotech Energy \$64m Financing Fubon Financial	Jerry \$75m Series C GOODWATER CAPITAL	azuga Acquired by BRIDGESTONE	fetch \$50m Series C CELOT CAPITAL MANAGEMENT	HAAS ALERT \$5m Seed Round Blu Venture INVESTORS	

































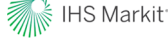







































2020 TRANSACTIONS

 acquired by Adevinta	 acquired by J.D. POWER	 \$300m Financing	 \$3.0b Financing	 \$14m Financing	 \$20m Financing	 \$827m SPAC Acamar Partners	 acquired by KAR GLOBAL	 \$23m Financing	 \$1.45b sale to EP	 \$260m sale to DealerSocket
 Invests in Circular	 acquired by J.D. POWER	 acquired by HEARST AUTOS	 \$25m Financing	 \$100m Financing	 Public Offering (SPAC)	 Acquisition CATTERTON	 Public Offering (SPAC)	 service simplified. acquired by Protective	 \$44.0b sale to S&P Global	 \$45m Series C FORTROSS VENTURES
 \$2.5b Financing	 Financing	 \$50m Financing	 acquired by MAG McCONKEY AUCTION GROUP	 acquired by CarGurus	 \$1.5m Financing	 \$724.4m IPO	 acquired by NATIONAL AUTO CARE	 \$150m Financing Advent International Global Private Equity	 \$875m sale to ATHENE	 POWERING OUT OF STATE TITLE & REGISTRATION Investment PCF polarispartners
 acquired by ASBURY AUTOMOTIVE GROUP	 Public Offering (SPAC)	 Public Offering (SPAC)	 Acquired by MAG McCONKEY AUCTION GROUP	 acquired by CAZOO	 \$311m Financing	 \$100m+ Financing KKR Tritium	 acquired by NATIONAL AUTO CARE	 \$55m Financing Durable	 \$1.3b SPAC C & CO INSU II	 \$5m Seed Round NEXTGEAR VENTURES
 \$50m Financing GM SAIC	 Public Offering (SPAC)	 Public Offering (SPAC)	 Offers 13.3m Class A stock	 Taken Private by Tencent 腾讯	 \$7.0m Financing	 \$1.33b SPAC RMG	 acquired by auto experience	 \$140m Financing	 \$7m Financing FM CAPITAL	 \$823m SPAC GigCapital
 IPO	 €231m Acquisition Wolters Kluwer	 \$7m Financing	 Offers 5.0m Class A stock	 \$1.375m Financing	 \$20m Financing	 acquired by LMP AUTOMOTIVE	 Financing PORSCHE VENTURES	 acquired by Reynolds & Reynolds	 \$7m Financing OurCrowd	 \$5m Financing THE ENGINE
 \$2.1b SPAC INTERPRIVATE	 \$267m Financing ONTARIO TEACHERS' PENSION PLAN	 \$6.2m Financing	 \$15m Series A HONDA	 Public via SPAC	 Acquired by CUNA MUTUAL GROUP	 acquired by Uber	 \$1b+ SPAC FORUM MERGER III CORPORATION	 \$25m Financing WITTINGTON VENTURES	 \$6m Financing	 \$45m Financing
 \$5m Financing POWERBAND SOLUTIONS	 \$24.5m Acquisition KINGSWAY FINANCIAL	 \$50m Financing T.RowePrice INVEST WITH CONFIDENCE	 StoneEagleF&I Majority Investment BV Battery Ventures	 \$20m Financing Kayne Anderson Capital Advisors, L.P.	 \$13m Financing OX	 €20 million Series A	 \$5.4b+ SPAC CIG MERGES CORP	 \$275m Acquisition CarGurus	 \$15m Series A INSIGHT PARTNERS	 \$3.5m Financing Wireframe VENTURES
 \$120m Acquisition vroom	 \$5.0m Financing redfortcapital	 \$23m Financing VENTURES	 \$1.9b SPAC COLONNADE	 \$20.5m Series A CAFFEINATED CAPITAL	 \$1.0b+ SPAC	 \$350m Financing VectoIQ	 \$700k Financing avis budget group	 Investment JMI EQUITY	 Plug into your future \$1.4b SPAC TPG FROM RECENTRAL FINANCE	 \$8m CAD Seed Round Threshold

>>> MOST IMPORTANT AUTO TECH DEALS BY YEAR: 2012-2016

2012	2013	2014	2015	2016
 BY  PRICE PAID: \$1.1B EBITDA MULTIPLE: 9.9x	 BY  PRICE PAID: \$25M REVENUE MULTIPLE: 0.8x	 BY  PRICE PAID: \$1.1B REVENUE MULTIPLE: 12.0x	 BY  PRICE PAID: \$460M REVENUE MULTIPLE: 6.5x	 BY  PRICE PAID: \$15M REVENUE MULTIPLE: N/A
 BY  PRICE PAID: \$10.0M REVENUE MULTIPLE: NA	 BY  PRICE PAID: \$1.4B EBITDA MULTIPLE: 14.0x	 BY  IPO Valuation: \$1.3B REVENUE MULTIPLE: NA	 BY  PRICE PAID: \$165M EBITDA MULTIPLE: 5.9x	 BY  PRICE PAID: \$5.9B REVENUE MULTIPLE: N/A
 BY  PRICE PAID: \$351M EBITDA MULTIPLE: 10.0x	 BY  PRICE PAID: \$1.1B EBITDA MULTIPLE: 11.5x	 BY  PRICE PAID: \$377.5M REVENUE MULTIPLE: 7.6x	 BY  PRICE PAID: \$4.6B REVENUE MULTIPLE: 4.4x	 BY  PRICE PAID: \$1.2B EBITDA MULTIPLE: 15.0x
 BY  PRICE PAID: NA REVENUE MULTIPLE: NA	 BY  PRICE PAID: \$974M REVENUE MULTIPLE: 4.2x	 BY  PRICE PAID: \$2.5B EBITDA MULTIPLE: 15.9x	 BY  PRICE PAID: \$6.5B EBITDA MULTIPLE: 14.2x	 BY  PRICE PAID: \$1.1B EBITDA MULTIPLE: 12.9x
 BY  PRICE PAID: NA REVENUE MULTIPLE: NA	 BY  PRICE PAID: \$550M REVENUE MULTIPLE: 15.0x	 BY  PRICE PAID: \$325M REVENUE MULTIPLE: 6.0x	 BY  PRICE PAID: \$142.5M EBITDA MULTIPLE: 11.9x	 BY  PRICE PAID: \$156M EBITDA MULTIPLE: 4.3x
 BY  PRICE PAID: \$49M REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$53M REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$193M EBITDA MULTIPLE: 17.5x	 BY  PRICE PAID: \$125M REVENUE MULTIPLE: 1.8x	 BY  PRICE PAID: N/A REVENUE MULTIPLE: N/A
	 BY  PRICE PAID: \$30M REVENUE MULTIPLE: 10.0x	 BY  PRICE PAID: \$65M REVENUE MULTIPLE: 3.6x	 BY  PRICE PAID: \$55M REVENUE MULTIPLE: 1.6x	 BY  PRICE PAID: \$35M REVENUE MULTIPLE: N/A

>>> MOST IMPORTANT AUTO TECH DEALS BY YEAR: 2017-2021

2017	2018	2019	2020	2021
 BY  PRICE PAID: \$125M REVENUE MULTIPLE: N/A	 BY  INVESTED: \$180M (minority investment) REVENUE MULTIPLE: N/A	 BY  INVESTED: \$500M REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$50M (14% Stake) EBITDA MULTIPLE: 10.0x	 BY  IPO VALUATION: \$4.8B REVENUE MULTIPLE: 23.1x
 BY  PRICE PAID: \$43.0M REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$22M REVENUE MULTIPLE: 10.0x	 BY  PRICE PAID: \$720M REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$263M REVENUE MULTIPLE: 7.4x	  IPO VALUATION: \$827M REVENUE MULTIPLE: 7.5x
  IPO VALUATION: \$2.0B REVENUE MULTIPLE: 2.9x	 BY  PRICE PAID: \$525M REVENUE MULTIPLE: 3.5x	  BY  PRICE PAID: \$2.2B REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$155M REVENUE MULTIPLE: 7.8x	 BY  PRICE PAID: \$336M REVENUE MULTIPLE: 12x
 BY  PRICE PAID: \$435M* REVENUE MULTIPLE: 8.7x	 BY  PRICE PAID: N/A REVENUE MULTIPLE: N/A	 BY  PRICE PAID: \$1.9B EBITDA MULTIPLE: 16.5x	 BY  \$275m Acquisition PRICE PAID: \$275M (51% stake) REVENUE MULTIPLE: N/A	 BY  IPO VALUATION: \$7.0B REVENUE MULTIPLE: 11.7x
 BY   PRICE PAID: \$680M REVENUE MULTIPLE: 5.0x	 BY  INVESTED: \$385M EBITDA MULTIPLE: N/A	 BY  PRICE PAID: \$4.4B EBITDA MULTIPLE: N/A	  IPO VALUATION: \$730M REVENUE MULTIPLE: 3.8x	 BY  IPO VALUATION: PENDING EBITDA MULTIPLE: N/A
  IPO VALUATION: \$1.95B EBITDA MULTIPLE: 8.8x	 BY  PRICE PAID: \$50M (7% Stake) REVENUE MULTIPLE: N/A	 BY  PRICE PAID: €2.9B REVENUE MULTIPLE: N/A	  IPO VALUATION: \$2.5B REVENUE MULTIPLE: 2.1x	  IPO VALUATION: PENDING REVENUE MULTIPLE: 30.4x
  IPO VALUATION: \$3.0B REVENUE MULTIPLE: 15.2x	 BY  PRICE PAID: \$205M REVENUE MULTIPLE: 10.0x	 BY  PRICE PAID: \$1.2B EBITDA MULTIPLE: 16.5x	 BY  \$120m Acquisition PRICE PAID: \$120M REVENUE MULTIPLE: 6.0x	 BY  PRICE PAID: \$404M EBITDA MULTIPLE: 11.5x

*IHS Markit acquired approximately 78 percent of automotiveMastermind for a purchase price of approximately \$392 million.



KEY TRANSACTION OVERVIEW

>>> DEAL DETAILS: REDWOOD MATERIALS / FORD

DEAL COMMENTARY

Ford Motor Company has invested \$50 million into Redwood Materials, a battery-recycling startup that plans to eliminate waste and allow Ford to reuse components from its electric vehicles.

Ford will work with Redwood to recycle EV production scrap and its end-of-life batteries.

As many automakers retool factories to accommodate ambitious EV mandates, it's likely they'll grow increasingly concerned with both sourcing battery inputs such as cobalt, lithium, copper and nickel, and reclaiming these valuable inputs at the battery's end-of-life. Reclaiming these inputs will both provide both a degree of supply chain independence, as well as greatly reduce the potential impact on the environment and EV batteries filling up landfills.

We expect other OEMs will make strategic investments or acquisitions in the battery technology space as they advance aggressive mandates around EVs.

REDWOOD
M A T E R I A L S

\$50m Investment by



>>> DEAL DETAILS: SPIERS NEW TECH/COX AUTOMOTIVE

OVERVIEW OF TRANSACTION

Cox Automotive Mobility announced the acquisition of Spiers New Technologies, a leading service provider for EV battery lifecycle management.

SIGNIFICANCE TO INDUSTRY

- Consumers, fleet managers, remarketers and dealers are going to need to understand remaining life in used EVs' batteries.
- Currently, there is no "Carfax" for remaining battery life.
- Cox and Spiers are collaborating on an independent, third-party battery health diagnostic tool.
- Cox hopes to drive adoption of this battery health diagnostic tool to assess the condition and value of EV batteries.
- Cox Automotive looks to help drive greater transparency and confidence in EV transactions with consumers, much like the trusted vehicle valuations Kelley Blue Book has provided to the automotive industry for nearly 100 years.
- Cox Automotive is currently delivering EV battery health reports as part of its Manheim condition reports at select auction locations.



Acquired by



Deal terms not disclosed

>>> DEAL DETAILS: SALTY ACQUIRED BY CDK GLOBAL

OVERVIEW OF TRANSACTION

CDK Global has entered into a definitive agreement to acquire Salty Dot, Inc. (“Salty”).

Deal terms were not disclosed.

SIGNIFICANCE TO INDUSTRY

- Salty provides a convenient, mobile-first solution that helps consumers secure the insurance they need for their vehicle seamlessly without leaving the car-buying experience.
- Historically, many dealerships set up their own in-house insurance agency, with mixed results.
- Salty, and competitor DealerPolicy (which just raised a \$110m Series C funding round led by Goldman Sachs), have figured out a different way to enable dealers to introduce vehicle insurance into the car buying process.
- Consumers can cross-shop insurance providers, save on their monthly premiums, which can then be rolled into either a more expensive vehicle or allow the dealer to attach more F&I products to the deal.
- The consumer wins and the dealer wins.



Acquired by



Deal terms not disclosed



COMPANIES TO WATCH

>>> OCTOBER COMPANIES TO WATCH



rdtstech.com

RDTS Technologies, or Run Dry Traction System provides an active safety system by projecting a flat jet of compressed fluid in front of the tire to ensure an uncontaminated leading patch. Early tests have shown that the solution is effective on water, sand, smaller loose gravel and light snow.



tyrata.com

Tyrata's IntelliTread Drive-Over System is a low-cost, solid-state sensor system incorporated into a low-profile speed bump to monitor tire tread of vehicles in transit through a service lane or depot. It uses commercial RFID tagging to track vehicles and correlates this data to uniquely track each tire that passes over the system.

PITSTOP

pitstopconnect.com

Cutting-edge AI and machine-learning technology that turns messy, real-world data into clean, actionable insights to make recall reductions, uptime increases and product improvements. Leverages data from hundreds of thousands of vehicles to drive actionable insights to save money, improve innovation, and stay ahead of the curve.



enerjazz.tech

Enerjazz is building battery swapping network (like gasoline stations) for 2M+ commercial electric vehicles in India. Enerjazz received a competitive grant from the European Union (EU), funding from YCombinator and was selected among 8 global innovative start-ups by Mercedes-Benz backed accelerator.

AUTHORITY

authority.io

Owning a car is amazing, but administering it is a hassle. Owners are overwhelmed with the number of services that need to keep up: insurance, parking, tolls, fines, maintenance, tires, registration, gas, among others, and everything is done independently and decentralized. Authority centralizes services and benefits related to a vehicle.

everrati

everrati.com

Everrati passionately redefine the most iconic classic cars and make them relevant to the world today. Each car's past is preserved by a meticulous, concours-standard restoration while simultaneously receiving a zero-emissions, full-electric powertrain that offers much improved levels of outright performance, refinement and of course sustainability.



coulomb.ai






















































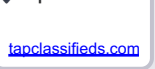

















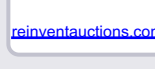


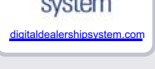

Coulomb's proven analytics software for electric vehicles and batteries can increase your bottom line, reduce battery-related failures, and extend its lifetime use. Offers Battery Analytics, EV Fleet Analytics and EV Feasibility Assessments.



interpl.ai

Interplai is creating the world's most efficient last-mile delivery solution using smart collaborative robots and software. The last mile of delivery is over 53% of the total transport cost for goods. Our goal is to significantly reduce this cost by using a multi-faceted approach to increase delivery efficiency.

>>> 2021 COMPANIES TO WATCH

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
 dealerwing.com	 aetautomotive.com	 fixedopsdigital.com	 carpay.com	 friendemic.com	 nubreaks.com	 wrapmate.com	 wepaythemax.com	 recurrentauto.com	 rdtstech.com	?	?
 nemodata.ai	 zipdeal.com	 autoap.com	 autoapr.com	 dealertrades.net	 carmaproject.com	 blynscy.com	 drivekyte.com	 aucto.com	 tyrata.com	?	?
 parkmyfleet.com	 robotire.com	 five64.com	 installernet.com	 crispify.io	 sfara.com	 quantum5.ai	 claimgenius.com	 momentenergy.ca	 pitstopconnect.com	?	?
 traverconnect.com	 sparkcharge.io	 pureinfluencer.com	 dealerx.com	 ampup.io	 spiffit.com	 lifesaver-app.com	 autofleet.io	 hyperspec.ai	 enerjazz.tech	?	?
 tecobi.com	 carcapital.com	 govintel.com	 rapidrecon.com	 calroadassolutions.com	 widewail.com	 dollaride.com	 dixontech.net	 roadstr.io	 authority.io	?	?
 strolid.com	 fuseautotech.com	 recallrabbit.com	 tapclassifieds.com	 getcarbly.com	 karus.ai	 informed.ig	 quotible.com	 lct1.com	 everrati.com	?	?
 truvideo.com	 xciteauto.com			 bluespace.ai	 tractable.ai	 motorq.com	 iserviceauto.com	 shyftauto.com	 coulomb.ai	?	?
 monkvision.ai	 click-ins.com			 gocarig.com	 reinventauctions.com	 griip.com	 autozen.com	 digitaldealershipsystem.com	 interpl.ai	?	?

>>> 2020 COMPANIES TO WATCH











 www.autohub.io	 www.adventresources.com	 www.goquickride.com	 www.dealerpolicy.com	 www.gettacar.com	 https://360converge.com	 www.suresale.com	 www.fluency.inc
 https://square-root.com	 https://autotitling.com	 www.truespot.com	 www.reviver.com	 www.tscpo.com	 www.worktrucksolutions.com	 https://matador.ai	 www.integratedauctionsolutions.com
 https://get.fixdapp.com	 www.autofi.com	 www.driven-data.com	 www.partsedge.com	 www.vinaudit.com	 www.spireon.com	 www.dealerdocx.com	 www.warrcloud.com
 www.dignifi.com	 www.darwinautomotive.com	 www.a2zsync.com	 www.insearchx.com	 www.lotpop.com	 http://wheelstvnetwork.com	 https://zerosum.ai	 https://dataclover.com
 www.privacy4cars.com	 www.digitalmotors.com	 https://astech.com	 www.cbautogroupinc.com	 www.boostacquisition.com	 www.oneauctionview.com	 https://runbuggy.com	 www.revolutionparts.com
 www.generationsdigital.com	 https://getprodigy.com	 www.getspiffy.com	 www.blackwidowimaging.com	 https://acertusdelivers.com	 www.winfooz.com	 www.caroffer.com	 https://drivecentric.com
 www.carletoninc.com	 www.edealerdirect.com	 https://pave.bot	 www.insigniagroup.com	 https://curbside.ai	 www.ravin.ai	 https://understoryweather.com	
 www.autoleadstar.com	 www.carwave.com	 https://offerlogix.com	 www.motiveretail.com	 www.blinker.com	 https://evnusa.com	 www.socialautotransport.com	

Confidential materials
provided by Automotive
Ventures LLC © 2021

AUTO TECH'S GOT TALENT



AUTOTECH'S *got talent* LEADERBOARD

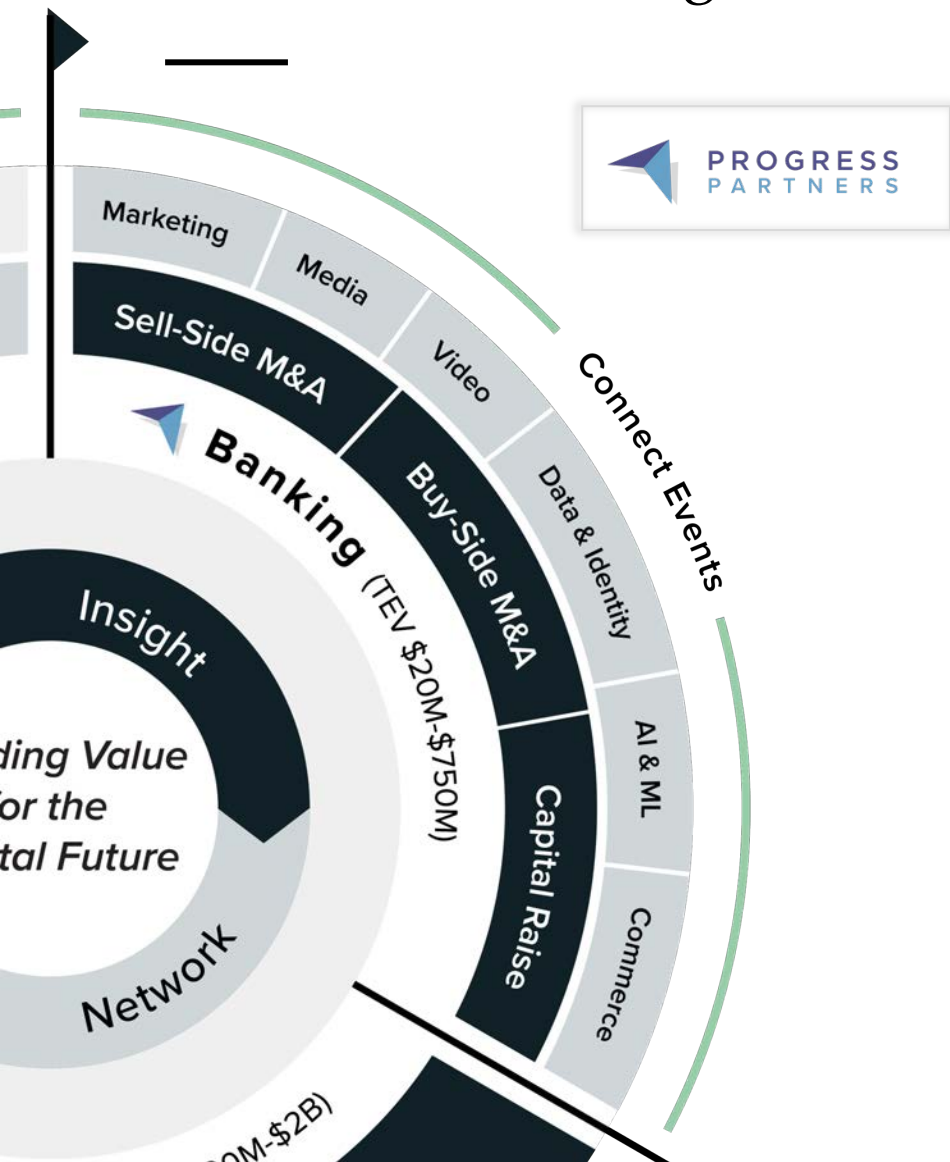
Scored	Rank	Company	Name	Judges' Score	LinkedIn Score	Total
	1		One Auction View	8.17	9.15	8.66
	2		Shyft Auto	8.33	8.89	8.61
	3		Selly Automotive	7.50	9.24	8.37
	4		Aucto	8.33	8.03	8.18
	5		TruckTractorTrailer.com	7.00	9.12	8.06
	6		Cognition Digital	6.83	9.06	7.95
	7		LotPop	7.17	8.71	7.94
	8		Bank My Bike	6.67	6.72	6.69
	9		ADAPT	6.17	6.43	6.30
On Deck	Rank	Company	Name	Judges' Score	LinkedIn Score	Total
	NA		Insignia Group	8.83		

Over a 10-week period, ten early-stage AutoTech companies will battle it out.

You help decide the winner.

Track the Leaderboard: www.automotiveventures.com/autotechsgottalent

Progress Partners: Investment Banking Services



A Full Suite of Services

Sell-Side
M&A

Buy-Side
M&A

Capital Raise

SPAC
Advisory

Reach and Footprint to 6 Sectors:

Adtech

MarTech

FinTech

HealthTech

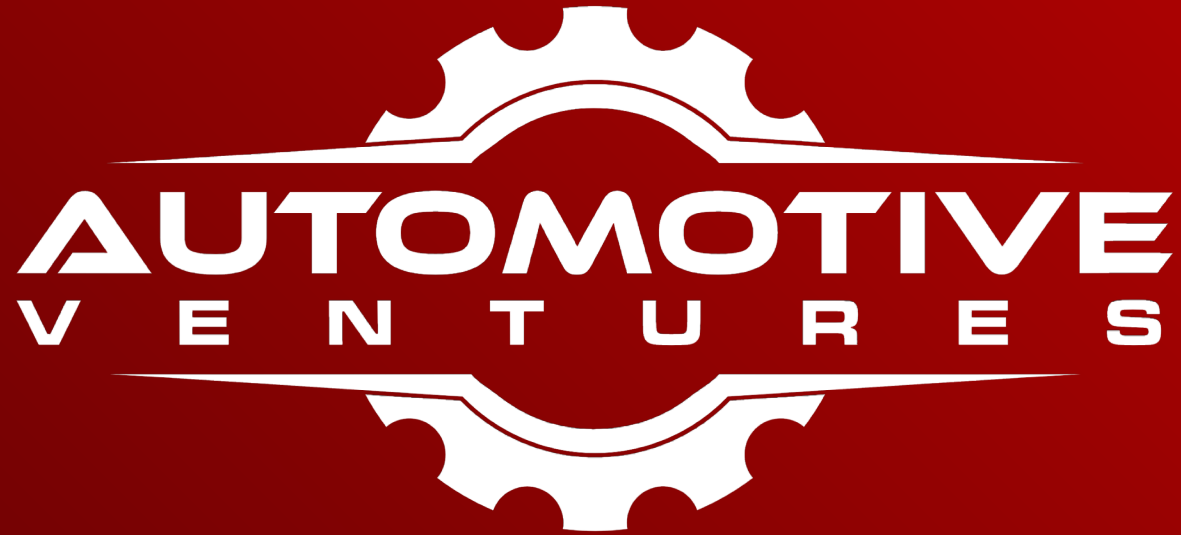
SMB

Automotive



Steve Greenfield | *Managing Director*

- 15+ years in the automotive technology space
- CEO/Founder at Automotive Ventures
- Fmr. SVP Strategy & Business Development at TrueCar
- Fmr. VP of Business Development at AutoTrader.com



**PROVIDING EXPERT ADVICE AND COMPREHENSIVE SERVICES TO
PLAYERS IN THE AUTOMOTIVE TECHNOLOGY ECOSYSTEM**

Automotive Ventures, LLC
1922 Wildwood PL NE
Atlanta, GA 30324
www.automotiveventures.com

Steve Greenfield
CEO/Founder
(470) 223-0227
steve@automotiveventures.com