

▶ M&A market report 1H 2020

Autotech



THE RACE FOR INNOVATION



2019 saw consolidation, funding and innovation at every stage of the global automotive value chain, from the production of vehicles and embedded technology to the enterprise systems that drive the automobile sales machine. This activity was reflected in the diverse range of acquirers of autotech companies, which included global OEMs, tier 1 suppliers, blue-chip automotive software providers, and mobility players.

The large amounts of venture capital now flowing into later-stage autotech funding indicate a “survivorship bias” towards proven and well-funded companies. It is also testament to the general maturity of startups specialising in automotive applications.

On the M&A side, the average age of target companies has seen a steady decline over the past six years: in 2013, targets were 21 years old at the time

of transaction, while they were 14 years old in 2019.

There is still everything to play for the in global race towards connected and autonomous vehicles, with big commitments this year such as Uber ATG's \$1 billion raise from Toyota and Denso; GM Cruise's \$1.15 billion raise from Softbank; and Aurora's \$530 million fundraise in a round led by Sequoia and Amazon.

And the sector is anything but boring: 2019 started out with Opel turning a profit for the first time in 20 years; saw the surprise unveiling and subsequent window destruction of Tesla's Cybertruck straight out of Tron; and ended with former Renault-Nissan chief Carlos Ghosn escaping from Japan in a cello case. We are looking forward to the many more surprises 2020 will bring.



M&A SUMMARY

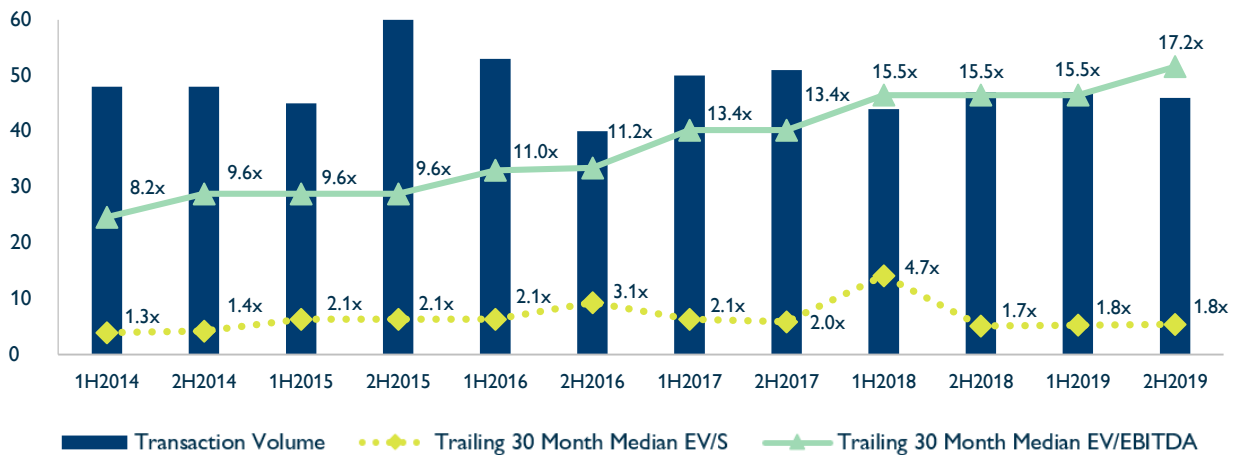
Stable deal volumes

In the second half of 2019, the number of deals remained remarkably stable, with just under 50 transactions broadly matching the semiannual trend of the last 24 months. Valuation metrics also remained strong, with the trailing median revenue multiple trending at 1.8x and the EBITDA multiple inching up further to a high of 17.2x.

Over 15 per cent of all autotech deals tracked in 2019 related to connected and autonomous vehicles, with

big name acquisitions coming from traditional players such as ZF Friedrichshafen and Ford but also from relative newcomers – by automotive standards – such as Tesla and Apple.

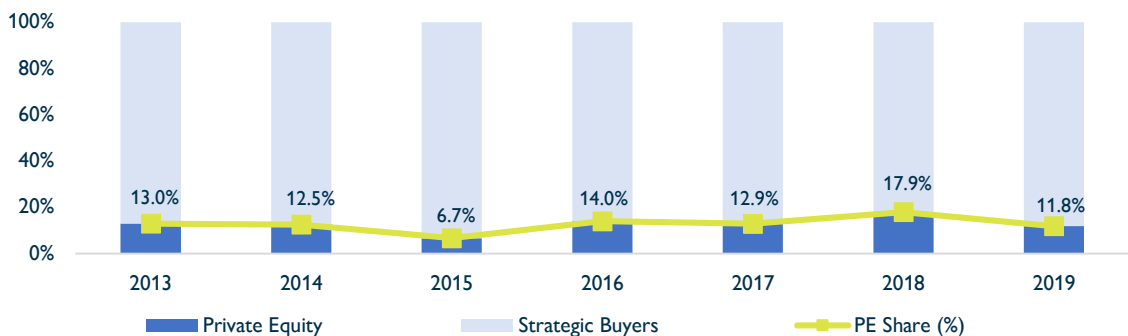
The year was also marked by a lack of megadeals, with just two transactions – Uber’s acquisition of competitor Careem and the PE buyout of AutoScout24 – each disclosing a \$3 billion+ sales price.



Private equity share remains sky-high

In 2018, financial sponsors played an outsized role in autotech M&A markets, as almost one quarter of all activity was driven by private equity. In 2019 this trend declined slightly, with only 11 autotech transactions

tracked by Hampton being closed by financial buyers, though the growing maturity of the autotech market and increasingly competitive bids from investors suggest further activity to come.



Our Autotech report covers the two-and-a-half-year period between July 2017 and January 2020. All totals and median values refer to the entire period unless otherwise stated. Median multiples plotted in the graphs refer to the 30-month period prior to and including the half year.



FUNDING SUMMARY

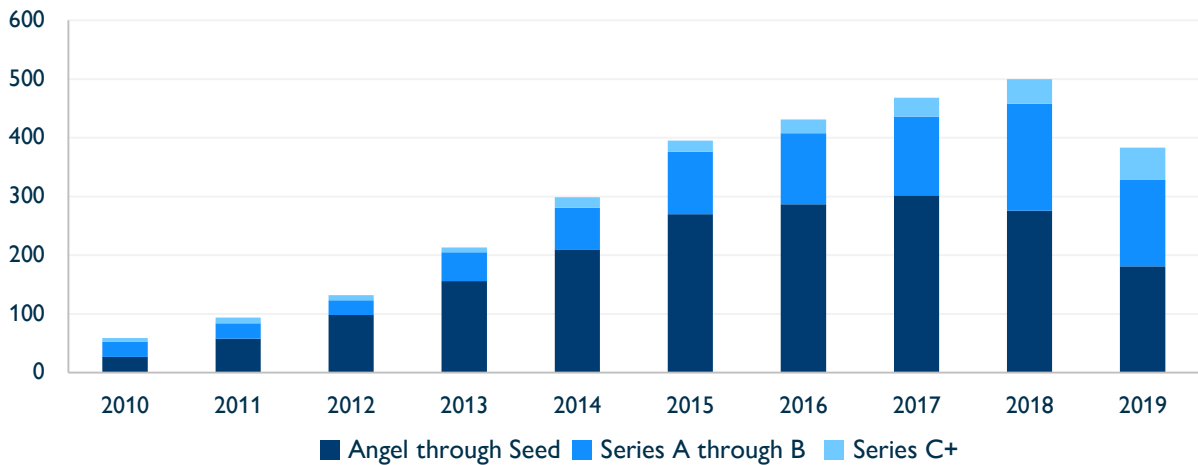
Maturity in the autotech VC market

Over 14 per cent of all venture capital dollars in autotech went to funding rounds of Series C and above, while angel and seed rounds saw a decline in number.

The proportion of later stage venture continues to grow – the average size per disclosed round was \$18 million in 2010, more than doubling to \$42 million in 2019 – indicating the maturity of investment in this industry cycle.

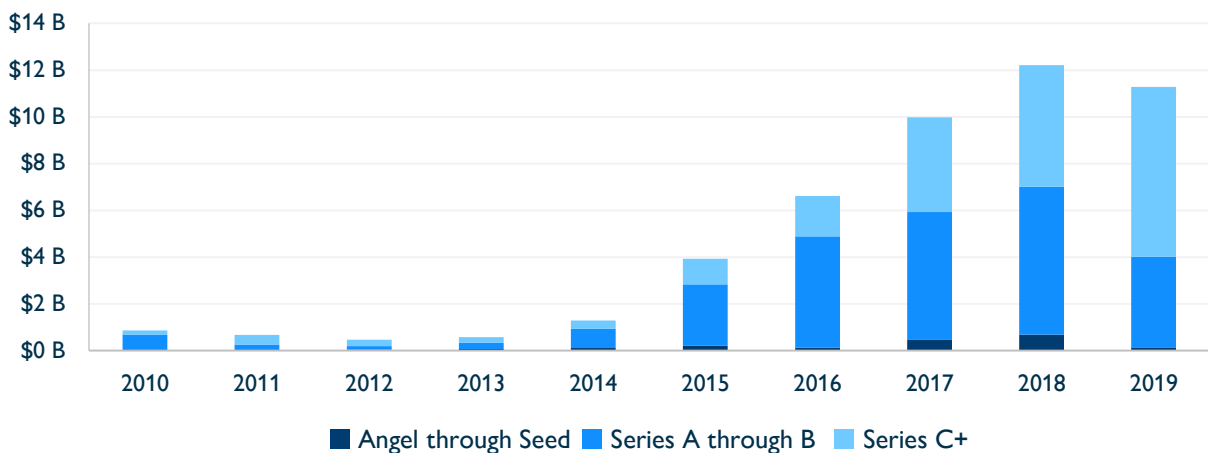


Autotech VC funding rounds by type, 2010-2019



Source: Crunchbase

Autotech VC aggregate disclosed value by round, 2010-2019



Source: Crunchbase








TOP ACQUIRERS



Number of active acquirers during the past 30 months



Number of acquirers who made >1 acquisition

Acquirers	Acquisitions in 30 months	Three most recent acquisitions
	5	Clearplan automotive repossession management SaaS CarsOnTheWeb European online B2B car auctions STRATIM Systems fleet management SaaS
	4	Quantum Signal robotic & autonomous vehicle system Journey Holding automatic vehicle location SaaS Skinny Labs electric scooter sharing services & app
	4	ELEAD1ONE automotive CRM SaaS Progressus Media mobile marketing SaaS Dashboard Dealership Enterprise dealership analytics reporting SaaS
	3	Torc Robotics autonomous driving sensors & software Transvoco French ride sharing mobile app Flinc GmbH ride-sharing mobile app
	3	Thermeon Worldwide trucking hauling scale management SaaS Profit Tools TMS trucking & transportation software & SaaS Creative Information Systems truck hauling scale management SaaS
	3	RedCap Technologies automotive customer logistics SaaS Colimbra data management software & services Autodata UK online automotive technical reference content
	3	Wabco brake manufacturer for commercial vehicles Simi Reality Motion Systems 3D motion detection & analysis software 2getthere autonomous electric passenger & cargo transport vehicles
	3	Thermeon Worldwide trucking hauling scale management SaaS Profit Tools TMS trucking & transportation software & SaaS Creative Information Systems truck hauling scale management SaaS



TOP TRENDS & LARGEST TRANSACTIONS

- **Tech giants** continue to penetrate the AV and EV spaces while OEMs insist on being “tech” companies
- **Tyre manufacturers enter the M&A race**, as illustrated by both Bridgestone’s and Michelin’s respective acquisitions of telematics assets
- **Micromobility solutions** embellish urban environments, as providers receive billion-dollar valuations
- Cost of sensors decreases, especially for **LIDAR technology**, as players are closing large fundraises and the market becomes ever more competitive

LARGEST DISCLOSED DEALS OF 2H2019

\$3.2 billion 17 Dec	Hellman & Friedman acquires AutoScout24 GmbH (26.5x EV/EBITDA)
\$3.1 billion 26 Mar	Uber Technologies acquires Careem
\$1.0 billion 22 Jan	Bridgestone acquires TomTom (telematics business) (6.5x EV/S)
\$775 million 11 Sep	ANSYS acquired Livermore Software Technology Corporation (LSTC)
\$720 million 04 Dec	iA Financial Group acquires Innovative Aftermarket Systems
\$320 million 02 Apr	Lear acquires Xevo Inc [fka UIEvolution]



OEMs and digital marketing

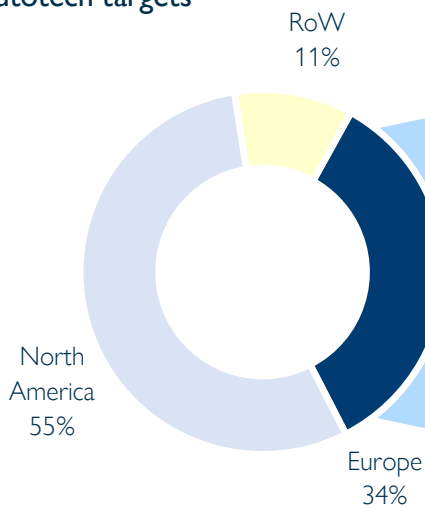
As part of their digitalisation strategies, some automakers are turning to inorganic growth. In January 2020 Volkswagen (VW) acquired all outstanding shares in the digital marketing and engineering agency diconium after having first bought 49 per cent of the company in November 2018. The 1,100-strong German agency derived almost half of its revenue from VW. Fitting into VW’s Car.Software division, diconium will develop the OEM’s global online sales platform, allowing connected car occupants to use VW connected services worldwide.

The move parallels the 2017 acquisition of digital agency Cinteo by Mercedes-Benz to support the latter’s efforts to be a networked provider of mobility services. Cinteo had been a subsidiary of diconium set up to exclusively service the Daimler account. In February, Toyota announced that it was bringing marketing in-house to create channel-specific content and “very personalised messages” – another example of OEMs centralising their marketing strategy.

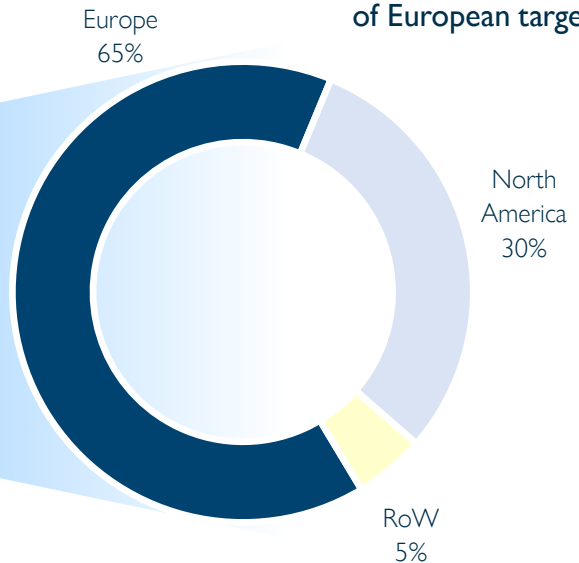


GEOGRAPHICAL BREAKDOWN – PAST 30 MONTHS

Headquarters of Autotech targets



Headquarters of acquirers of European targets



65%



of European targets were acquired by European buyers in the last 30 months, compared to 30 percent of European targets snapped up by North American investors. This accounts for the majority of deals involving European autotech targets and reflects Europe's historical strength in the sector.

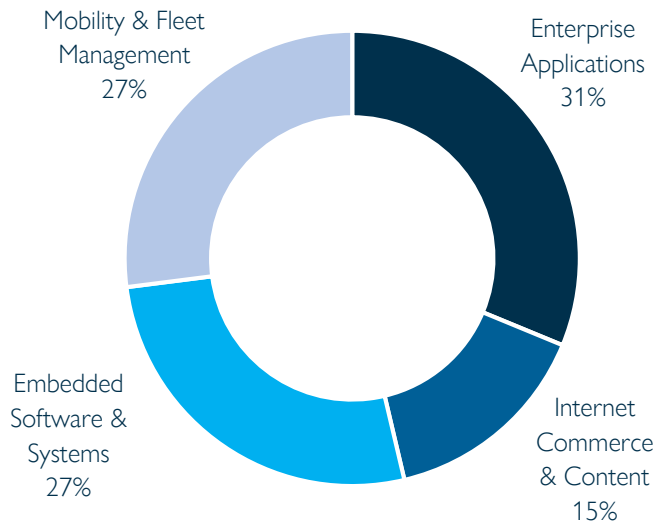
Nevertheless, targets from North America dominated the charts overall, accounting for just over half of all acquisitions, with Japan and the rest of world rounding out the total with around one tenth of all deals.



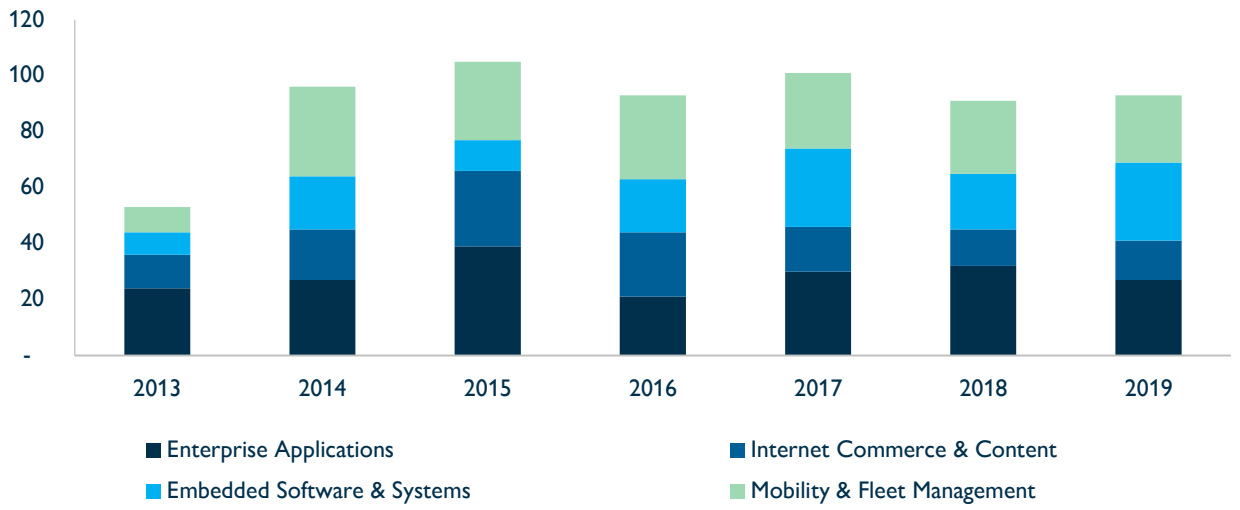


SUBSECTOR BREAKDOWN – PAST 30 MONTHS

- **Enterprise Applications**
 Customer retention & CRM, dealership management systems, automotive PLM software.
- **Internet Commerce & Content**
 Online vehicle classifieds, vehicle auction websites.
- **Embedded Software & Systems**
 ADAS, connected car systems, self-driving software.
- **Mobility & Fleet Management**
 Ride sharing & hailing, e-mobility, parking applications, fleet management systems.



Autotech M&A transactions by sub-sector, 2014-2019





ENTERPRISE APPLICATIONS

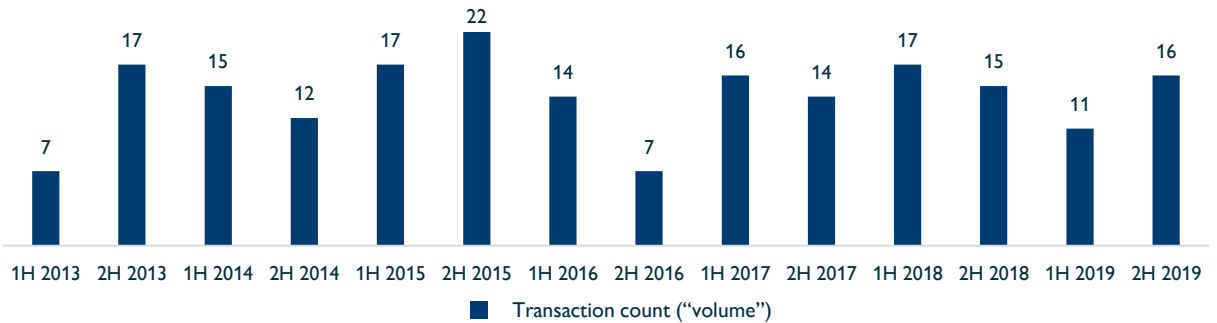
Simulation assets take centre stage

With simulation and testing gaining ever more importance in the automotive sector, the flurry of related deals comes as no surprise. The largest disclosed deal of this sub-sector belonged to LSTC as it was acquired by CAD stalwart ANSYS for \$775 million. LSTC's industry-standard multiphysics solver was in use across virtually all T1 suppliers, with the acquisition capping years of cooperation between the two companies.

Also in the modelling space, Bentley picked up urban mobility analytics specialist Citilabs. With its suite of tools to design transport, mobility and autonomous

systems, the acquisition strengthens Bentley's portfolio of engineering solutions for the automotive and transport industries. Meanwhile, the rise in importance of emissions testing was reflected in IHS Markit's buyout of Novation Analytics, a provider of full-vehicle simulation SaaS primarily aimed at emissions modelling.

20 Oct
ACQUIRED
Not disclosed



Aftermarket at the forefront

In the largest disclosed transaction by a UK buyer in 2019, Accel-KKR-backed Kerridge picked up automotive supply chain management (SCM) software provider MAM Software for \$154 million. At 4.1x trailing revenue and almost 29x EBITDA, the acquisition will considerably expand Kerridge's product offering but also geographic scope, boosting its US presence substantially. Elsewhere, OE Connection, an automotive part and inventory management SaaS provider, was sold by Providence Equity Partners to Genstar Capital for an undisclosed sum.

F&I management key priority for dealers

2H 2019's second-largest transaction in this sub-sector went to iA Financial Group's \$720 million acquisition of IAS, a dealership F&I management SaaS provider, while Providence Equity nabbed French DMS provider l'Car Systems-DATAGROUP to expand their exposure in this market.

04 Dec
ACQUIRED
\$720 million

11 Sep
ACQUIRED
\$775 million

31 Jul
ACQUIRED
\$154 million

30 Apr
ACQUIRED
Not disclosed



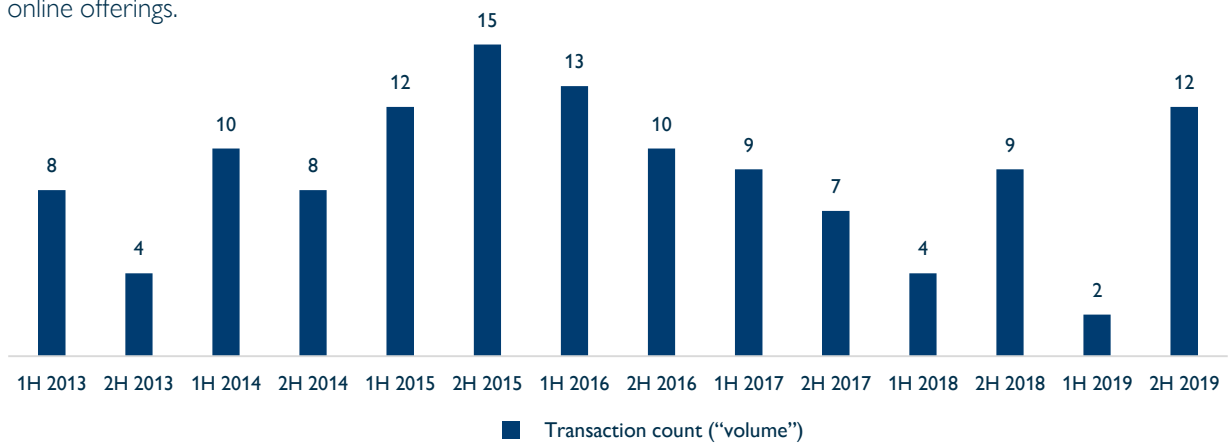
INTERNET COMMERCE & CONTENT

Online classifieds & vehicle marketplaces abound

The sector's largest disclosed transaction this year, Hellman & Friedman's \$3.2 billion acquisition of AutoScout24, the motors division of Scout24 in Germany, was the culmination of a deal years in the making. After partnering with Blackstone in January 2019 and making an ultimately unsuccessful bid for the entire Scout24 business, the AutoScout24 pickup represents a statement of intent as it is the largest European online vehicle marketplace.

Meanwhile, elsewhere in Europe, Apax-backed Baltic Classifieds Group (BCG) acquired auto24 from BaltCap Private Equity, adding to BCG's portfolio of online offerings.









Away from Europe, the sub-sector also experienced activity in Southeast Asia and Australia. Prolific Indian acquirer CarDekho made a play for Rocket Internet's Carmudi assets in the Philippines, while its Indonesian assets were similarly acquired by Malaysian automotive classifieds network iCar Asia. Furthermore, eBay picked up Cox Automotive's Australian assets that include its AutoTrader and Kelley Blue Book brands in that region. In Canada, LeaseCosts made a pair of acquisitions in August 2019 in the online automotive leasing marketplace space in Vroom.ca as well as Boombo.ca.



Fair.com focuses on profitability

In September, Fair.com, one of the largest car-as-a-service leasing providers – having raised at least \$2.1 billion in equity and debt to date – announced its acquisition of Canvas, an automotive subscription service, from Ford.

This is the fourth buy Fair.com has made since 2016, among them its 2018 acquisition of Uber's leasing business. With reach to over 20,000 customers, the company is now shifting gears to focus on profitability as it cut 40 per cent of its workforce in what it indicated was a proactive move. The short-term lease market is seeing development among both personal car users as well as ride-hailing drivers.

 25 Jun ACQUIRED \$12 million 	 12 Sep ACQUIRED Not disclosed 
 25 Sep ACQUIRED Not disclosed 	 17 Dec ACQUIRED \$3.2 billion 

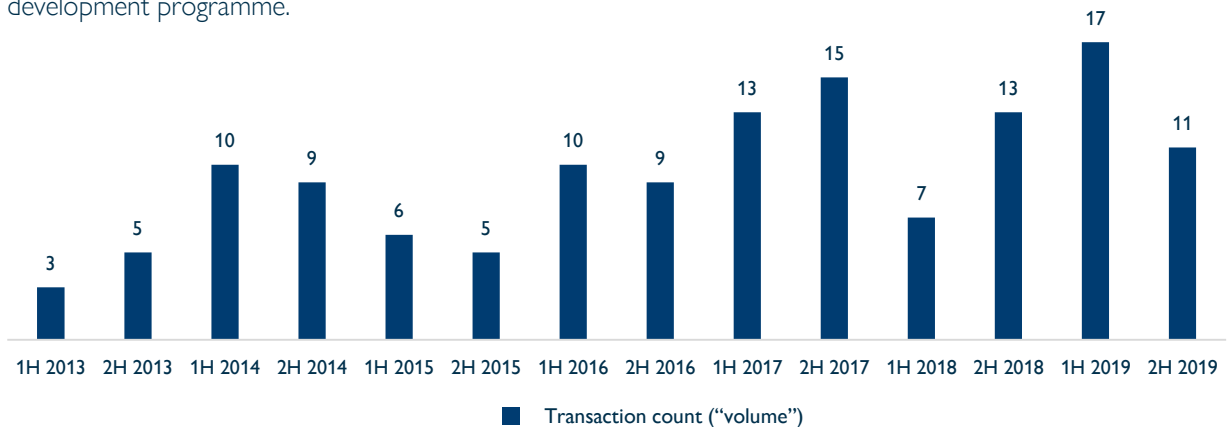


EMBEDDED SOFTWARE & SYSTEMS

AV companies are older than you think

Ford's largest capital moves in 2019 came from its participation in two rounds of equity funding into Rivian, the 10-year-old electric SUV startup that has attracted almost \$3 billion from investors including Amazon. Its acquisition of Quantum Signal however, indicated a move for an autonomous vehicle software company founded in 2000 and intimately involved in military robotics prior to that. Quantum Signal's age and deployment record contrasts with Ford's pledged \$1 billion investment into Argo.AI, a relative newcomer – though both moves indicate Ford's continued support of its autonomous vehicle development programme.

Also of note is ZF's acquisition of 2getthere, a Dutch provider of autonomous electric vehicles with a similar robotics heritage stretching back over two decades.



DoorDash exploring autonomy

Given Uber's push into food delivery on the back of infrastructure built by virtue of its ride-hailing operation – and of course its public pursuit of level 4+ autonomy under its ATS division – it is perhaps surprising to see the dynamic work the other way too. DoorDash, one of the largest food and last-mile delivery services in the US, acquired Scotty Labs, a teleoperations and autonomous vehicle company. This wasn't DoorDash's first push into autonomous capability, as in 2019 the company hired the executive team of Lvl5, a high-definition mapping company, after its liquidation earlier that year.

Tesla targets EV and AV acquisitions

Earlier this year, Tesla acquired the supplier of ultracapacitor-based energy storage products, Maxwell Technologies, for \$218 million. More recently the OEM acquired DeepScale – a provider of advanced computer vision – for an undisclosed amount. The move will expand Tesla's ADAS features capability and, critically, add AV talent to its staff.



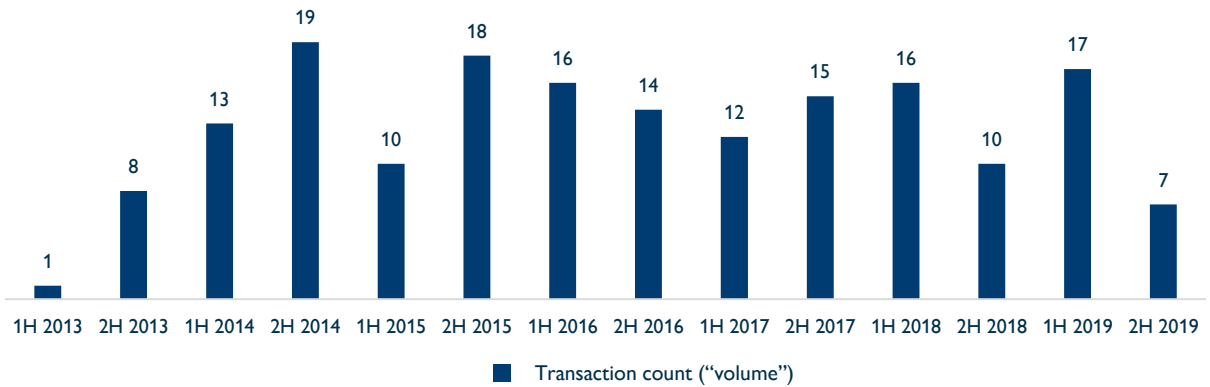


MOBILITY & FLEET MANAGEMENT

Trucking software attracts private equity

2019 saw at least two mid-market transactions in the trucking software space consummated by financial sponsors, both in North America: CapStreet acquired PCS, a trucking fleet management software provider, while ICONIQ Capital picked up Truckstop.com, a freight-matching online marketplace. In late 2018,

Greenbriar Equity Group made a notable \$350 million purchase of Spireon Inc, also in this space. Fleet management software across the world is clearly a strategic focus for private equities as Three Hills Capital made a \$50 million growth investment in UK-headquartered Trak Global in September 2019.



Uber’s push into the Middle East

It’s been a storied year for Uber and the ride-hailing market in general. Two IPOs dominated the H1 headlines, though Uber and Lyft both ended 2019 with shares down 28 and 45 per cent respectively on their opening prices. In anticipation of its float and pursuing new geographic reach, Uber acquired Careem, a UAE-based ride-sharing app, for \$3.1 billion – a testament to the importance of this market. Two months later, as part of a general sector trend toward micromobility support, Careem itself went on to acquire Cyacle, a bike-sharing app. In Russia, Uber’s joint venture with Yandex also extended its market dominance by picking up the Rutaxi and Vezet apps. Despite the fragmented global oligopoly for ride-hailing apps, largely dominated by a handful of well-capitalised technology giants competing for market share, it seems there is still space for local players. For example, in November, New Mexico-based BitiCar acquired local competitor Ello.

Ford on testing-as-a-service (TaaS) infrastructure

In addition to its pickup of Quantum Signal, which has extensive real-time simulation capability, Ford also acquired two companies – DoubleMap and Ride Systems – to explicitly target automatic vehicle location capability that is critical to TaaS applications for municipalities, universities, airports, hospitals and corporate fleets. Organised under the Ford Smart Mobility division, the automakers hope to use this infrastructure to offer multimode transport support under the TransLoc name, ranging from personal shuttles to electric scooters. This comes as many OEMs seek to diversify into mobility services and support modes of transport beyond passenger cars.

Uber
26 Mar
ACQUIRED
\$3.1 billion
Careem

Ford
30 Jul
ACQUIRED
Not disclosed
DoubleMAP
RIDE SYSTEMS



CONCLUSION & CONTACTS

While we have seen the R&D funds of OEMs and T1s shift away from autonomous vehicle (AV) tech and towards technology considered more market-ready (e.g. ADAS features and the deployment of EVs), overall M&A and fundraising activity remains robust across the board in all autotech sectors.

Those buying into AV tech are playing a longer game, looking to set standards that will surely need to be adopted in the run-up to scale this technology. We will therefore continue to see activity in the AV sector, but we predict EV tech and associated infrastructure will see the most substantial growth over the next several years.

The reason for this push for EV tech spending? Improved (read: faster) charging technology, and the increased availability of charging stations and locations needed to meet OEM volume expectations. You may note we did not refer to EV “demand” in the previous sentence, as we’re still uncertain whether customers want what OEMs are producing when considering feature content, range and price... but at the right price, including what could be a very high level of incentives, OEMs will sell what they build.

Connectivity solutions, advanced ADAS (L2-3), in-cabin entertainment platforms and advances in engine electronics allowing smaller ICE engines to produce power that was common in engines 2-3x the size less than 10 years ago – all these are areas that will see M&A and fundraising activity through the remainder of 2020 and into 2021.

In the software sector, retention solutions will continue to perform well, allowing OEMs and their dealer networks to offset trends that impact customer loyalty and/or customer visits to dealers (e.g. mobility solutions, subscription models, electrification). We’ll see a substantial increase in this area over the next 24 to 36 months, including advanced AI solutions added to existing automotive software solutions to drive traffic to dealers.

While I cannot predict that 2020 will include the same level of surprise and drama that marked the end of the last decade, we’re sure there will be an abundance of investment activity, as all major players fight to make a meaningful impact in this space.

About the Author

David runs Hampton Partners’ automotive practice and has over 30 years’ experience in the sector, having previously transacted in various roles including working for a global OEM, serving as CEO of a leading content management supplier to OEMs and dealers around the globe, and working with leading T1 suppliers on advanced connectivity solutions.

David has been completing auto-focused deals for more than 25 years – the last several years with Hampton Partners – focusing on sell-side M&A, buy-side consultancy including divestment and M&A, as well as raising growth capital in the autotech and AI sectors. David advises and sits on the board of several autotech and AI firms.

If you are interested in speaking to David about our autotech sector, please reach out using the email address on this page.



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Hampton’s experienced deal makers have built, bought and sold over 100 fast-growing tech businesses and provide hands-on expertise and unrivalled international advice to tech entrepreneurs and the companies who are looking to accelerate growth and maximize value.

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Selection of Hampleton Autotech transactions

 acquired by 	 acquired by 	 acquired by 	 acquired by 	 acquired by 
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