ALANTRA

THE GLOBAL MID-MARKET SPECIALIST

M&A Technology Update

Smart Cities

APRIL 2019

The rise of the on-demand economy fuels smart city innovation

As the recent announcements of Uber, Lyft and Postmates' IPOs along with DoorDash's latest fundraise at an impressive $6Bn valuation remind us, the on-demand economy has taken the world by storm.

This disruptive way to deliver goods and services at the consumers' will has given birth to a new set of asset-light technology companies that act as intermediaries between service providers and end users, leveraging existing resources and infrastructure to optimize the way goods and services are delivered and consumed.

> **Research from UPS and Capgemini shows that 75% of online consumers are willing to pay a premium for express delivery services, reaching 4.6% of total order value for same day fulfillment**

These innovative upstarts have shaken traditional businesses to their core, permanently altering consumer habits and expectations. Research from UPS and Capgemini shows that 75% of online consumers are willing to pay a premium for express delivery services, reaching 4.6% of total order value for same day fulfillment. **(FIG 2)** Moreover, patience levels are increasingly wearing thin at online checkouts, with 26% of consumers abandoning their carts due to lengthy shipping times.

On-demand economy outpaces supporting infrastructure

Consumers' new expectations of immediacy have forced established companies to fundamentally rethink their business models and value propositions. The result is that 51% of global retailers offered same-day delivery in 2018, a three-fold increase from 2017; by the end of 2019, the figure is expected to jump to 65%. Meanwhile, fast food stalwarts such as McDonald's and Subway have joined food delivery platforms such as Uber Eats and Doordash, and globally, registered taxis have signed onto apps like Mytaxi to compete with ride-hailing start-ups.

Companies are also incorporating the latest technologies into their transportation and logistics systems to facilitate seamless movement. Initiatives range from automated factory production to autonomous truck warehouse delivery, robotic warehouse picking, and predictive shipping whereby goods are dispatched from warehouses to retail and online supply chains based on anticipated demand. However, last mile delivery—a product's journey from warehouse shelf to customer doorstep—is proving to be the most challenging to optimize. This key component in the delivery chain is typically the most expensive and time-consuming, accounting for a hefty 53% of the total shipping costs.

Figure 1: Infrastructure does not support an efficient and sustainable scalability of the On-Demand Ecosystem

Ride hailing apps create more traffic & congestion

Food delivery apps interfere with service to walk-in clients

Office and residential buildings are flooded with delivery service packages

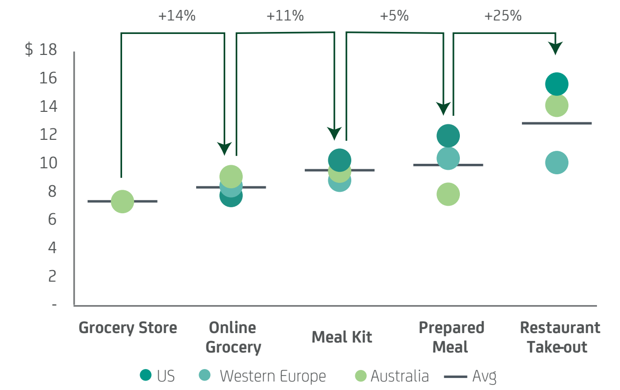
Autonomous Vehicles are limited by strong regulations

Tackling last mile delivery challenges has become even more difficult due to unintended consequences of the burgeoning e-commerce / on-demand economy **(FIG 1)**. For example, roads have become more congested, with ride-hailing and food delivery apps contributing to a 160% increase in traffic on city streets. As many readers can likely attest, office mailrooms and residential doorsteps are inundated with food deliveries and packages.

While still in its infancy, meal delivery platforms have already hit $120Bn in gross sales globally, according to an analysis by Ark Invest. Similarly, AlphaWise estimates that direct delivery of food could make up 40% of total restaurant sales in the US by 2020. However, conventional restaurants are struggling to develop alternative lines of operation to handle the logistics challenges caused by delivery orders, as the massive growth in take-out business interferes with service to walk-in clients.

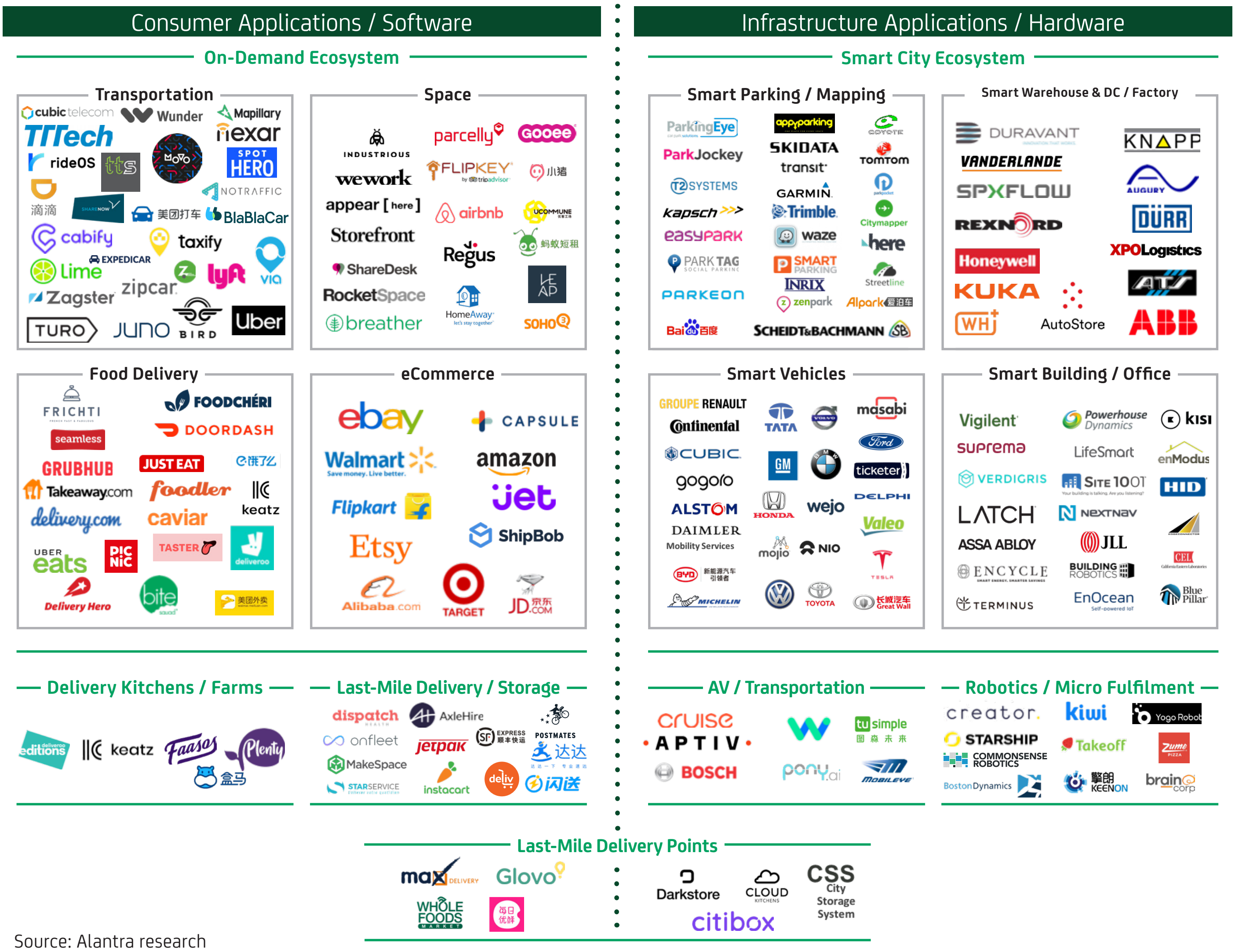
These difficulties have highlighted the fact that the infrastructure needed for continued growth is not in place. The on-demand economy is moving at a faster pace than the underlying infrastructure which is in desperate need of upgrading to support these new business models in an efficient, sustainable, and scalable manner.

Figure 2: Premium Paid for increasing level of convenience ($ per single entrée dish)



51% of global retailers offered same-day delivery in 2018, a three-fold hike from 2017; by the end of 2019, the figure is expected to jump to 65%

Figure 3: On-Demand Ecosystem Landscape



Source: Alantra research

Hot deals in the Smart City

The limitations of current last mile infrastructure create a massive opportunity for those who can alleviate the challenges. Financial and strategic investors are keenly interested in tech start-ups that make existing infrastructure "smart" and better able to support new delivery technology.

These players are placing their bets: Deliveroo secured $385Mn in funding to expand its Editions (delivery kitchen only) program and Amazon launched "The Hub"—parcel delivery lockers strategically located in city center locations to provide end users with pick-up collection points. Robotics companies have also tapped investors to develop micro-fulfillment centers and self-driving delivery robots—Takeoff Technologies raised $12Mn led by Forrestal Capital, and Starship Technologies garnered $25Mn with Daimler as lead investor. In Q1 2019 alone, over $2Bn flowed into last mile technology companies, globally. **(FIG 4)**

Figure 4: Selected smart infrastructure deals, Q1, 2019 (Pitchbook Research)

Date	Smart company	Infrastructure focus	Amount raised	Series	Lead investors	Post-money valuation
Mar-19	Keatz	Virtual restaurant chain	$22Mn	Growth	Project A, Atlantic Food Labs, Kfund, JME Venture Capital, U-Start, Vis Capital, RTP Global	-
Feb-19	Roadie	On-demand storage	$200Mn	D	Home depot, TomorrowVentures	$233Mn
Feb-19	Panda Selected	Same day delivery services platform	$13Mn	C	Tiger Global, DCM, GenBridge Capital	-
Feb-19	Nuro	Autonomous self-driving vehicles	$940Mn	B	SoftBank	$2.7Bn
Feb-19	FourKites	Precision delivery tracker	$50Mn	C	Bain, August Capital, Otter Consulting	$575Mn
Jan-19	Bringg	Delivery management platform	$25Mn	C	Next47, Salesforce Ventures, Cambridge Capital, O.G. Tech Ventures, Pereg Ventures, Aleph, Coca-Cola Ventures	-

Robotics companies have also tapped investors to finance the development of micro-fulfillment centers and self-driving delivery robots

Photo source: Nuro

Technology firms' deep understanding of market dynamics and fast-paced mentality make them the right candidates to drive smart city innovation

Thanks to increased connectivity, instant communication, and established infrastructure systems, new technologies are being adopted at an exponential rate. In the past, we would have looked to incumbent companies to fill any gaps in consumer needs, such as last mile delivery solutions. However, they have proven too slow and bureaucratic to respond seamlessly and efficiently to demanding consumer expectations. The mantle has been passed to a new generation of technology companies who have not only the skills and prowess, but also the requisite culture and understanding to fulfill the requirements of an on-demand economy. The emergence of these companies helps explain why tech firms are leading the M&A deal-making that has been unleashed in this area over the past few years. The tidal wave began with Amazon's $13.7Bn purchase of Whole Foods in 2017. The acquisition allowed Amazon to centralize the organic food retailer's merchandising and purchasing systems, a significant step toward its ultimate goal of becoming an online, automated supermarket. More importantly, the acquisition provided Amazon overnight access to a network of centrally located sites that act as last mile fulfillment centers for same-day delivery. **(FIG 5)**

On the smaller end of the scale but following a similar pattern, BlaBlaCar, a long-distance carpooling community of over 65 Mn members in 22 countries, purchased Ouibus, a French intercity bus operator. The acquisition will help BlaBlaCar to revolutionize travel in Europe by offering a broad mobility door-to-door service that provides a combination of cars and buses while optimizing capacity rates. **(FIG 6)**

Figure 5: Wholefoods acquisition provides Amazon with access to a network of city center sites

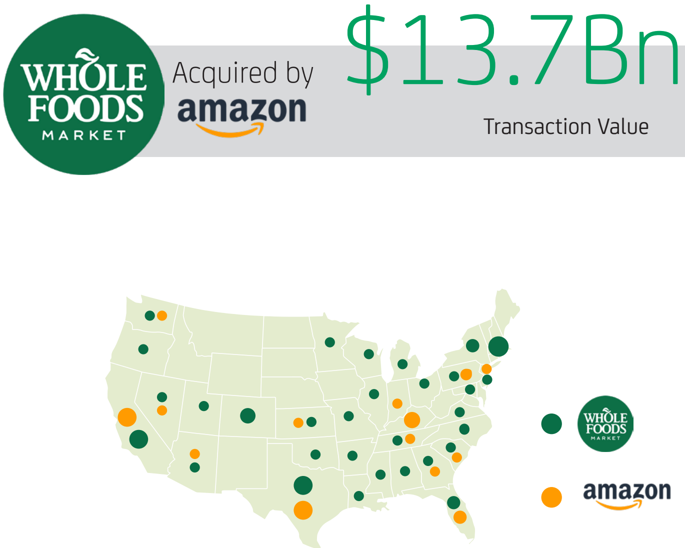
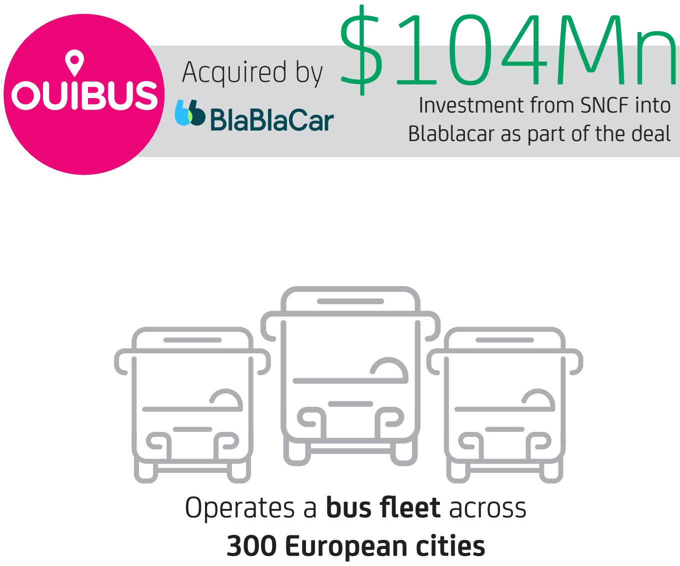


Figure 6: The acquisition of Ouibus supports Blablacar's strategy to create a broad mobility offering across Europe



The mantle has been passed to a new generation of technology companies who have not only the skills and prowess, but also the requisite culture and understanding to fulfill the requirements of an on-demand economy

Readily available capital fuels significant investment in disruptive start-ups to follow non-traditional growth paths and gain market dominance

The trend of start-ups and entrenched technology firms buying traditional businesses to achieve scale and deploy their technology at a faster rate will remain a major theme. The availability of large pools of capital will continue to oil the acquisition wheels, and ever larger funds are expected to come to market to meet the needs of the on-demand economy. Interest rates may be rising, but are still at historic lows. Softbank's $100Bn Vision Fund is seen as a bellwether to other tech investors raising larger funds to jockey for the best opportunities. Overall, there were 45 super venture capital funds raised in 2018 (+150% increase vs. 2017), and a total of $73.7Bn was spread across 4,119 deals as of the third quarter last year.

In recent years, these changing market dynamics have allowed a growing number of disruptive technology-enabled companies to follow the untraditional growth path of acquiring much larger, traditional businesses and transforming them. Examples include the acquisition of Bright Agrotech by Plenty (pre-revenue start-up, aiming to become a large-scale indoor farming business), the purchase of three waste brokers by Rubicon ("Uber for recycling") and the acquisition of two leading parking operators in North America by ParkJockey (Smart Parking Operator, that was advised by Alantra). **(FIG 7)** They may be addressing different problems, but they share a common vision to improve efficiency, disrupt traditional business models and enhance the customer experience. Such acquisitions give these start-ups scale and the necessary breadth and depth needed to stay one step ahead of their competition and meet the challenges of an ever-demanding consumer base. Those that are complacent will be left behind.

Figure 7: Investors are fuelling start-ups with significant funds to follow untraditional growth paths and gain market dominance

impark CITIZENS parking

Acquired by

ParkJockey

Smart Parking start-up acquires traditional parking operators and creates new tech-enabled market leader

BRIGHT AGROTECH

Acquired by

Plenty

Vertical farming pre-revenue start-up acquires Bright Agrotech to reach "field-scale"

RiverRoad

COMPUTERIZED WASTE SYSTEMS

WestRock

Acquired by

RUBICON

"Uber for recycling" start-up acquires three waste brokers to increase scale and volume

Super angel fund and low interest rates have flooded the market with cheap money allowing disruptive technology-enabled companies to follow the untraditional growth path of acquiring much larger, traditional businesses and transforming them.

Photo source: Shutterstock

Case study:

The Creation of a Parking Unicorn

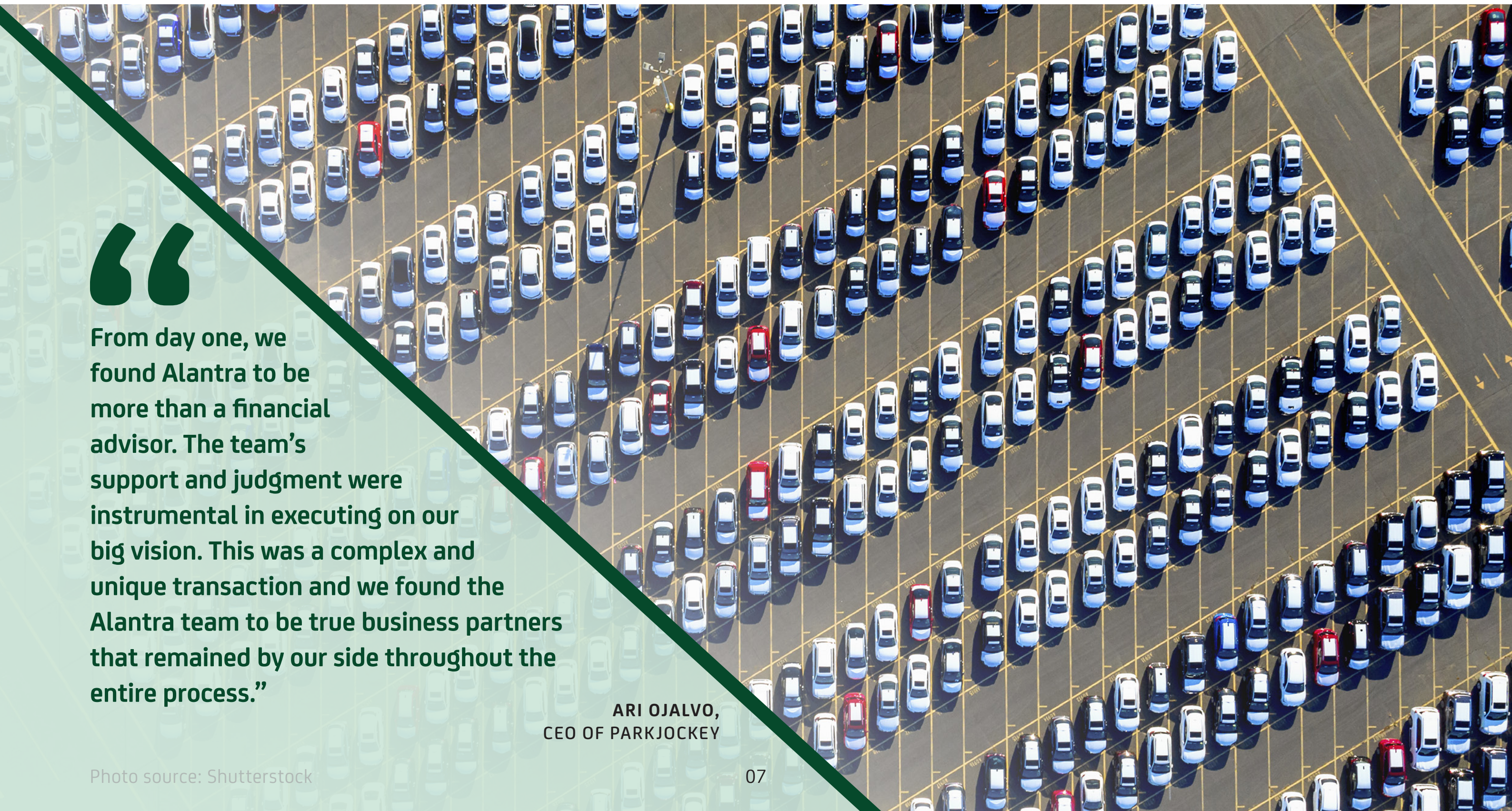
ParkJockey, which was advised by Alantra, is one of the most recent M&A deals in the smart city space

The company deployed significant funding from leading global investors to buy two traditional North American parking operators – Citizens Parking Inc. (US based with over 900 locations) and Imperial Parking Corporation (aka Impark, one of North America's largest parking operators with 3,600 plus parking locations in key markets such as San Francisco and Seattle). The acquisitions pole vault ParkJockey, a next-generation parking technology platform, into a national brand. Launched in 2013, the group which is led by a highly skilled and entrepreneurial team, developed a novel and cutting-edge approach to the age-old problems of parking. They utilize proprietary software and best-in-class hardware to help commercial real estate owners better monetize parking lots as well as optimize parking experiences for customers. They can tap into services such as automatic license plate recognition and pay as you go apps or those that find parking spaces more efficiently.

"After meeting ParkJockey, we quickly realized that their technology and vision had the potential to revolutionize the parking industry and we did not hesitate to jump on board to help them achieve their ambitious plans," said John Emery, head of Alantra's technology team. "This transaction is a great example of a trend that we are currently seeing in the market – Traditional businesses are no longer leading the transition from the Old Economy to the New/Smart Economy. The focus has shifted to technology-centric businesses that have a deep understanding of new market developments and dynamics, as well as a fast-paced mentality and execution capabilities to speed this transition. ParkJockey's technology, unique vision and highly skilled team, made them the perfect candidate to lead the transition of two legacy parking real estate businesses into a smart city champion."

Alantra's in-depth experience played a crucial role in helping ParkJockey to secure funding from leading global investors and support the purchase of Citizen Parking and Imperial Parking.

Alantra coordinated several simultaneous and complex workstreams including two buy-side M&A processes and capital raise discussions to finance both acquisitions. By effectively positioning the company and building a robust, multi-scenario operating model, Alantra supported ParkJockey's vision to dramatically transform the parking and logistics sectors.



"From day one, we found Alantra to be more than a financial advisor. The team's support and judgment were instrumental in executing on our big vision. This was a complex and unique transaction and we found the Alantra team to be true business partners that remained by our side throughout the entire process."

ARI OJALVO,
CEO OF PARKJOCKEY

Alantra Global Technology Group

+50
Team deals since 2013

+200
Team deals over career

+700
Private technology investor relationships

$5Bn
M&A aggregate deal value

$1Bn
Growth capital raised

+500
Strategic technology buyer relationships

Alantra's Technology team has 20 dedicated professionals, who have advised on over 50 transactions in the last five years. The team partners with emerging and established technology leaders throughout the growth lifecycle to provide strategic advisory solutions for transactions including mergers, acquisitions, capital raising, capital structure optimization, and recapitalizations.

Recent smart city transactions

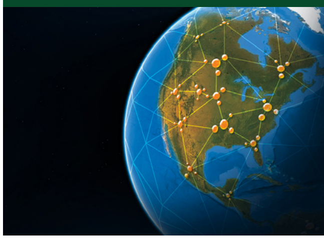
SMART PARKING / LAST MILE HUB

2018

impark CITIZENS
ParkJockey

Advisor to ParkJockey on the investment to finance the acquisition of Citizens and Impark

SMART BUILDING / OFFICE

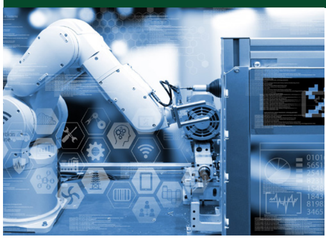


2015

bluvision
HID

Advisor to Bluvision on the acquisition of HID

MICROLOCATION & SPATIAL INTELLIGENCE



2018

5D
HUMATICS

Advisor to 5D Robotics,Inc. on its sale to Humatics Corp.

SMART WAREHOUSE & DISTRIBUTION CENTERS

2018

transnorm
your best move
Honeywell

Advisor to IK Investment Partners on the sale of Transnorm to Honeywell Int.

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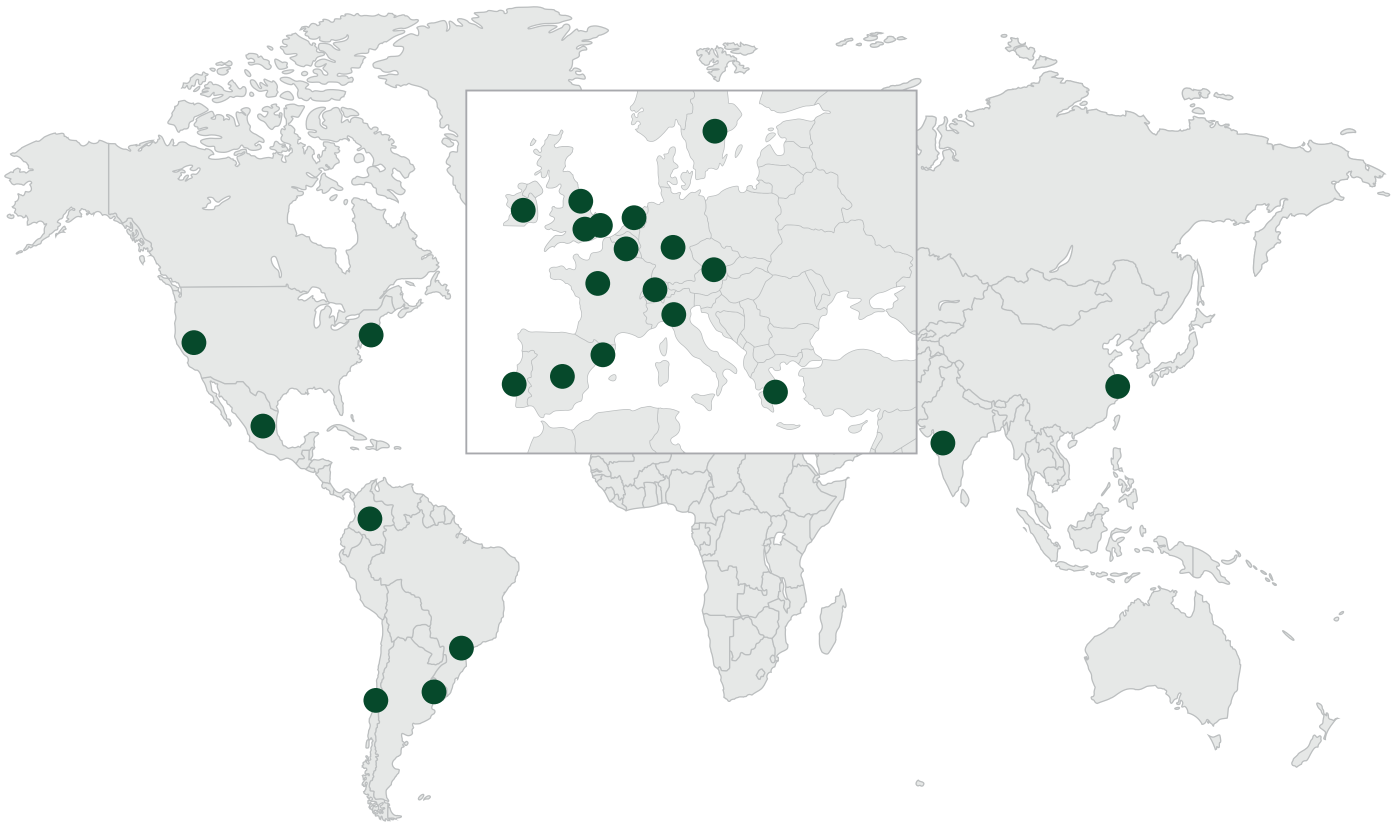
About Alantra

Alantra is a global investment banking and asset management firm focusing on the mid-market with offices across Europe, the US, Asia and Latin America.

Its Investment Banking division employs over 330 professionals, providing independent advice on M&A, debt advisory, financial restructuring, credit portfolio and capital markets transactions.

The Asset Management division comprises a team of over 80 professionals with €4.5Bn of Assets under Management in Private Equity, Active Funds, Debt, Real Estate and Wealth Management.

Global Presence



ALANTRA

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