



Stock exchange
TASE



Symbol
AILN



Sector
Technology



Sub-sector
Software



Stock price target
52.7 NIS



Closing price
26.7 NIS



Market cap
761 M NIS



No. of shares
28.5M



Average daily trading volume
3,699 stocks



Stock performance (last 3 months)
12%

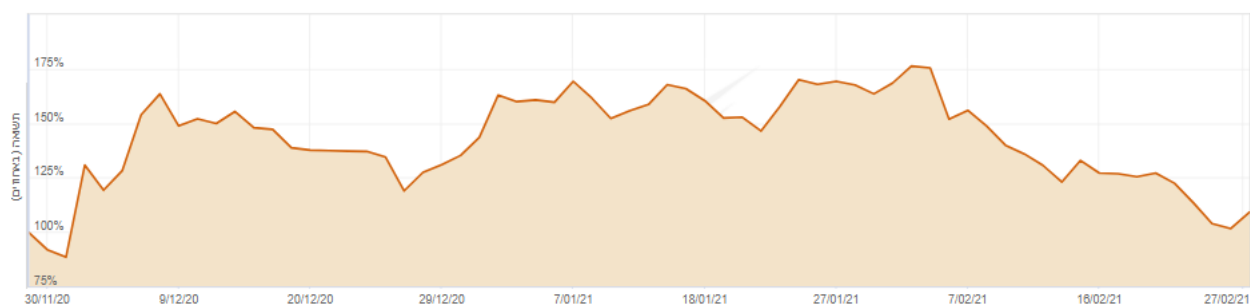
Axilion Smart Mobility Ltd.

01.03.2021

INITIATION OF COVERAGE

- Axilion is an artificial intelligence (AI) software company that **develops AI-based systems** to better manage **traffic mobility** in cities, thereby **reducing their carbon footprint** and **improving urban traffic safety**.
- **Market**—2020 was a breakthrough year for cloud-based AI. We anticipate 2021 being the year in which AI systems will be deployed globally, utilizing the new infrastructure built into data centers. This will attract more investments in the coming years.
- According to Frost & Sullivan, the global AI market is expected to grow to US\$386.1 billion by 2025, at a staggering CAGR of 19.7%. The rapid growth in the volume of data being generated, along with the increasing deployment of cloud-based computing platforms, is fueling AI adoption across various industry verticals, including automotive, healthcare, retail, telecoms, transportation, etc. **Axilion is well-placed to address the emerging needs of smart city management systems.**
- **Strategy**—Axilion is leveraging AI capabilities to reduce the carbon emissions of the transportation sector within cities by charging a city to manage its traffic patterns. Axilion's solution utilizes Microsoft Azure as a strategic partner for its products.

We value Axilion's equity at NIS 1,502 M, based on market benchmarking for AI firms; and its price target to be in the range of NIS 50.1 to NIS 55.4, with a mean of NIS 52.7.



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Investment Thesis

Executive Summary

A significant share of global fossil fuel based energy generation goes to the transportation sector. The combustion of fossil fuels, such as gasoline and diesel, releases carbon dioxide and other greenhouse gases (GHG), causing adverse environmental impacts, such as global warming and air pollution, that can result in respiratory illness in humans. Climate change due to global warming also has other, far more serious, consequences, such as disrupted monsoons (threatening the global food supply chain) and increased occurrences of natural disasters, such as drought. In 2020, in the United States alone, GHG emissions from the transportation sector accounted for 28% of total U.S. GHG emissions¹, making it the largest contributor to U.S. GHG emissions.

Driven by stringent environmental norms and increasing environmental awareness, industry participants across the globe have begun adopting technology solutions that enable them to adhere to zero-emission protocols. Electrification of the transportation sector is considered to be an important stepping stone towards a sustainable transportation sector; however, the electrification process entails its own cost and infrastructure-related challenges. Another approach towards reducing the carbon footprint of transportation networks is establishing congestion-free road networks and increasing public transportation utilization, as the carbon footprint per person traveling via public transportation is much lower than that per person traveling via private vehicle.

The traditional method of building more flyovers, highways, roads, and underpasses is costly and time-consuming. An alternative solution, which is derived from the idea of **Industry 4.0**, or the fourth industrial revolution, is the increased **automation of traditional industrial practices** using smart and modern technology solutions. This entails developing highly adaptive and AI-powered smart traffic management systems capable of autonomously managing the traffic flow and prioritizing fixed-schedule vehicles (primarily public transportation vehicles). There is an urgent need for a traffic-management system capable of accurately predicting traffic patterns to determine the optimum traffic light sequence. AI and deep reinforcement learning technology are ideal candidates to enable such smart traffic management systems.

¹ Source: United States Environmental Protection Agency



Deep Reinforcement Learning
Technology for Autonomous
Mobility Optimization
Saving time and resources,
transforming the transportation
network without costly infrastructure
changes



Utilizing an AI Mobile Edge Camera, Axilion's technology solution (X Way Suite) is able to capture the road-traffic network and convert the collected data into actionable insights via X Way Suite's AI cloud services. The idea is to leverage the data collected from **AI-based cameras** via the proprietary **trained neural network** to determine the optimum traffic signal schedule across the network.

X Way Suite's advanced algorithms continuously analyze the incoming data from dashboard cameras and, in parallel, simulate the entire city's transportation network via a **digital twin**, where solutions such as **deep reinforcement learning AI** technology are used to run multiple tests and determine the most efficient traffic signal schedule for multiple intersections. Data collected from the cameras are streamed through Microsoft Azure's IoT hub, where Azure Edge's encryption technology is utilized for data protection and enhanced cyber security.



In addition to the above, the developed system leverages the fixed route of the public transportation system and onboard cameras to dynamically track the traffic pattern on a real-time basis and to change traffic light signals, prioritizing the movement of public transportation to reduce travel time.

The digitization of public transportation schedules and coordination with traffic signals creates a far more efficient public transportation network, where users can track the entire schedule from mobile apps or screens at bus stops, and plan their travel accordingly. In the long run, faster and more efficient public transportation networks aid in changing commuter preferences toward public transportation over private vehicles, thereby directly reducing the carbon footprint of the transportation network.

We view Axilion as an excellent opportunity for those seeking to invest in sustainable and smart cities and specifically in a primary element of smart cities—traffic flow management.

1. Company Overview

Axilion (TLV: AILN) hereafter "the Company" and/or "Axilion" is a publicly-traded AI software company headquartered in Israel and has offices in Israel, US, UAE, and Europe. The company focuses on developing **AI-based software systems** to better manage **traffic mobility** in cities, thereby **reducing the carbon footprint** and **improved safety**. In recent years, the company has been successful in implementing as well as in piloting its software solutions across multiple geographies: Israel, France, Switzerland, the United Arab Emirates, the city of Jerusalem, and the United States. In Israel, US, and Europe alone Axilion's solutions have been deployed at more than 1,000 traffic intersections.

The company has received recognition from the Israel Innovation Authority, which supported the collaboration between the Technion Institute of Technology and Axilion for research & development aimed at developing advanced traffic management solutions. The company is considered among the top 200 partners at Microsoft, top 3 in smart cities and ranks 1st with regards to traffic and congestion alleviation. Further, the company raised USD 6 million in Series A funding in 2019 (led by Germany based Sixt SE), followed by a reverse merger with TASE in 2020 end raising USD 10, which was followed by raising USD 19 million via public funding and contributions from major investors such as Phoenix, More Investments, Excellence, Kesem, Alpha, Colibri, and others.



The company has developed an AI-based technology solution that collects and analyses data from multiple cameras across the city to **dynamically create smart traffic light schedules**, resulting in **faster traffic movement**, improving road safety, and **prioritizing public transport**. Further, factors such as autonomous operations, easy deployment, high scalability, and quality of being hardware agnostic (can be easily integrated with any kind of sensor) provide the technology solution a superior edge over other traffic management solutions available in the market.

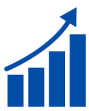
Traffic congestion across the globe is only increasingly getting more frequent, further, the issue is also exacerbated with the increasing number of private vehicles. Further, the traditional way of how traffic light

operates has not changed since decades, and it still follows scheduled traffic light patterns. The need of the hour is a smart traffic light system that can anticipate incoming traffic flow and change the light's pattern adaptively and smartly

Axilion has come up with an idea that fulfils the need, a **smart traffic management system**. The developed technology solution uses the information being gathered by traffic monitoring infrastructure (dashboard cameras) to make traffic lights work smarter by anticipating traffic patterns and preventing congestion. Further, additional sensors for traffic related data collection can also be integrated to have a more in-depth and dynamic status of road conditions, providing Axilion with rich data set and higher predictability power enabling it to effectively mitigate traffic congestion issues. The developed solution is highly scalable and can be easily implemented across an entire city's transportation infrastructure, enabling a **smart city ecosystem** with intelligent traffic management.

Improvement in Traffic flow

25 – 40%



Minimum stoppage time at intersections



Prioritizing public transit and smoother traffic flow for an overall reduction in transportation system carbon footprint



Pedestrian safety due to Smart Traffic Management System

The developed technology solution is named as X Way suite of AI Cloud Services (SaaS), further, the suite has three major components: X Way Pulse (data collection via multiple sensors), X Way Twin (Uses real-time data for the creation and continues calibration of a digital twin), and X Way Neural (Optimizes traffic light pattern using AI driven algorithms). In general, wherever the X Way Suite was deployed the results were very promising: shortened travel time by as much as 40%, mitigated over 140,000 tons of CO2 emissions to date and contributed towards the adoption of public transport with increased ridership (up to 400%).

Strategy and Business Model



Established in 2009, Axilion is led by Mr. Oran Dror (CEO, Co-Founder, and Chairman of the Board) who has over 10 years of experience working with Microsoft in senior sales marketing and operational roles. He is also a long time board member with Azrieli Group (TLV:AZRG) Israel's largest real-estate company with \$8B market cap. Other Axilion team members come from leading

conglomerates across the globe: Intel, Alibaba, Amazon, Google, Oracle and Apple amongst others.

The company's vision has primarily been towards leveraging AI capabilities to reduce the carbon emissions of the transportation sector.

Traffic congestion is a challenge that contributes to millions of dollars in lost time and waste fuel across the globe. Further, the issue of traffic congestion is more frequent in urban centres than in rural settings primarily due to a larger number of private vehicles, commercial vehicles, and sometimes also due to heavyweight vehicles. Axilion has developed its X Way Suite specifically to address the challenges faced by urban centres with minimum required investment.

The company deals via Microsoft's existing agreement with government bodies where the Axilion X Way suite is provided as an add-on solution. For every camera installed, Axilion generates about USD 300-600 per month of Azure credit depending upon data requirements. Further, Axilion charges the city for managing the traffic patterns, whereas it takes a share of 50% of the cost incurred to the city for utilizing Microsoft Azure.

The system ensures that vehicles with a fixed route (public transportation, electric trains, trams, and heavyweight cargo vehicles) are prioritized to have a less commute time for public transit riders. Further, other criteria such as road construction, pedestrian activity, and weather conditions are also considered while optimizing the flow of traffic across the whole city.



Additionally, the developed system is hardware agnostic and in the coming years is likely to be integrated with multiple types of sensors, which might be already present in a city's transportation infrastructure (stand-alone pedestrian traffic signals, speed gun detectors, and others) to ensure that at the least all the vehicles with a predefined route faces as fewer red lights as possible. For instance, the X Way Suite has ensured that the Light Rail in Jerusalem always passes through the green light, all the while taking pedestrian safety under consideration. The end result was that the Jerusalem average commute time drastically dropped to 42 minutes from the previous 80 minutes, headway reduced to 6 minutes and the ridership increased by as much as 387.4%.

Products and Technology

As sensors and cameras continue to enhance their data collection capabilities, AI has taken a central role in understanding patterns and enabling data driven decisions to maximize operational efficiency and accuracy. With innumerable successful trials, pilots and growing number of commercial implementations, AI based smart cities and traffic management systems are being seen as an inseparable element of the urban environment. In fact, futuristic algorithms such as RL (reinforcement learning) are also finding adoption in smart traffic management systems, imparting higher autonomy and adaptability to these systems.

Axilion's Deep Learning AI-based traffic management system has been extensively researched and refined by testing in multiple geographies.

In addition, the company has been actively collaborating with research institutes such as Technion, Tel Aviv University, and the Innovation Authority for continuous development in the X Way Suite.



Unlike autonomous vehicles which analyse the data from multiple cost intensive and in-vehicle hardware units such as LIDAR, RADAR, and other processing units, the X Way suite optimizes the traffic flow pattern without physical infrastructure changes and without any expensive hardware installation. Only a dashboard camera (equipped with GPS and a wireless connection) installation is required which allows for real time video analysis. In general, about 40 – 50 operational cameras are required for mid-sized city intersections (about 24 traffic signal arterials).

However, the exact number depends upon the granular level of data required and the desired resolutions. The camera is a proprietary hardware developed by Axilion in conjunction with HW manufacturer, which is retrofitted with Microsoft Azure for seamless operations. In addition to the above, the company is also utilizing existing camera infrastructure already installed in major cities which is expected to further increase the cost effectiveness of the technology solutions in the coming years.

Further, the platform utilizes the digital twin technology in conjunction with AI to reduce traffic-related emissions, prioritize sustainable transportation means, improved pedestrian safety, and an adaptive traffic management system. The result is a smooth traffic flow with minimal need of vehicles decelerating or

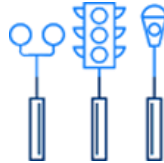
accelerating (the acceleration/ deceleration process is generally responsible for roughly half of the overall vehicular CO2 emission), as most of the time vehicles pass through green traffic lights.

Axilion technology decreases average commute times, improves pedestrian safety, reduces air pollution, decreases stoppage times at red lights, drives public transit use, improving quality of life."

Axilion's X Way Suite's key attributes



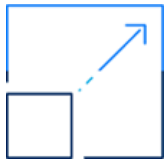
Deep Reinforcement Learning AI Technology



Maximize Existing Traffic Infrastructure



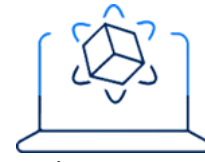
Real-Time, Adaptive Control



Smart & Scalable



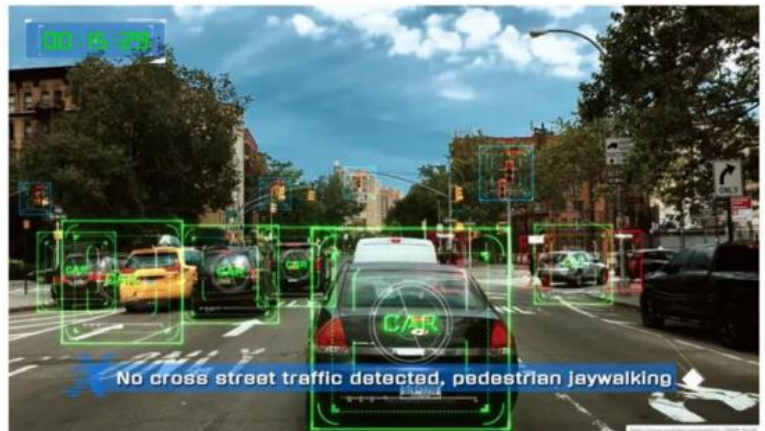
Hardware Agnostic



Efficient Simulation via Digital Twin

The company has three SaaS service offerings:

1) X Way Pulse



Identification and analysis of the traffic light network and its efficiency by collecting and analysing video footage captured by cameras installed on moving vehicles as well as cameras installed on intersections. X Way

Pulse analyses the information via deep learning networks designed to understand the video for an in-depth understanding of the driving behaviour from the driver's perspective.

In order to effectively manage the large amount of incoming data and to analyse it with foremost efficiency, Axilion has smartly optimized the incoming data flow by reducing both the frame rates as well as image resolution of incoming video feeds making the data collection and analysis process more efficient.

X Way Pulse generates actionable insights for not only traffic intersection points but also for entire routes and transportation networks, enabling granular visibility into network activity and easy identification of root causes behind traffic issues.

2) X Way Twin (Technology under development)



By utilizing all the data gathered by X Way Pulse, X Way Twin creates a digital twin or a digital replica of the entire city's transportation network in the cloud. The digital twin model is then used to run multiple simulations or test multiple "what-if" scenarios for deciding the optimum traffic light schedule with the best possible outcome. The digital twin utilizes the origin-destination matrix or the OD matrix which allows the digital twin to identify where vehicles are going and where they are coming from, to identify heavy load junctions so that most critical traffic intersections can be tweaked for optimization.

Further, the X Way Twin also provides granular insights about the city on a real-time basis by leveraging the data collected by X Way Pulse. Data points such as traffic signal progression (queue length, queue time,

average vehicular speed through intersections), pedestrian density, two-wheeler density, and abstract data points such as pedestrian face mask usage is also available.

3) X Way Neural (Technology under development)

X Way Neural utilizes an AI-driven algorithm for automating the traffic light schedule as per several parameters: traffic volume, vehicle types, road capacity, pedestrian presence, driving patterns, and weather conditions amongst other factors.



X Way Neural is essentially an addition to the X Way Pulse Monitoring system and X Way twin digital modelling system. X Way Neural uses deep reinforcement learning techniques to identify the most optimum traffic light pattern across multiple city intersections to identify the one with the highest average traffic intersection vehicular speed, further the traffic pattern is beforehand tested on the digital twin and the performance is evaluated for proposing a new mobility plan.

X Way Pulse Monitoring system uses proprietary AI video technology to capture safety hotspots and probable traffic issues and performs a root cause analysis. The data is then sent across Microsoft Azure Cloud on a real-time basis, where the incoming data feed is redacted (faces and number plates are blurred) per General Data Protection Regulation (GDPR) compliance. X Way Neural constantly alters the digital Twin Model parameter and proposes the most optimum changes required for the best possible outcome.

Further, the system is also equipped with deep reinforcement learning AI, which means the system is continuously improving and is always learning. For instance, for a blocked intersection the suite captures and

understands the issue, recommends an optimized plan, and then analyses the result, until finally a similar situation arises and the suite leverages the previous analysis to generate more valuable suggestions.



Impact of Axilion's X Way Suite in Haifa (A metropolitan city in Israel)

Haifa was one of the first cities to adopt Axilion's X Way Suite, and the city upgraded its Metronit bus rapid transport (BRT) network by adopting Axilion's X Way Suite for 200 traffic lights along the bus route, for continuous and automated optimization of the traffic flow. In a short period, the BRT network witnessed roughly a two-fold increase in ridership (115,000 travellers from a previous 60,000 travellers per day), faster commute (average traveling speed of buses increased from 20 kilometres per hour or kmph to 26 kmph, whereas the average travel time decreased from 73 minutes to 58 minutes), less congestion, and enhanced pedestrian safety.

In addition to the above, there was a drop of 11% in the private vehicle utilization, an estimated annual savings of USD 7 million in operations and maintenance, along with an estimated 140,000 tons of annual CO2 emissions avoided.

Impact of Axilion's X Way Suite in Jerusalem

The tram network in the city of Jerusalem updated its 273 intersection points by Axilion X Way suite for enhanced traffic management.

- Estimated savings due to reduction in fleet size: USD 600 million annually
- Estimated reduction in energy requirements of trams: 28%
- CO2 Savings: 100,000 tons annually (Primarily due to decrease in operational tram fleet size, increase in public transportation utilization, and decrease in private vehicle utilization)

	Before	After	Benefits
Travel time	80 min	42 min	47%
Number of trams required	32	21	34%
Tram frequency (headway)	15 min	5 min	66%
Number of Passengers	40,000	200,000	400%

2. AI in Traffic Management Market Overview

Market Overview:



Artificial Intelligence has a strong potential to overcome the deficiencies in the automotive sector and provide significant benefits in terms of improved productivity and added revenue. AI acts as a crucial technology enabler in transforming every aspect of the automotive value chain starting from research and development to enhancing the car driving experience. In the automotive sector, a

major chunk of the innovations is focused at streamlining the in-vehicle driving experience, whereas just a few are focused at the overall scenario of smart traffic management.

AI has proven to yield better results in understanding the environment, analyzing large amounts of data, drawing insights, and ability to learn from past experiences for better results as compared to any other technology. AI technology developers and automotive manufacturers have been focusing on streamlining the user experience of vehicles integrated with AI. Most of the AI abilities typically focus on enhancing the user safety and comfort level: Integrating AI in advanced driver assistance systems (ADAS) to support functions such as automatic braking, driver drowsiness detection, lane departure warning, and other safety features.

Traffic congestion is a problem faced by both the developing as well as developed economies, where AI powered systems for managing traffic lights is expected to be the most ideal solution due to its massive data handling and analysis capabilities. AI is considered to be a promising technology solution for transport authorities to achieve rapid improvements in relieving traffic congestion, improved travel time, and improved utilization of their assets for enhanced revenue generation, productivity, and lower carbon footprint. Among the prominent players specifically catering towards technology solutions streamlining traffic flow across the city are: Nexar (Israel), Mobileye (Israel), Moovit (Israel), C3 AI (United States), Google WAZE (Israel), NoTraffic (United States), Rapid Flow Technologies LLC (United States), FLIR Systems Inc. (United States), Alibaba Cloud City Brain (China), Telefonaktiebolaget LM Ericsson (Sweden), and AlndraLabs (India) amongst others.

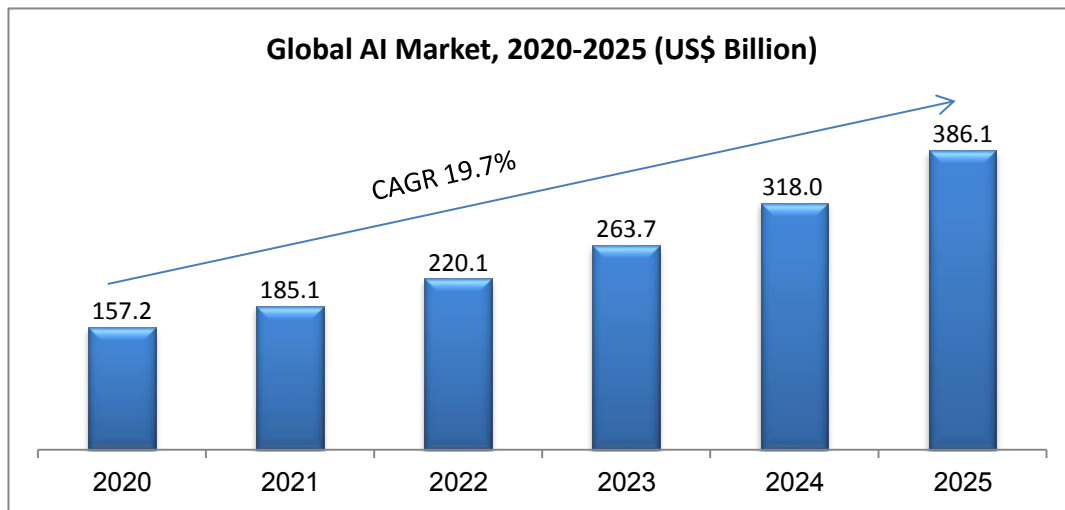
Global Artificial Intelligence Market:

The global artificial intelligence (AI) market is expected to grow from US\$157.2 billion in 2020 to US\$386.1 billion by 2025, at a CAGR of 19.7%. The rapid growth in the volume of data being generated along with the

increasing deployment of cloud-based computing platforms is fueling AI adoption across various industry verticals including automotive, transportation, retail, telecom, healthcare, etc.

Axilion is well placed to address the emerging need of smart traffic management systems. The company's X Way Suite combines data analytics (data gathered via AI based cameras), digital twin, and a deep learning AI technology platform, to achieve a highly autonomous and adaptive traffic management system.

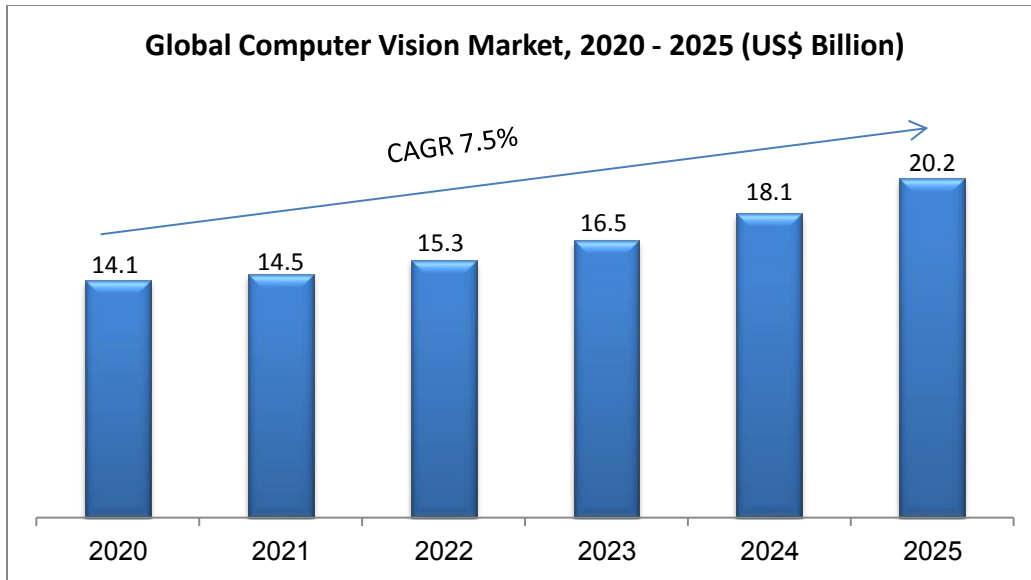
The AI market includes revenue from three technology sub-segments – Software, Hardware, Services. Software is the largest AI technology segment delivering close to 80% of all AI revenue.



Computer Vision:

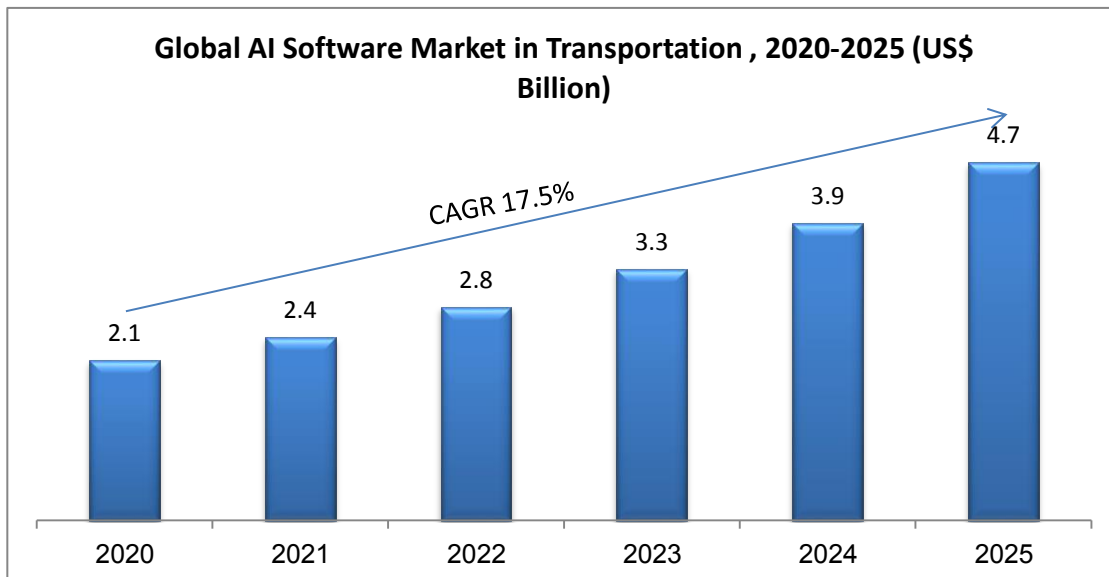
The global computer vision market is expected to grow from US\$14.1 billion in 2020 to US\$20.2 billion by 2025, at a CAGR of 7.5%. The increasing application of computer vision technology in the automotive and transportation industry is one of the key growth drivers. The emergence of self-driving cars equipped with advanced cameras and LiDAR sensors leverages computer vision to have a safe ride.

Axilion's proprietary dashboard cameras are equipped with GPS and wireless, which enables a real-time data transfer. Through Microsoft azure, Axilion uses its video analysis tool for data collection and analysis for an adaptive and autonomous traffic management system.

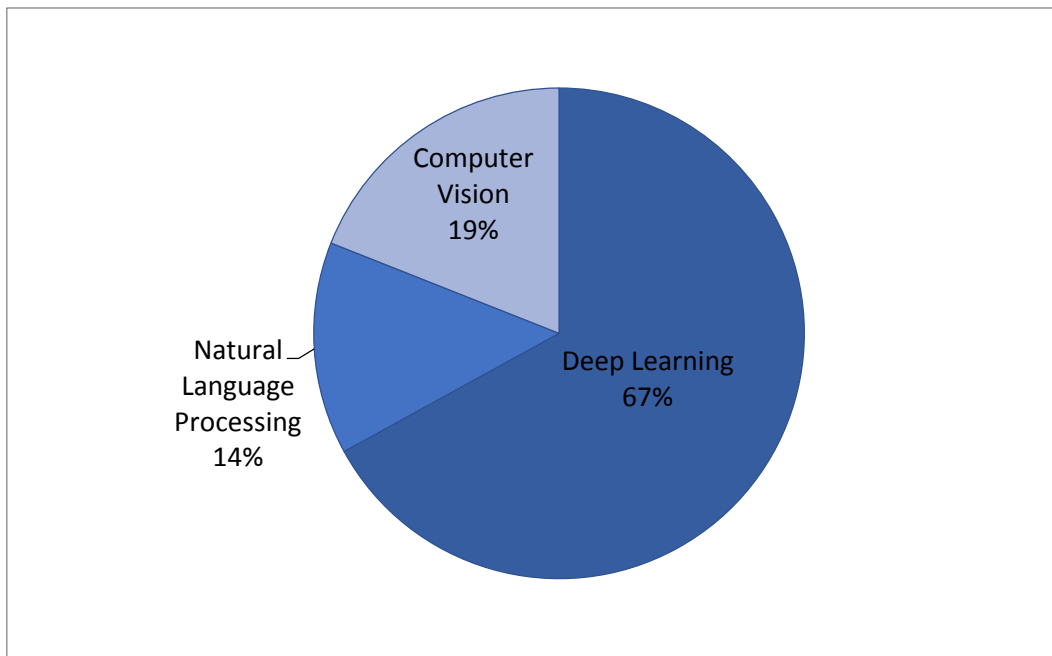


Global AI Software Market in Transportation:

The global AI software market in transportation industry is expected to grow from US\$2.1 billion in 2020 to US\$4.7 billion by 2025, at a CAGR of 17.5%.















Global AI in Transportation Market by Technology – 2020









Deep learning holds the highest share of around 67% in the global AI transportation market 2020. Deep learning algorithms analyze the hidden patterns effectively in huge volume of data and assist the transportation industry to overcome the traffic issues.

Further, deep learning is a fully automated technique which offers more accuracy when compared with the traditional methods. Computer vision accounts for 19% share of the global AI transportation market and it is primarily used to enable the traffic management system to accurately capture images and analyze them under a wide variety of conditions such as bad weather and lighting, tracking vehicles at high speed and extremely congested traffic jams.

AI Enabled Smart Traffic Management Market Growth Drivers:

	Market Growth Drivers	Short Term (Less than 2 years)	Medium Term (2 -5 years)	Long Term (More than 5 years)
1	Reducing Traffic Congestion: AI collects traffic information at the intersections continuously in real-time and analyzes it not only to assess current traffic conditions but also to predict how much traffic congestion can happen and help traffic management system with intelligent insights to ease out the clogged roads efficiently.			
2	Improving Road/Driver Safety: AI technology has the capability to efficiently analyze the critical driving factors such as vehicle speed, driver behavior and nearby vehicles movement to alert the drivers with safety insights regularly and give more reaction time in-case of accidents.			
3	Fuel Efficient: Vehicles stopping at traffic signals creates engine idle for some time and again accelerating to get back up to speed may leads to wastage of fuels, adding pollution. The deployment of AI in the traffic management system synchronizes the timing of traffic signals wit vehicle movements to considerably reduce the idle time, offer improve mobility and makes vehicles energy efficient.			
4	Forecasting Accurate Transit Time: For public transport system, forecasting accurate transit travel time for vehicles is very crucial, as it allows the drivers/passengers to efficiently plan their trips and minimizes the waiting times. Based on the various traffic data collected such as vehicle speed, traffic conditions and etc., AI will assist the public transport users with reliable pick up and drop off times for their routes.			

AI Enabled Smart Traffic Management Market Restraints:

	Market Restraints	Short Term (Less than 2 years)	Medium Term (2 -5 years)	Long Term (More than 5 years)
1	Lack of AI- Specific Skills: The end-users in the transportation industry still lack the talent with appropriate skill sets to bring the best out of AI. It's difficult for the users to continuously validate and update the AI system in real-time to incorporate the changes regularly.			
2	Data Privacy Issues: Data privacy and usage rights are another key barrier for AI deployment in transport industry. The AI-based transport management system requires access to huge amount of data that is often sensitive in nature. Hence, there needs to be a completely secure system to ensure data is fully encrypted.			

3	Regulations: AI to make its way into actual vehicles and in transportation industry would require a properly defined regulation. AI in transportation needs higher regulatory standards than many other industry use cases. Regulations will differ by region and even by country and state, and thus these conditions need to have a robust regulatory framework in place.			
4	Lack of Infrastructure: At a global level, in countries and in general many cities, the transport industry lacks the technology infrastructure to support AI implementation. The traditional technology infrastructure is not capable enough to analyze huge amounts for data that is required for training AI solution.			
Legend		High	Medium	Low

Carbon Capture Needs Has Created a Carbon Market and Technology has Created Market Opportunity

There is a great demand on global markets **to reduce** carbon **emission/carbon capture** solutions. All pathways that limit global warming to 1.5°C project the use of carbon dioxide removal on the order of 100-1000 Gigatons over the 21st century. It is projected that CO₂ removal with the right policy support will become the world's biggest market. The climate math propounded by various agencies suggests a need for 10-20 Gt CO₂ per year. At an average cost of US\$50-100/ton for capture and removal, that creates an industry at least thrice as large as the current size of the Oil and Gas industry.

Tackling the carbon challenge is complex. The world emits an average of 52 Gt CO₂e/yr. However, the cost of capturing that carbon is enormous





1. Currently, there are no known solutions to capture carbon at any cost above 38 Gt CO₂e/yr
2. The cost of abatement rises quickly at larger volumes to over \$1000 Gt CO₂e/yr. Whereas, ideally, the cost of carbon abatement should be below \$100 per ton to make economic viability
3. The world is already on its way to 80 Gt CO₂e/yr
4. None of the carbon technologies currently addresses legacy CO₂ removal, which is 95% of the problem.

To achieve the hypothetical net-zero, viz. to remove almost the entirety of 50+ Gt CO₂ of annual emissions, the world has to spend at least \$85 trillion annually (i.e., ~6% of the world GDP). If the world achieves a sub \$50/t cost of carbon capture, the world will still ~2.5% of its GDP but makes the entire process more viable.

As discussed earlier, Axilion's solutions help to reduce carbon emissions significantly. In our view, the company could receive a premium for its services due to its carbon-reducing effect.

AI in Traffic Management: Competitive Landscape

Axilion's X way suit's key differentiator is its unique data collection methodology (dashboard cameras equipped with GPS and wireless connection), simulation capability of real-time traffic via a digital twin, and deep reinforcement learning technology.

Company	Product Description/Technology Profile	Potential Impact on Improving Traffic Mobility
Mobileye (Israel) Mobileye is an Intel owned company and was established to provide technology solutions enabling a safer and congestion-free transportation system. The company employs more than 1,700 employees and has developed a diverse range of software solutions that run on a proprietary computer chip, EyeQ.	The company has developed vision technology for Advanced Driver Assistance Systems (ADAS) and autonomous driving. The system is highly compatible with all sorts of on-vehicle sensors: surround cameras, radars, and LIDARS.	
Moovit (Israel) Moovit is an Intel owned company which develops software solutions for urban mobility, the technology solutions largely focus around real-time trip planning and mobile payment facilities.	The company has developed a technology suite, Mobility-as-a-Service (MaaS) solution, for enhanced urban mobility. The technology largely caters the requirement of public transit authorities for streamlined functioning. The suite includes facilities such as mobility apps, mobile payment for transit apps, and mobility analytics tools.	
C3 AI (United States) C3.ai is an AI software developing company primarily engaged in digitizing the industrial value chain by equipping it with predictive maintenance, fraud detection, and supply network optimization tools amongst others.	The company has developed AI driven technology solutions which can be used for vehicle path optimization and urban analytics.	
Dynniq Mobility (Netherlands) The company develops technology solution to aid in managing the flow of energy and mobility in our society	The company has developed a Intelligent Transport Systems (Peek Traffic), which utilizes IoT, sensors, and analytics to develop an adaptive, cloud-connected, and modular technology solution for traffic management.	

<p>Bestmile (United States)</p> <p>Bestmile is a technology services provider for public and private mobility providers. The company is primarily focused at AI solutions enabling optimized trip planning.</p>	<p>The company provides its solution under the technology suite of Bestmile Fleet Orchestration Platform, which analyzes all the variables like vehicle capacity, battery level, demand on network and many other factors to suggest most optimum fleet schedule.</p>	
<p>Rapid Flow Technologies LLC (United States)</p> <p>Rapid Flow Technologies LLC is a startup company spun out of Carnegie Mellon University; the company was formed to commercialize the technology solution Surtrac (Scalable Urban Traffic Control) adaptive traffic signal control technology developed at the Robotics Institute at Carnegie Mellon. The company's technology solutions have been installed at more than 50 intersections across Pittsburgh, US. The system has successfully reduced average travel time by as much as 26%, intersection stoppage time by 41%, and also curbed vehicular emissions by 21% due to increased mobility (Reduced requirement of frequent acceleration and deceleration).</p>	<p>The idea is to use data from installed fix cameras and use robotics and artificial intelligence for real-time traffic optimization and communication.</p>	
<p>FLIR Systems Inc. (United States)</p> <p>The company develops technology solutions enhancing the perception and awareness of equipment. The product offerings of the company include sensing solutions: thermal imaging, visible-light imaging, threat detection systems, and analytics software suits.</p>	<p>FLIR Systems Inc. announced the launch of two new cameras FLIR ThermCam AI (with thermal imaging capability) and FLIR TraficCam AI, both the cameras are equipped with artificial intelligence to optimize the traffic flow across city intersections. The cameras when connected with FLIR's cloud platform (FLIR Analytics) can be used for predicting traffic patterns, prevent congestions, and identify potential accidents. Hence, resulting in creating a smoother traffic flow and safer roads for pedestrians and cyclists.</p>	
<p>Alibaba Cloud (China)</p> <p>The company provides secure cloud computing and data processing capabilities as a part of its technology offering. The company provides its services to several enterprises across 200 countries and regions.</p>	<p>One of the most prominent traffic management technology solutions, City Brain, has been deployed in major Asian urban centers, with deployment in more than 23 Chinese cities and in countries such as Malaysia.</p> <p>The concept utilized by the technology involves leveraging data from cameras installed at traffic intersections and then analyzing the data for managing multiple traffic signals with the aim of preventing gridlock.</p>	
<p>NoTraffic (United States)</p> <p>The company provides stationary sensors and</p>	<p>The company's technology solution for efficient traffic management includes plug & play AI sensor installation and real-time data upload on</p>	

cloud computing options enabling digitization of road infrastructure allowing a seamless traffic management capability.	the cloud for autonomous and data driven traffic light management	
Telefonaktiebolaget LM Ericsson (Sweden) The company is primarily engaged in developing and marketing communication technology solutions. Further, the company caters to customers across 180 different nations spanning across the globe.	In its product suite of Connected Urban Transport solutions, the company provides Advanced Traffic Management System (ATMS) for automated system monitoring, management, and maintenance between cities as well as counties. Real time data from traffic sensors and cameras is aggregated and analyzed for smart management of traffic lights at intersections	
AindraLabs (India) The company is one of the prominent artificial intelligence related technology solution providers in India. The company specializes in developing products capable of analyzing digital video and images via its visual analytics platform.	The company has developed Aindra-Intellivision, a visual analytics platform, which has the potential of transforming any traffic monitoring camera into a smart device. The Aindra-intellivision monitors digital video input and to detect incidents and collect real time data for assisting decisions.	
Hikvision (China) The company develops and markets video surveillance equipment for both public and military applications.	Hikvision has developed a traffic flow optimization system, which leverages data from cameras and sensors installed at intersections. The system adjusts the traffic light ensuring a constant flow of traffic from all directions.	
South Ural State University (SUSU) (Russia) South Ural State University (SUSU) is a Russian public research institute. Since, 2010, the university has held the status of a national research university.	Researchers at the university have developed a unique Artificial Intelligence Monitoring System (AIMS) which uses data from HD CCTV cameras installed at fixed location for traffic analysis and has the potential to aid in enabling smart traffic management systems.	Low Technology readiness level

Legend	High	Medium	Low
			

Comparative Analysis of AI enabled traffic management solutions

Company	Axilion (Israel)	Rapid Flow Technologies LLC (United States)	C3 AI (United States)	Alibaba Cloud (China)	Hikvision (China)
Automation	✓	✓	✓	✓	✓
Avg. time saved	📈 Up to 40%	📈 Up to 25%	-	📈 Improved mobility	📈 Improved mobility
Preference for Public Transportation	✓	-	-	-	-
Impact on Overall Transportation System's carbon footprint	Highest	Medium	Medium	Medium	Medium
Setup effort	Minimal setup with no requirement of field installation	Requires on-field Equipment Installation: Cameras and controller units	Data collection infrastructure required		
Hardware Agnostic	✓	Can be connected with existing traffic detection system and may require additional hardware installation in the traffic control cabinet	✓	✓	Installation of intelligent traffic cameras required
AI data-driven predictive insights	✓	✓	✓	✓	-
Scalability	High	High	High	Medium	Medium

Integrated real-time traffic simulation			-		
Continuous time plan optimization				On demand	

The proprietary dashboard cameras, developed by Axilion, collect data from the driver's perspective and capture an optimized number of frames per second for quick and efficient data analysis. Further, dashboard cameras provide more rich data than fixed intersection cameras and hence a limited number of cameras are required to monitor multiple traffic intersections. The limited requirement of dashboard cameras is highly cost effective, further, deep reinforcement learning technology enables generation of optimum signal traffic plans, ideal for each intersection. The deep learning model also ensures that the traffic management system becomes smarter with time by learning from every new data point. Further, by giving a selective preference to public transportation systems and ensuring a smooth traffic flow across all the intersections, the overall carbon footprint is significantly reduced over time. As more people begin using public transportation and less private vehicles travel on roads, the carbon footprint of urban mobility is further reduced.

Recent Developments in AI-enabled Smart Traffic Management Solutions Sector

- In 2020, Hikvision (China) entered into an agreement with Xi'an's transportation authority for the deployment of intelligent traffic management infrastructure. Hikvision is a prominent IoT services provider and would be providing the city with Checkpoint Capture Cameras, Intersection Violation Capture Units, along with AI-powered analytical tools for enabling the smart traffic management infrastructure.
- In 2020, the AI company NoTraffic entered into an agreement with the transportation authority of City of Phoenix (United States) for upgrades in some of the city's traffic lights for their transformation into data driven and AI powered traffic lights.
- In 2019, Fujitsu completed the demonstration of its AI-powered traffic management technology by successfully piloting its cameras and analytics platform in Nagao (Japan). The result of the demonstration was that the system can detect vehicles even in harsh weathers and smartly optimize traffic lights. The test was supervised by the Kanto Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism.

- In 2019, The UK government announced its plan of sharing data on road congestion, repairs, and any other scheduled disruption to the country's transportation network along with a research funding of USD 368 million to drive innovations in data driven traffic management decisions for a smoother city-wide mobility.
- In 2019, the government of Maharashtra (India) initiated the process of upgrading traffic intersection with an Intelligent Traffic Management System (ITMS), which leverages AI to analyze traffic data and monitor traffic violations.
- In 2017, the Japan's transportation ministry began the initiative of installing cameras at important city junctions for data collection. The ministry plans to drive the development of data driven AI solutions capable of analyzing the collected data and help in managing traffic lights for most efficient urban mobility.

3. Financial Analysis & Valuation

Valuation Method & Approach

Valuation of a start-up company in its early stages can be challenging due to limited cash flow (if any) and uncertainty regarding the future. As part of a Discounted Cash Flow (DCF), the accepted method used in financial valuations, there are several modifications to a start-up company's valuation. In general, there are four primary methods within the DCF method:

1. Real options – this valuation method is designated for pre-clinical and early-stage clinical programs/companies where the assessment is binary during the initial phases and based upon scientific-regulatory assessment only (binomial model with certain adjustments).
2. Pipeline assessment – a valuation method used for early-stage companies before the market stage where time-to-market may be a few years for full operations. The company's value is the total discounted cash flow for its products/signed agreements plus unallocated costs and its technology platform assessment.
3. DCF valuation - this method applies to companies with products that have a positive cash flow from operations.
4. Market benchmark – this method is based on recent deals (M&A and/or fundraising) within the company's domain and market multiples.

Axilion is a publicly held firm, thus a late-stage firm from a financial aspect, however early-mid stage in its time-to-market. Our valuation is based on a market benchmark approach.

Financial Overview - Artificial Intelligence (AI) & Machine Learning (ML)

ML is a subfield of AI that aims to give computers the ability to learn iteratively, improve predictive models, and find insights from data without being explicitly programmed. In practice, AI & ML is a subfield of data science that can extract predictions from complex datasets.

The pandemic is pushing digital technology initiatives to the top of enterprise priority lists, and AI & ML is a primary beneficiary of increased investment. We believe that AI is disproportionately benefiting from this focus since AI enables both the creation of new services and new technology resources management.

We believe the commercial AI & ML market is in the first ten years of a long-term shift in societal decision making, leveraging scientific progress made over the past century via improved computing power and enhanced datasets. As a result, we are just seeing the early growing pains of the technology in practical applications and barely gaining a glimpse into the technology's potential to replicate human intelligence.

We estimate ML vertical alone to be a \$67.1 billion market as of 2020, forecasting it to grow at a 22.3% CAGR into a \$131.5 billion market in 2023.

The AI field is in the pilot stages of creating a new class of companies with different characteristics than the SaaS businesses that have defined tech giants' current era. **We believe that the industry is in the first ten years of a 40-year era that can redefine multiple industries and product categories.** This has coincided with a golden era of SaaS computing, though we believe the two technologies are computationally and functionally distinct. Investors have conflated the two and encouraged AI developers to commercialize their findings early, resulting in some market failures.

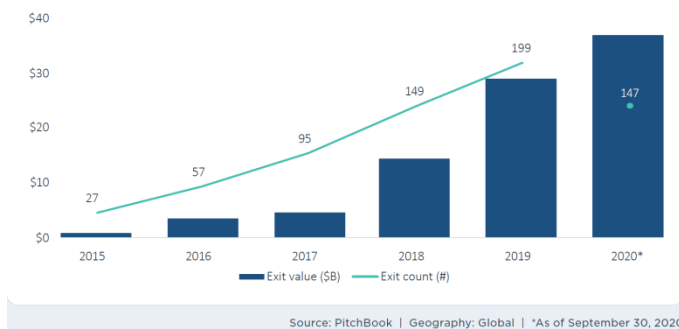
AI & ML has been a lucrative space for VC investors over the past seven years, belying the confusion in the market. Previous PitchBook research found that AI & ML has had outstanding financial returns for VC investors for companies funded between 2013 and 2018, with all series achieving an adjusted annualized return of at least 35.6%. These returns far surpass those for the technology industry more broadly, for which no series earned over a 13.5% adjusted annualized return.

Global Venture Capital Activity

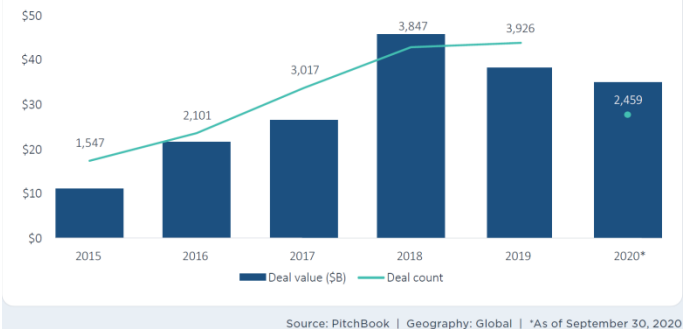
Q3 2020 deal value remained strong for AI & ML with \$10.4 billion invested across 770 deals—nearly half of the deal value derived from mega-deals in late-stage unicorns in the US and China, primarily driven by large institutional investors including BlackRock, Baillie Gifford, SoftBank, and Coatue Management.

Exit activity showed that public markets might be the best route for AI startups to maximize their value going forward. The trend of AI-integrated IPOs continued, with nine companies across segments taking advantage of an open IPO window, highlighted by Palantir's long-awaited debut. Palantir has made autoML a feature of its data integration platform. Cambricon Technologies pushed AI chip startups' valuation ceiling higher, achieving a \$3.3 billion pre-money valuation in its IPO on the Shanghai Stock Exchange only four years after being founded. M & M&A continued to be slow in deal count and deal value, with no acquisition disclosing a value of more than \$14 million. Apple and Microsoft remained active in M&A in Q3, demonstrating that exit opportunities for leading startups remain robust in a recessionary environment. Apple acquired an AI-integrated podcast startup, Scout.FM, and Microsoft acquired AlaaS startup Orions Systems, both likely for low deal values.

AI & ML VC EXIT ACTIVITY



AI & ML VC DEAL ACTIVITY



We also see a tremendous surge in the Far East with China's venture capital ecosystem. In China alone we found 14 "unicorns" - startups with a valuation of \$1 billion or more - worth \$40.5 billion in total.



Source: <https://www.weforum.org/agenda/2018/09/the-top-5-chinese-ai-companies/>

We will now dive in into horizontal platforms and will view use cases relative to Axilion positioning within the market.

Horizontal Platforms

Horizontal platforms empower end-users to build and deploy AI & ML algorithms across a variety of use cases. These platforms directly apply scientific advances in AI & ML research to commercial applications. Companies in this segment have differentiated AI & ML approaches and are built with AI & ML from the ground up (also referred to as AI-first). Furthermore, some horizontal platforms improve AI & ML algorithms but do not use AI & ML themselves.

Computer vision: The use of AI & ML to analyze visual data and make meaningful predictions about both the physical world and digital images. The technology can be used across use cases to label and make predictions about visual data. Key technologies utilizing computer vision across various verticals include: AI-enabled augmented reality, computer vision as a service, facial recognition, geospatial analysis, and visual data labeling software.

AI automation platforms: Software and services that enable enterprises across all verticals to leverage AI to automate critical business processes via predictive analytics. Categories include AI-first applications of the following products: AI for IT operations (AIOps), business intelligence, contract lifecycle management automation, database management, decision intelligence, and intelligent process automation.

Vertical Applications

Vertical applications in AI & ML address **specific problems** within industries and are not always AI-first. Many startups in this category design a solution to an industry problem using software and integrate AI & ML to optimize some part of their product. These solutions typically differentiate based on the quality of the dataset used to train the industry-specific model and the industry expertise of the data scientists in identifying decision-making areas that can be enhanced by AI & ML models. As a result, many of these startups help automate specific functions within their industry but have limited ability to cross-apply their AI & ML to other industries. Sub segments, for example, are financial services, healthcare, transportation, and more.

Market size - Vertical applications

We estimate the vertical applications market to reach \$39.7 billion in 2020, with a 23.5% CAGR out to 2023, resulting in a \$74.8 billion market. The segment is heavily weighted toward enterprise IT applications, a \$17.8 billion market, led by customer service automations in ecommerce and enterprise sales, growing to a \$33.9 billion market by 2023 at a 24.0% CAGR. This estimate includes \$2 billion to \$4 billion markets in sales & marketing automation, information security automation, and fraud prevention. **We estimate industrial AI to be the second-biggest category at \$8.3 billion, focused primarily on manufacturing automation and predictive maintenance.** This category may grow more slowly than the market overall at a 20.0% CAGR due to the challenge of integrating new analytics with legacy controls systems.

Valuation Summary

We based our valuation on a top-down, market benchmark analysis. Observing Axilion market positioning we identified 89 similar companies in terms of activity (AI & ML) and growth stage and excluded outliers from our sample. The average post-money valuation for these similar deals is \$453.7M (See appendix 1 for the full data set). Below we present a sample of the 10 top AI deals:

Company Name	Description	Deal Date	Deal Type	Pre-money Valuation (million, USD)	Post Valuation (million, USD)	Country
Pony.ai	Developer of an autonomous driving technology intended to facilitate manufacturing of automated vehicles.	07-Feb-2021	Later Stage VC	4,933	5,300	United States
C3.ai	C3.ai Inc is an enterprise artificial intelligence company.	09-Dec-2020	IPO	3,375	4,026	United States
Luminar	Luminar Technologies Inc is an autonomous vehicle sensor and software company.	02-Dec-2020	Reverse Merger	2,994	3,400	United States
SentinelOne	Developer of automated cybersecurity software designed to protect devices and servers against malware and threats.	11-Nov-2020	Later Stage VC	2,733	3,000	United States
Verafin	Developer of cloud-based fraud detection and anti-money laundering software.	11-Feb-2021	Merger/ Acquisition		2,750	Canada
Sumo Logic	Sumo Logic Inc is a software company.	17-Sep-2020	IPO	1,846	2,171	United States
Farmer's Business Network	Farmers Business Network is a provider of a farmer-to-farmer agronomic information network.	03-Aug-2020	Later Stage VC	1,600	1,800	United States
Lookout	Developer of cloud-based security software designed to detect mobile threats and improve mobile security.	01-Mar-2020	Later Stage VC	1,701	1,751	United States
Harness	Developer of a delivery-as-a-service platform created to simplify the software delivery process.	06-Jan-2021	Later Stage VC	1,615	1,700	United States
Verkada	Manufacturer of enterprise security cameras designed to offer enterprise physical security services.	29-Jan-2020	Later Stage VC	1,520	1,600	United States

We also view AI and Mobility tech firms since 2020 and found that the median post money valuation is \$526.2M, as we present below some of the companies²:



Based on the aforementioned data and analysis, we evaluate the company's equity value at \$453.7M.

We estimate Axilion's price target to be in the range of NIS 50.08 and NIS 55.35, with a mean of NIS 52.72.

Based on the aforementioned data and analysis, we evaluate the company's equity value at \$453.7M. We estimate Axilion's price target to be in the range of NIS 50.08 and NIS 55.35, with a mean of NIS 52.72.

² Source: Pitchbook (showing 38 of 468 companies).

Appendix 1: Deals Sample

Company Name	Description	Deal Date	Deal Type 1	Company Pre-money Valuation (million, USD)	Company Post Valuation (million, USD)	Company Country
Pony.ai	Developer of an autonomous driving technology intended to facilitate manufacturing of automated vehicles. The company's technology leverages artificial intelligence and algorithms to accurately perceive the vehicle's surroundings in order to predict the surrounding driver's actions and maneuver the vehicle accordingly, enabling vehicle companies to improve their car functionality and safety in an efficient manner.	07-Feb-2021	Later Stage VC	4,933	5,300	United States
C3.ai	C3.ai Inc is an enterprise artificial intelligence company. The company provides software-as-a-service applications that enable customers to rapidly develop, deploy, and operate large-scale Enterprise AI applications across any infrastructure. It provides solutions under three divisions namely, The C3 AI Suite, is a comprehensive application development and runtime environment that is designed to allow customers to rapidly design, develop, and deploy Enterprise AI applications of any type; C3 AI Applications, include a large and growing family of industry-specific and application-specific turnkey AI solutions that can be immediately installed and deployed; and C3.ai Ex Machina, analytics for applying data science to every-day business decisions.	09-Dec-2020	IPO	3,375	4,026	United States
Luminar	Luminar Technologies Inc is an autonomous vehicle sensor and software company with the vision to make autonomy safe and ubiquitous by delivering the lidar and associated software that meets the industry's stringent performance, safety, and economic requirements.	02-Dec-2020	Reverse Merger	2,994	3,400	United States
SentinelOne	Developer of an automated cybersecurity software designed to protect devices and servers against malware and threats. The company's cloud-based software helps in delivering autonomous security for the endpoint, data centre and cloud environments to help organizations secure their assets with speed and simplicity, unifies the detection, prevention and remediation of threats initiated by nation-states and organized crime in a single platform powered by artificial intelligence, enabling organizations to detect malicious behaviour across multiple vectors, rapidly eliminate threats with a fully-automated integrated response and adapt their defences against the advanced cyber attacks.	11-Nov-2020	Later Stage VC	2,733	3,000	United States
Verafin	Developer of cloud-based fraud detection and anti-money laundering software designed to identify entities that may be involved in money laundering or terrorist financing activities. The company offers compliance automation tools such as big data intelligence, visual storytelling, collaborative investigations, artificial intelligence, machine learning for cross-institutional, multi-channel analysis to detect deposit, check, card and wire frauds, funnel accounts, human trafficking, unusual tax refund, and other unethical activities, along with vendor management, enterprise reporting, case management, watch list scanning, and other related services, enabling banks and credit unions to scan customers and transactions prior to initiating contracts.	11-Feb-2021	Merger/Acquisition		2,750	Canada
Sumo Logic	Sumo Logic Inc is a software company. The company develops software, which enables organizations of all sizes to address the challenges and opportunities presented by digital transformation, modern applications, and cloud computing. The software platform enables organizations to automate the collection, ingestion, and analysis of application, infrastructure, security, and IoT data. The solutions provided are Operations Intelligence,	17-Sep-2020	IPO	1,846	2,171	United States

	Security Intelligence, and Business Intelligence.					
Farmer's Business Network	Farmers Business Network is a provider of a farmer-to-farmer agronomic information network designed to help farmers in the management of their data and gain insights from each other. The company's platform predominantly collects data extracted from farm equipment, as well as from manually recorded data from farmers to offer insights in areas such as seed selection, compare productivity and benchmark field performance over time, enabling users to make informed decisions.	03-Aug-2020	Later Stage VC	1,600	1,800	United States
Lookout	Developer of cloud-based security software designed to detect mobile threats and improve mobile security. The company's platform protects mobile phones from viruses, malware, spyware and has the ability to backup and restore data and tools to help locate lost or stolen phones by using machine intelligence, enabling users to secure their personal information and data that are stored in mobile devices from serious cyber-attacks.	01-Mar-2020	Later Stage VC	1,701	1,751	United States
Harness	Developer of a delivery-as-a-service platform created to simplify the software delivery process. The company's platform utilizes machine learning and offers real-time delivery analytics, live notifications, continuous verifications, workflow wizards, and a pipeline builder, thereby enabling software engineers to save time by automating the scripting process.	06-Jan-2021	Later Stage VC	1,615	1,700	United States
Verkada	Manufacturer of enterprise security cameras designed to offer enterprise physical security services. The company's platform offers cameras that combine cutting-edge camera technology with intelligent, web-based software all in a secure, user-friendly system, as well as eliminate the need for outdated equipment such as network video recorders, enabling users to get updated and expanded cameras that offer the protection of full encryption with no special configurations required.	29-Jan-2020	Later Stage VC	1,520	1,600	United States
Zenoti	Developer of cloud-based enterprise software designed to empower the beauty and wellness industry. The company's software uses artificial intelligence, predictive analytics and communication tools to manage reporting and analytics, inventory management, marketing and employee management, enabling businesses to eliminate long front desk lines, omnichannel booking and contactless payments for seamless check-outs.	15-Dec-2020	Later Stage VC	1,110	1,264	United States
Tekion	Developer of a cloud-built platform intended to connect digital experiences to automotive retail. The company's platform provided brings the entire consumer, Dealer, and OEM ecosystem together by connecting every part of the automotive retail journey, enabling car dealers to seek a better way to do business while providing customer experiences and increasing efficiency, revenue, and retention.	21-Oct-2020	Later Stage VC	875	1,000	United States
Asapp	Developer of a machine learning software designed to make customer experiences more productive. The company's software augments and automates human work while focusing on complex and data-rich problems, enabling individuals and organizations to realize their full potential and increase efficiency.	01-May-2020	Later Stage VC	650	835	United States
Neo4j	Developer of an open-source graph database designed to help companies build intelligent applications. The company's database leverages data as first-class entities and helps to understand connections, influences, and relationships in data through machine learning and artificial intelligence that can adapt to changing business needs, enabling clients to get support in fraud detection, real-time recommendations, and master data.	30-Sep-2020	Later Stage VC	710	740	United States
Transwarp (Big Data)	Developer of big data software technologies for enterprises. The company's cloud-based platform offers an integrated, one-stop data processing and cloud operating system to explore the applications of big data infrastructure in enterprises, enabling enterprises to store, manage and analyze data.	01-Dec-2020	Later Stage VC	650	696	China
Tansun	Tansun Technology Co Ltd is engaged in independent research and development of core technologies and	24-Aug-2020	IPO	516	688	China

	products, focusing on customer assets (credit, transaction banking and supply chain finance), risk management, core business systems. The company is focused on providing long-term IT solutions and services for financial industry customers, including central banks, political banks, state-owned banks, joint-stock banks, local commercial banks, and non-banking financial institutions. Its services include consulting and testing services.					
WorkTrans	Developer of a human resource management software designed to offer diversified attendance, mobile scheduling and unified management. The company's software helps in generating fast payroll, roster, recruitment and training around attendance, enabling companies to improve recruiting efficiency.	08-Jan-2021	Later Stage VC	550	669	China
Brain Corp	Developer of artificial intelligence-based software designed to help create autonomous machines that can navigate safely and efficiently in public indoor spaces like retail stores, airports, hospitals, and more. The company's technology utilizes a cloud-connected operating system for commercial autonomous robots that can power robots in environments such as malls, airports, universities and big box stores, enabling robots to navigate autonomously, avoid obstacles, adapt to changing environments, manage data, generate reports and seamlessly interact with end-users and other robots.	27-Apr-2020	Later Stage VC	500	536	United States
Emailage	Developer of a SaaS fraud prevention and identity verification technology designed to make transactions easy and secure. The company's technology uses machine learning and proprietary algorithms in order to provide real-time alerts of risky transactions and delivers a risk score, enabling companies to realize significant savings from identifying and stopping fraudulent transactions and improve customer experience.	19-Mar-2020	Merger/Acquisition		480	United States
Socure	Developer of a digital identity authentication platform designed to mitigate identity fraud risks for financial institutions. The company's platform is based on artificial intelligence and machine learning that integrates predictive analysis with digital, offline and social identity data to determine the authenticity of user identity and deliver fraud risk prediction, enabling organizations to reduce fraud rates, increase acceptance rates as well as lower compliance and manual review costs.	25-Aug-2020	Later Stage VC	340	375	United States
Tungee	Provider of an enterprise sales forecasting platform designed to offer sales analyses and solutions. The company develops a sales forecasting SaaS platform based on big data and artificial intelligence to provide enterprises with intelligent sales solutions including leads mining, business opportunity engagement, customer relationship management and order analysis, enabling businesses to reduce sales cost and improve sales performance.	01-Dec-2020	Later Stage VC	281	334	China
Gorgias	Provider of multi-channel helpdesk services designed for e-commerce to manage all customer support in one application. The company's help desk software combines machine learning and integrations with the tools to automatically suggest how to solve support request as well as creates templates and shortcuts to auto-expand small snippet of text into a polite support answer, offering customer support agents with an artificial intelligence-powered help desk that makes them efficient at answering customer support requests.	10-Dec-2020	Later Stage VC	300	325	United States
STATSports	Developer of athletic performance monitoring technology designed for elite sports organizations. The company's product is the most accurate wearable in the world, with over 90 peer reviewed publications, and utilises AI and real-time machine learning to collect over five million data points per typical session, endorsed professionally and privately by some of the world's most influential teams and sports stars, and brings the highest resolution of data to the consumer market, allowing fans to authentically compare their athletic performance against their favourite athletes.	14-Jun-2020	Later Stage VC	317	320	United Kingdom

Featurespace	Developer of an adaptive behavioral analytics platform designed to bring new insights through new ways of treating data. The company's platform monitors all customer data in real-time to spot anomalies and block new fraud attacks as they occur and recognizes genuine customers without blocking their activity, enabling organizations to reduce their fraud costs, keep their customers happy and increase their revenues.	13-May-2020	Later Stage VC	228	265	United Kingdom
Xnor.ai	Developer of machine learning software models designed to work with applications for retail analytics, drones, automotive, industrial automation and smart cameras. The company's software is able to deliver very high performance, low power machine learning models suitable for sophisticated analytics on resource-constrained edge devices, as well as delivering fast and scalable algorithms with no cloud and internet connectivity required, enabling users to achieve deep learning, machine vision, and speech recognition to be done directly on devices.	08-Jan-2020	Merger/Acquisition		200	United States
JSonar	Developer of a security data platform intended to offer efficient data-centric audits and protection. The company's platform offers source tools which are fast to deploy, easy to use, fully functional from the start with built-in machine learning, AI and keeps data in a live, usable form according to retention needs, enabling businesses to meet their security and compliance needs in a single low-cost platform.	09-Jun-2020	Later Stage VC	150	200	United States
Ocrolus	Developer of a human-in-the-loop fintech infrastructure platform intended to automate back-office tasks with precision. The company's platform uses artificial intelligence and crowdsourcing to automate financial review processes, analyze documents with accuracy and speed, delivering highly accurate data verification, enhanced fraud detection and cash-flow analytics to lenders, enabling financial services companies to make high-quality decisions, in an automated and efficient way, with trusted data.	12-Nov-2020	Later Stage VC	187	200	United States
Awake Security	Developer of a network security and analytics platform designed to improve security team productivity. The company's platform uses machine learning and data science to automate analysis of both insider and external attacker behaviors, and provides autonomous triage and response with full forensics across traditional, IoT, and cloud networks, enabling enterprises to quickly find and remediate the threats that would otherwise go undetected by traditional security solutions.	15-Apr-2020	Later Stage VC	150	186	United States
Seal Software	Provider of contract discovery, data extraction and analytics software designed to help companies manage their contract portfolios. The company's software leverages machine learning and natural language processing that works like a search engine where users can ask various questions about their contracts, like start dates, renewals, payment terms, liability, pricing, incentives and others to get answers for them, enabling companies to understand exactly where their contracts are and what is buried within them, maximizing revenue opportunities, mitigating risk and reducing expenses.	01-May-2020	Merger/Acquisition		185	United States
FogHorn	Developer of an edge intelligence software designed to deliver the power of real-time industrial-grade analytics to resource-constrained edge devices. The company's software augments edge computing with machine learning to bring intelligence to industrial IoT which works with mainstream IoT platforms in the public cloud and can be easily integrated with AWS and Azure, thereby enabling businesses to make profitable analytics-based decisions.	25-Feb-2020	Later Stage VC	150	175	United States
Anodot	Developer of automated anomaly detection system designed to detect and turn outliers in time series data into valuable business insights. The company's platform uses automated machine learning algorithms to continuously analyze all business data and alert the businesses in real time whenever an incident occurs,	16-Apr-2020	Later Stage VC	136	171	United States

	enabling clients to reduce detection time, consequently safeguarding revenue, minimizing operational costs, and improving customer experience.					
BroadbandTV	BBTV Holdings Inc is a media and technology company. The company provides end-to-end management, distribution, and monetization of content. Revenue is generated from direct Ad sales, advertising, content management, and mobile gaming apps.	28-Oct-2020	IPO	40	171	Canada
Eigen Technologies	Developer of a natural language processing technology designed to read complex documents. The company's technology leverages machine learning to analyze and mine documents and contracts, automating the extraction of unstructured qualitative data, enabling individuals and organizations to make the right decisions by unlocking the value of their qualitative data.	13-Mar-2020	Later Stage VC	128	170	United Kingdom
Aktana	Developer of a decision support platform designed to synthesize and prioritize data to provide commercial teams relevant insights and suggested actions within their workflows. The company's platform harnesses machine learning algorithms, analyzes market data, channel activity, and HCP preference in real-time, enabling pharmaceutical companies to increase revenue, capitalize on data investments and drive channel productivity and results.	16-Oct-2020	Later Stage VC	140	155	United States
Chorus	Developer of a conversation intelligence platform designed to identify and help teams replicate the performance of top-performing reps by analyzing their sales meetings. The company's platform transcribes and analyzes business conversations in real-time, listens to sales calls, and leverages proprietary natural language processing (NLP) algorithms to glean insights from recorded calls, enabling clients to focus on business and close more deals in a short span of time.	28-Jul-2020	Later Stage VC	120	153	United States
Onna	Developer of a data integration platform intended to connect to emerging apps. The company's platform integrates corporate legal departments and disparate data sources into a central platform and uses a self-learning neural network to collect, preserve and search scattered data silos in one single repository, thereby enabling organizations to better centralize their data in one single repository.	17-Jun-2020	Later Stage VC	80	107	United States
Saltlux	Saltlux Inc is engaged in the business of machine learning and natural language processing. The solutions provided are customer voice analysis, opinion mining, social network analysis, intelligent audit, and other services.	23-Jul-2020	IPO	89	105	South Korea
Evergage	Developer of a real-time personalization platform designed to deliver the most relevant, individualized marketing experience. The company's platform combines in-depth behavioral analytics and customer data with advanced machine learning and provides companies with a detailed and real-time insight of how their customers use their products, enabling marketers to understand and interact with each person that visits their website, one at a time, thereby increasing customer engagement and conversions.	03-Feb-2020	Merger/Acquisition		100	United States
Clara Analytics	Developer of AI and ML-based software designed to provide accurate analytics for insurance companies. The company's platforms identify the best providers and attorneys to use and help them pursue the most cost-effective settlement strategy to reduce costs across their claims operations and provide alerts and insights on day one, enabling them to quickly spot potentially costly claims and take action before they escalate.	21-May-2020	Later Stage VC	75	100	United States
SafeGuard Cyber	Developer of an end-to-end collaboration security platform designed to manage the full life cycle of digital risk protection. The company's platform detects, analyzes, defends and prevents cybersecurity attacks while automating governance and compliance and delivers massive-scale threat analytics that leverages machine learning to notify clients, enabling clients to take action against risks and threats across digital channels in real-	18-Dec-2020	Later Stage VC	75	96	United States

	time.					
Revuze	Developer of a cloud-based business software designed to offer an all-automated customer opinions analyzer. The company's software is built around a self-learning artificial intelligence and therefore unconstrained by human imagination, so it can go deeper than any existing product and provide data-driven insights, enabling clients to get customer loyalty reports such as Net Promoter Score (NPS) and measuring their consumer satisfaction (CSAT) as well as that of their rivals in a hassle-free manner.	06-Mar-2020	Later Stage VC	89	94	United States
Riskmethods	Developer of a supply chain risk management software designed to identify, assess and mitigate supply chain risk. The company's software leverages AI algorithms to automate and accelerate threat detection for risk awareness, reacts fast and manages risk proactively to avoid supply interruption, enforce compliance and protect the corporate image, enabling organizations to identify and evaluate challenges within the supply chain and to initiate appropriate countermeasures.	19-Feb-2020	Later Stage VC	79	88	Germany
FarEye	Developer of a cloud-based mobile field workforce management platform designed to offer GPS based vehicle tracking and security system. The company's platform is customizable and can seamlessly integrate into the existing workflow of the organization to schedule jobs, track execution and evaluate the performance, all in real-time, enabling logistics, insurance, pathology and retail industries to monitor and track field activities.	21-Aug-2020	Later Stage VC	41	79	India
Casetext	Developer of a legal research platform designed to make the law more accessible and understandable. The company's platform automates key legal research tasks by leveraging artificial intelligence and machine learning technologies to analyze litigation documents and uses that information to algorithmically query the law, enabling attorneys and law firms to provide litigation services in a better manner.	13-Mar-2020	Later Stage VC	70	78	United States
Hiretual	Developer of an artificial intelligence-based recruiting software designed to increase team collaboration, pipeline management and improve intelligent engagement. The company's software sources candidates from over 30 platforms featuring more than 700M professional profiles, enabling recruiters to prioritize the best candidates, save time with instant contact details and find the right people faster.	08-Jun-2020	Later Stage VC	60	73	United States
Alfi	Operator of an artificial intelligence and machine learning company intended to improve the accurate delivery of personalized content in a measurable way. The company's software utilizes computer vision powered by proprietary developed machine learning algorithms to sense human behaviour and performs with high levels of visualization accuracy of real-time metrics providing insights into age, gender, ethnicity, emotion, object classification and retina motion interaction, enabling customers to capture big data and delivering data analytical reporting.	18-Jan-2021	IPO	55	73	United States
PSL Software	Developer of Softwares in Medellin, Colombia. The company offers agile software development, nearshore IT outsourcing, test automation, cloud architecture designs and implementation a software reengineering, thus helping in solving tough engineering challenges in areas like machine learning, automation and performance.	17-Jun-2020	Merger/Acquisition		71	Colombia
Element Analytics	Developer of an industrial analytics software designed to make industrial data easy to use and turn it into insights. The company's software process manages and integrates large volumes of data from a wide variety of sources including sensors and engineering and operational systems, enabling industrial organizations to surface reliability, productivity, and sustainability insights for operations.	26-Jun-2020	Later Stage VC	50	68	United States
Symbio	Developer of robotics technology intended to make industrial robots more capable and easier to use. The company's technology utilizes artificial intelligence to transform hyper-specific industrial robots into powerful,	28-Sep-2020	Later Stage VC	55	67	United States

	general tools that anyone can use and also help industrial robots manufacture everything from smartphones to car engines by integrating algorithms into a robust control architecture, enabling manufacturing companies to improve their production through automation of tasks throughout powertrain and general assembly operations.					
Stellar Cyber	Developer of a unified security analytics platform intended to provide a breach detection tool required for data protection. The company's platform helps organizations to automatically detect and thwart attacks on their critical data systems before damage is done or data is lost and deploys easily in any computing and network environment, enabling enterprises and service providers to manage detection and response services efficiently.	21-Jul-2020	Later Stage VC	57	65	United States
Netomi	Developer of artificial intelligence (AI)-based customer service platform designed to unlock the power of one-to-one relationships across the entire customer journey. The company's platform helps businesses to activate, manage and train AI to automatically resolve tickets, enabling businesses to contextually engage and build relationships with their customers by analyzing trending topics, conversation sentiment and other factors.	07-Jul-2020	Later Stage VC	52	64	United States
Wise Systems	Developer of an automated dispatching and routing software designed to simplify delivery route planning. The company's software uses machine learning to automatically schedule, monitor and adjusts routes in real-time, considering multiple variables and constraints, enabling fleet managers to optimize transportation operations and make deliveries efficient at decreased costs.	04-Jun-2020	Later Stage VC	45	60	United States
Neurala	Developer of deep learning neural network software designed to make drones smarter. The company's software focuses on building artificial intelligence and computer vision technologies for robots, drones, toys and smart devices, enabling enterprises to solve visual inspection challenges using the power of AI to increase productivity, raise quality and lower costs.	24-Jun-2020	Later Stage VC	52	57	United States
Edited	Developer of a real-time analytics platform designed to help retailers improve their decision making. The company's platform offers data tracking of pricing, assortment, and deep product metrics for apparel professionals in merchandising, buying, trading, and strategy, enabling brands to understand their markets better and trade more efficiently.	15-Apr-2020	Later Stage VC	34	56	United Kingdom
ThoughtTrace	Provider of a SaaS platform intended to extract valuable insights from unstructured data buried in large volumes of complex contractual documents. The company's platform uses a combination of artificial intelligence and machine learning algorithms to help enterprises review and validate critical information in existing contracts and legal documents, enabling clients with the ability to apply context to content, replace ambiguity with clarity, and provide understanding even in the absence of structure.	20-May-2020	Later Stage VC	45	55	United States
Artomatix	Developer of a creative artificial intelligence platform designed to create realistic and immersive worlds by generating 3D content. The company's platform uses artificial intelligence to radically enhance textures and backgrounds in 3D gamespace by scan-based design and photogrammetry, enabling experts and enthusiasts alike to focus on creativity, while automating the tedious aspects of 3D content creation.	11-Mar-2020	Merger/Acquisition		54	Ireland
Indico Data	Developer of a process automation platform intended to accelerate document-based workflows. The company's platform leverages deep learning and artificial intelligence to offer contract analysis, regulatory compliance, audit, and reporting, customer support automation, claim analysis, and contract process automation, enabling businesses to improve the efficiency of labor-intensive workflows and automatically extract meaningful insight from unstructured data at scale.	14-Dec-2020	Later Stage VC	30	52	United States
Gridspace	Developer of a communication software designed to monitor and extract meaningful details from business	10-Jul-2020	Later Stage VC	40	47	United States

	conversations. The company's software combines new techniques in the fields of speech recognition, natural language processing and artificial intelligence by turning conversational interactions into structured business data, enabling businesses to become more aware, customer-friendly, profitable and secure.					
Smartvid.io	Developer of a cloud-based video management platform designed to significantly reduce jobsite risk with the power of human and artificial intelligence. The company's platform uses machine learning to develop software that analyzes all images and videos in each project and matches them to a set of construction-specific tags, enabling clients to solve the management, collaboration, search and analysis challenges associated with industrial videos and photos.	09-Dec-2020	Later Stage VC	39	44	United States
Atlas ML	Developer of an online platform created to advance open source deep learning. The company's platform offers community and toolkit to solve workflow problems for machine learning, enabling developers to create a free and open resource with machine learning papers, code and evaluation tables.	01-Feb-2020	Merger/Acquisition		40	United Kingdom
ZineOne	Provider of cloud-based marketing technology designed to provide real-time brand-to-user interactions across all digital channels. The company's technology provides a real-time engagement platform for different verticals to match and correlate customer interaction patterns in real-time to initiate preferred actions based on machine learning, enabling customers with contextual interactions without changing a line of code in their applications.	08-Oct-2020	Later Stage VC	30	40	United States
Securonix	Provider of a cloud-based big data security insights platform designed to transform security management with risk intelligence. The company's security intelligence platform uses Hadoop and machine learning technology to consume, enrich and investigate and provide insights on massive volumes of data in real-time, enabling clients to detect and prioritize insider threat, cyber threat, cloud and fraud attacks automatically and in a precise manner.	04-Feb-2020	Later Stage VC	28	40	United States
ZenCity	Developer of an AI-powered data analytics tool intended to provide local governments with data-driven insights about their communities' needs and priorities. The company's platform analyzes millions of pieces of anonymized, aggregated feedback from varied sources like social media, local broadcast media and government customer service channels to offer actionable insights based on trending topics in citizens' conversations, enabling government agencies to prioritize resources, shape policies, track performance and connect with their communities.	06-Aug-2020	Later Stage VC	26	40	Israel
Rezatec	Developer of a geospatial data analytics platform designed to monitor and detect environmental changes. The company's platform uses proprietary algorithms and advanced machine learning techniques to deliver actionable insights as Data-as-a-Service landscape intelligence via an online decision support portal to help drive the smart management of land-based assets, enabling cities to become more resilient to environmental and social changes.	06-Feb-2020	Later Stage VC	27	33	United Kingdom
FarmX	Developer of a crop management platform intended to save resources and increase the health and wellness of plants and animals using the power of data. The company's platform uses monitors to identify critical soil, plant, and environmental variables with its proprietary farm-map soil data that is transferred to the FarmMap cloud, enabling farmers to get real-time analytics based on state-of-the-art machine learning processes.	21-Apr-2020	Later Stage VC	22	31	United States
Edgewise Networks	Developer of a micro-segmentation platform intended to eliminate network attack surface inside cloud or data center infrastructures. The company's platform leverages machine learning to instantly micro-segment network environments with one click and automatically keeping business applications protected and operational with no network changes required, enabling clients to implement	28-May-2020	Merger/Acquisition		31	United States

	and manage security even if there is a failure of firewall protection.					
Globacap	Developer of a digital capital raising platform intended to automate and significantly streamline post-trade processes. The company's technology enables all legal requirements involved in title transfer to be fulfilled automatically and institutional service providers, such as custodians and registrars, to have their balances and records reconciled continuously in real-time without any human involvement, enabling companies to reduce liquidity risk in private assets.	14-Jan-2021	Corporate	21	30	United Kingdom
Growers	Provider of digital agriculture tools intended to help farmers make quick and tactical decisions that drive profit on every acre. The company's tools use farm evaluation and planning to offer soil management, variable rate planting and hardware calibration services, enabling farmers to reduce input costs, maximize yields, simplify decision making and improve farming performance.	19-Feb-2020	Merger/Acquisition		28	United States
PopCom	Developer of automated retail technology software and hardware intended to provide deep consumer data and insights and engagement for vending machines and kiosk operators. The company's technology leverages facial recognition, machine learning, blockchain and smart contracts to augment and power machine-driven transactions for consumer products of all types including government-regulated products, enabling consumers to purchase items in a secure way.	30-Jun-2020	Equity Crowdfunding	25	26	United States
Radicalbit	Provider of a digital dataops platform intended for streaming data integration and real-time advanced analytics. The company's platform facilitates the development, deployment and the management of event stream processing applications, leveraging streaming and event-driven based technologies, machine learning, enabling users to securely manage the end-to-end data lifecycle putting models into production in seconds and facilitating data analysis with less costs, time and efforts.	24-Sep-2020	Equity Crowdfunding	24	25	Italy
ZERØ	Developer of AI-powered solutions engineered to help law firms achieve operational excellence. The company's platform automates and streamlines onerous administrative tasks such as email management and mobile time capture to minimize revenue leakage, increase email compliance, enabling lawyers to seamlessly manage their inbox content, be more productive and generate more revenue.	01-Jan-2020	Later Stage VC	15	23	United States
Aqua Digital Rising	Developer of a next-generation alternative-asset and analytics investment platform intended to invest in sports stars, business leaders, celebrities, and influencers. The company's software uses AI, mathematics, analytics, algorithms, and a proprietary real-time pricing engine to capture and analyze data from hundreds of global sources enabling customers to create tradable indices and put a price on human success.	19-Oct-2020	Equity Crowdfunding	22	23	United Kingdom
Curalate	Provider of visual analytics and marketing platform designed to connect people to pictures and products. The company's platform offers an image recognition algorithm software that can be applied to social media conversations to find people communicating about brands in pictures instead of just text, enabling people to communicate across social communities, digital channels, mobile applications, and websites.	08-Jul-2020	Buyout/LBO		22	United States
Voltaiq	Developer of an analytics platform designed to drive innovation and improve the devices that power electrified world. The company's battery analytics platform ensures the safety of new products and accelerates the transformational shift in how one uses a device, power the vehicle and balances the electric grid, enabling companies that manufacture or use batteries to increase productivity, drive innovation, and improve performance and reliability.	07-Apr-2020	Later Stage VC	20	21	United States
Resonance AI	Developer of an AI platform for video intended to answer the fundamental questions of why audiences connect, react and engage. The company's innovative software	31-Aug-2020	Later Stage VC	18	20	United States

	analyzes the creative essence of videos and can be tailored for any video content like TV shows, trailers, local newscasts, consumer and retail ads, allowing companies to see direct connections between their content and viewer behaviors and provide actionable insights that help increase viewing, subscriptions and purchases.					
Clustree	Developer of human resource management software designed to turn data into evidence-based recommendations. The company's human resource management software provides services like talent management, data management and internal mobility strategies by using big data analysis and job sourcing, enabling companies to make better human capital decisions through machine learning.	24-Jan-2020	Merger/Acquisition		19	France
DeepDraw	Developer of software designed to provide a full set of product digitization and intelligent technical support services. The company's platform focuses on the integration and application of multiple fields such as artificial intelligence, fashion big data, aesthetic quantification in the pan-fashion industry, providing global fashion brands with product digitizing services and management of digital assets in the process of digitization of products.	13-Jan-2021	Merger/Acquisition		18	China
CrowdSmart	Developer of a collective intelligence software platform designed to improve the accuracy of predicting investment success while reducing ingrained bias. The company's platform helps to screen potential investments, assembles a strong collective and transparent exchange of information between experts, investors and issuers, enabling startups to improve investment accuracy and decisions with prediction science.	08-Sep-2020	Later Stage VC	10	17	United States
TrafficCast	Developer of travel-time forecasting software designed to provide time forecasting and traffic information. The company's software offers digital traffic data, with software and predictive models to produce route-specific, real-time traffic information and travel-time forecasts for traffic-information markets, enabling users to manage travel times, road speeds and route choice behaviors.	07-Dec-2020	Merger/Acquisition		17	United States
Vidado	Developer of an AI based data capture platform designed to turn paper information into digital data. The company's platform uses cloud-native technology with crowd-guided machine learning to extract structured information from different sources like paper documents, scans, faxes, emails, call centers and web forms that can be analyzed and scaled, enabling enterprises to eliminate the need for ineffective manual data entry processes.	24-Mar-2020	Merger/Acquisition		15	United States
Cybertonica	Developer of a cloud-based fraud prevention software designed to help in global digital payments' fraud prevention system. The company's software uses machine learning and artificial intelligence to reduce basket drop-off and increase conversion for all channels of e-payments and transaction platforms as well as provides frictionless onboarding, checkout and secure payments processing, enabling payment service providers and fintech sectors to decrease the number of fraud transactions and chargebacks and to create frictionless authentication, smooth user journeys and increase profitability.	08-Jan-2020	Later Stage VC	12	14	United Kingdom
Big Data Platform	Developer of big data processing, artificial intelligence and machine learning technologies aiming to offer specialized technological solutions to client businesses.	30-Mar-2020	Joint Venture		14	Russia
Tangent Works	Provider of prediction services designed to bridge academic research in the field of machine learning to solve challenges in the industry. The company's model uses machine learning and offers insights about the dynamics hidden in the data and allows machine learning solutions to be executed directly on a device, enabling businesses to generate accurate predictive models for time series analysis in seconds.	16-Apr-2020	Later Stage VC	11	13	Belgium
GenesisAI	Developer of a blockchain-based decentralized marketplace intended to assist in the development of AI products and services. The company's marketplace	22-Jun-2020	Equity Crowdfunding	11	12	United States

	connects companies in need of AI services, data and models with companies interested in monetizing their AI tech, enabling companies to communicate with each other, exchange data and trade services easily. It focuses on the asset management space and healthcare sector.					
CarServ	Provider of an online machine learning-based platform intended for the automotive repair industry to manage their businesses easily. The company's platform uses SaaS and includes shop management, customer communication and marketing, enabling businesses to better communicate with their customers and provide repair facilities as well as a consistent and high-quality experience at an affordable price.	27-Oct-2020	Later Stage VC	10	11	United States
SapientX	Developer of white-label software intended to add voice and intelligence to technology products. The company's platform incorporates voice systems with the ability to understand users and to converse with them naturally, enabling companies to develop voice-enabled interfaces for cars, robots, mobile phones and consumer products.	24-Jun-2020	Equity Crowdfunding	7	8	United States
MedUX	Developer of an online measuring software intended to measure user experience and service quality on telecommunication networks. The company's software offers drive testing and residential monitoring through machine learning, artificial intelligence and customer experience metrics in real time without any integration, enabling telecommunication operators to improve user experience and increase customer loyalty.	18-Nov-2020	Debt Refinancing		7	Spain
Rais	Developer of a data analytics platform designed to unite, analyze and enrich customer data. The company's predictive software platform de-duplicates data and deploys it to the customer engagement channel, helping clients to improve customer retention by generating more repeat business across marketing channels and to understand customer behavior and marketing performance.	26-Jan-2020	Equity Crowdfunding	3	3	United Kingdom
Emergeiq	Provider of an artificial intelligence based platform intended to omit in-house Data Science or dashboards. The company's platform runs solution giving analytics & artificial intelligence for businesses, then sends back the resulting insights via their existing mobile apps and desktop tools or other reporting channels, enabling small businesses to avail data support who cannot afford in-house data scientists and software.	01-Jan-2021	Equity Crowdfunding	1	1	United Kingdom

Appendix 2: About Frost & Sullivan

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For further inquiries, please contact our lead analyst:

Dr. Tiran Rothman T: +972 (0) 9 950 2888 E: equity.research@frost.com

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