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## EMERGING TECH RESEARCH

## 2024 Industrial Technology Outlook

Our analysts' outlook on the industrial technology market in 2024

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

## 2024 outlooks

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## **AGTECH**

## Outlook: Autonomous farm robots will see a major increase in adoption.

### Rationale

The anticipated surge in adoption of autonomous farm robotics in 2024 is driven by a convergence of compelling factors addressing critical challenges within the agriculture sector. First, the persistent global labor shortages in agriculture are pushing farmers to seek alternative solutions, with farm automation offering a viable response to mitigate the impact of diminishing workforce availability. Second, technological advancements, particularly in artificial intelligence, sensors, and automation, have matured to a point where the cost-effectiveness and reliability of robotic systems make them increasingly attractive for widespread adoption. Third, the imperative to optimize resource use, reduce operational costs, and enhance overall farm efficiency aligns seamlessly with the capabilities of modern farm robotics, positioning them as essential tools for a more sustainable and productive agricultural future. Fourth, the rise of Robotics-as-a-Service models is proving instrumental in easing upfront costs associated with adopting these technologies. Fifth, pilot studies have successfully demonstrated the effectiveness of farm robotics, and companies are now transitioning to full-scale commercialization, making 2024 a pivotal year for the integration of these technologies into mainstream agricultural operations.

Traditionally characterized by manual labor, the agriculture industry is now undergoing a technological revolution. Automation and robotics are seen as solutions to pressing issues such as labor shortages, rising input costs, and the imperative for sustainable farming practices. Automation can be applied to many farm activities, including plowing, planting, seeding, weeding, and harvesting. Over 250 VC-backed startups, along with incumbents such as John Deere and Kubota, are developing robotic and automation solutions. In 2023, we observed agriculture robotics companies begin to transition from pilot studies to full-scale commercialization. These technologies are poised to gain broad acceptance in 2024 and redefine how farming operations are conducted globally.

Several key players are at the forefront of driving innovation in farm robotics and automation. Industry stalwarts like John Deere, a pioneer in agricultural machinery, and its subsidiary, Blue River Technology, which specializes in machine learning and computer vision, are leading the charge. Deere is one of the most prominent incumbents in the space, having ramped up robotics and automation innovation over the past six years. It has acquired multiple automation startups, including Blue River Technology and Bear Flag Robotics, to enhance its capabilities and portfolio. Its portfolio includes autonomous tractors and tractor implements. In 2021, the company launched its first See & Spray offering that uses computer vision and nozzle-control technology to spray emerged weeds, avoiding soil and crops. Deere is poised to lead the agricultural automation market with advanced intellectual property, first-mover advantage, and a robust sales and operations network. Furthermore, having strong after-market support capabilities will give Deere an



advantage over competing startups and instill confidence in customers who are hesitant to adopt new and complex hardware.

Although Deere is a key provider of automated tractors and tractor implements, the autonomous robot landscape is dominated by startups. Startup FarmWise is a key producer of weeding robots and implements. It is developing a stand-alone autonomous weeding robot as well as two automated weeding implements. Naïo Technologies is developing a variety of autonomous field and vineyard robots that can weed and cultivate crops. Other key providers include Carbon Robotics, Harvest Automation, and SwarmFarm.

While the benefits are clear, challenges exist, primarily related to initial investment costs and the integration of new technologies into existing farming operations. Small and medium-sized farmers may face hurdles in adopting these innovations, necessitating support and training for a seamless transition. Lastly, farmers expect reliable service and repair support by local dealers or technicians, which could be challenging for a small startup to provide.

#### Risks

A projected increase in farm automation adoption in 2024 may face challenges due to high initial costs, technical integration issues, data security concerns, and potential delays in regulatory frameworks adapting to rapid advancements in the field.

#### Key autonomous farm robot companies\*

Company	Key products	Total raised (\$M)	Last financing valuation (\$M)	IPO probability	M&A probability	No exit probability
Monarch Tractor	Smart sprayers	\$148.5	N/A	85%	12%	3%
Verdant Robotics	Autonomous tractors	\$58.0	N/A	24%	65%	11%
Carbon Robotics	Autonomous laser weeding robots	\$66.3	\$154.0	21%	74%	5%
Greeneye Technology	Smart sprayers	\$44.8	N/A	17%	75%	8%
Naïo Technologies	Autonomous multi-use vine and field robots	\$55.3	\$60.6	14%	67%	19%
FarmWise	Autonomous mechanical weeding robots	\$74.4	N/A	9%	88%	3%
TerraClear	Autonomous rock picking implement	\$37.1	\$83.0	9%	78%	13%
Greenfield	Autonomous scouting robots	\$11.7	N/A	4%	88%	8%
Aigen	Autonomous, solar-powered, multi-use robots	\$18.1	\$57.0	3%	87%	10%
Burro	Autonomous multi-use robots	\$20.6	\$38.9	1%	91%	8%

Source: PitchBook • Geography: Global • \*As of December 6, 2023 Note: Probability data is based on PitchBook VC Exit Predictor methodology.



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#### INTERNET OF THINGS

# Outlook: Private 5G startups will produce a unicorn valuation in a late-stage deal or acquisition.

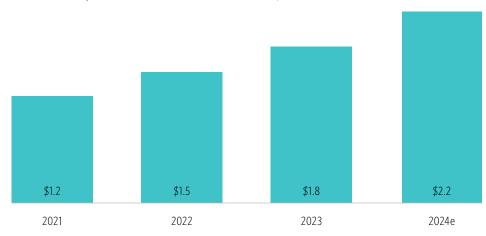
#### Rationale

Unicorn valuations have been rare in the Internet of Things (IoT) industry with only two VC deals for Dragos and EquipmentShare valuing companies over \$1.0 billion in North America and Europe in 2023. 5G startups have not reached this threshold despite achieving rapid valuation growth for midstage companies and a \$1 billion exit in the space in 2020 for Cradlepoint. Numerous technical and commercial barriers to entry will ease over the coming year and revenue growth is on pace to accelerate. The fundraising timelines of private leaders align with this trend, creating investment opportunities for growth-stage and corporate VC investors, along with telecommunications acquirers.

5G networks are being deployed at individual facilities to enable high bandwidth with latency that is 50x lower than 4G LTE and can support as many as 100x more devices per square foot. 33 new private cellular networks were disclosed in H1 2023, according to IDC research. More than half of new private cellular networks are based on 5G, suggesting the technology is prioritized by industrial customers. These networks will include millimeter wave, or mmWave, hardware that provides connectivity at high frequencies for both IT devices and IoT sensors.

Private 5G spending growth is on track to accelerate in 2024. According to IDC estimates, spending will reach the highest growth rate since 2021 at 23.1% in 2024, crossing \$2.0 billion, after two consecutive YoY declines in spending growth.<sup>2</sup> The ecosystem has been constrained by chip availability for compatible devices and long integration timelines. We believe these pressures will ease by mid-2024 and

#### Private LTE/5G market size estimate (\$B)\*



Source: <a href="IDC">IDC</a> • Geography: Global • \*As of June 28, 2023

 $<sup>\</sup>underline{\text{1: "Updated Worldwide Private 4G/5G Network Market Insights from 1H23 Publicly Announced Contracts," IDC, August 3, 2023.}\\$ 

<sup>2: &</sup>quot;Worldwide Private LTE/5G Wireless Infrastructure Forecast, 2023-2027," IDC, June 27, 2023.



can be disrupted by startups offering enterprise sales motions in a market currently dominated by legacy systems integrators. The market is now large enough to accommodate large supporting startups.

5G has produced uniquely high-value startup outcomes within IoT. Ericsson started a wave of 5G M&A with its acquisition of Cradlepoint for \$1.1 billion in 2020. In 2022, Qualcomm acquired 5G software startup Cellwize for \$350.0 million. In Q1 2023, Hewlett Packard Enterprise acquired 5G connectivity vendor Athonet for an estimated \$490.0 million to align with its Aruba Networking product suite. Athonet offers hardware-agnostic connectivity management software and completed over 450 enterprise installations before acquisition. These deals will pressure incumbents across telecommunications, networking, and semiconductors to improve their software capabilities in 5G network management.

Technical issues around IoT device compatibility will be further absolved by developments in a new protocol called 5G reduced capability (RedCap). RedCap aims to expand the 5G ecosystem via new devices with lower cost, complexity, and power consumption. Chip vendors announcing new products supporting this technology include Qualcomm, MediaTek, and MLINK. We believe these capabilities will grow more quickly in 2024 than other communication protocols such as cellular IoT and Wi-Fi, offering a tailwind for startups that announce supporting products.

Promising startups that can benefit from these tailwinds include Cohere Technologies, Celona, and EdgeQ. These startups have each been valued over \$300.0 million in the past two years and will likely need to raise subsequent rounds in 2024. These companies can benefit from the shift to 5G RedCap by launching compatible chips and software support for the protocol. Each of the companies has over a 90% success probability based on the <a href="PitchBook VC Exit Predictor methodology">PitchBook VC Exit Predictor methodology</a>, suggesting they are likely to achieve positive outcomes in the near future. Based on this same methodology, EdgeQ and Celona have opportunity scores of 87 and 79, respectively, making them stand out as exit candidates.

#### Key recent private 5G VC deals\*

Company	Close date	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)	Valuation step-up (post to pre)
EdgeQ	March 16, 2023	\$71.6	\$300.0	Series B	5G Ventures	1.5x
Cohere Technologies	January 30, 2023	\$32.5	\$461.7	Series D1	BCE	1.0x
Celona	March 8, 2022	\$60.0	\$360.0	Series D	DigitalBridge Group	2.8x

Source: PitchBook • Geography: Global • \*As of December 4, 2023

#### Risks

Private 5G rollout has slowed over the past two years due to chip constraints, integration problems, and a lack of supported IoT devices. These issues may persist through 2024 and suppress investment in startups. Additionally, private valuations have continued to compress since 5G startups' last rounds, creating challenges to raise at higher valuations. Debt is also a valid instrument for 5G network build-out for both public and private companies, which may substitute for dilutive funding.



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## SUPPLY CHAIN TECH

## Outlook: Drone deliveries will go commercial in the US with more funding and investor interest in the space.

#### Rationale

The Federal Aviation Administration (FAA) regulates the drone delivery market with a primary consideration on safety. To date, drones have been subject to a restriction called beyond visual line of sight (BVLOS) meaning an operator must have the drone within sight at all times when it is flying. This restriction represents a significant (some might say insurmountable) hurdle for the development of a drone delivery marketplace. The cost of an operator visually tracking and monitoring every delivery via drone is prohibitive. The FAA has stated that it wants to integrate drones into common airspace, and issued a number of exemptions to the BVLOS rule to startups and larger companies over the course of 2023. These exemptions open the door for the market to finally develop.

In late 2013, Jeff Bezos went on 60 Minutes, unveiled the "octocopter," and proclaimed that Amazon would be delivering e-commerce orders by drone within five years. In the decade since the announcement, a number of companies have invested in and developed drone delivery technology, but in the US and elsewhere, the BVLOS restriction has limited the economic appeal of scaling up.

Drones have the potential to be a very efficient and cost-effective delivery system. Able to fly directly from a retailer's premise or warehouse to the customer above streets, traffic, and neighborhoods, drones can deliver goods in a fraction of the time of typical delivery services. E-commerce could provide the instant gratification of the retail experience. Drone delivery company Zipline claims it can complete deliveries in one-seventh the time of delivery by car. Its P2 platform can make a delivery in 10 minutes within its 10-mile range. Drone delivery can reduce energy usage and emissions by more than 95% compared with a standard delivery vehicle. Emissions reduction is a key goal of the service. Noise is a concern. Drones can be loud, but Zipline has mitigated the impact by tethering deliveries from several hundred feet up. Sound propagation is subject to the inverse-square law, so doubling the distance from the source cuts the intensity of the noise to one-quarter.

Under COVID-19 lockdown restrictions, consumers adapted to a variety of delivery services for meals, food, and other small goods, but one-off, low-ticket deliveries by vehicle are inefficient, and deadheading by delivery drivers exacerbates traffic congestion. Delivery by drone could take a significant share of this activity. Healthcare represents another major category where timely delivery of medicines and medical products is key.

Larger competitors such as Amazon have bemoaned the sluggish pace of regulatory approval, but more nimble startups such as Zipline have built up hours of experience focused on niches where the startup could prove its solutions. To date, the company has logged more than 60 million flight miles and will likely surpass 1 million deliveries by the end of 2023 by delivering medical products in African nations and elsewhere globally where insufficient roads and infrastructure limit efficient



transportation. The accumulated experience and data was key to the company attaining the BVLOS FAA exemption for limited operation in the US. The regulatory hurdle represents a barrier to entry for new startups, but a safe and successful rollout is likely to ultimately lower the bar as regulators become more comfortable with domestic operations.

The September 2023 FAA BVLOS exemption for Zipline will allow the company to provide commercial deliveries without visual observers in Salt Lake City, Utah and Bentonville, Arkansas and will expire in the fall of 2025. Data from this program will help guide FAA policy for a final BVLOS regulation, which could come within the year. The FAA also issued exemptions for UPS Flight Forward, Phoenix Air Unmanned, and uAvionix for their drone operations. During 2023, there were 18 deals across the drone delivery and related technology space. After a decade of trial and evolution, we anticipate the rollout of commercial drone deliveries in 2024 will attract new entrants and increased investor funding.

#### Top drone delivery deals in 2023\*

Company	Year founded	Total raised (\$M)	Last financing date (2023)	Last financing size (\$M)	Last financing valuation (\$M)
Iris Automation	2015	\$34.6	October 24	N/A	N/A
Pablo Air	2018	\$36.4	October 20	\$15.6	N/A
Silent Arrow	2012	\$1.1	September 28	\$0.2	N/A
Antwork	2015	\$7.3	July 13	N/A	N/A
Ware	2019	\$2.5	June 26	N/A	N/A
Percepto	2014	\$149.3	June 12	\$67.0	\$210.0
MightyFly	2019	\$5.1	May 30	\$0.2	N/A
Wingcopter	2017	\$112.9	May 10	\$44.1	N/A
Zipline	2011	\$884.3	April 11	\$330.0	\$4,200.0
Manna Drone Delivery	2018	\$29.7	March 16	N/A	N/A

Source: PitchBook • Geography: Global • \*As of December 6, 2023

#### Risks

So far, the exemptions cover very limited areas, such as Salt Lake City, Utah and Bentonville, Arkansas for drone developer Zipline. These are best seen as test beds as market and consumer acceptance evolve. State and local rules, as well as zoning, are also pieces of the regulatory puzzle that vendors must navigate. Any sort of mishaps, such as drones crashing onto highways or into buildings, could send the industry back to the starting line and shut the door with regulators. Privacy, noise, and nuisance concerns could stymie consumer acceptance and adoption. Payload size and mass also limit the types of deliveries drones can provide. Amazon, Google, Walmart, UPS, and other large companies have invested significantly in this market and may squeeze out smaller startup competitors.



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### **CARBON & EMISSIONS TECH**

# Outlook: Demand for carbon credits will recover, following uncertainty in 2022 and 2023.

### Rationale

Voluntary carbon markets (VCMs) have been under significant scrutiny in recent years, particularly carbon credits based on avoidance—rather than removal—of emissions. Multiple different sets of standards, and the perceived risk associated with low-integrity credits, has been reducing the overall traded volumes of carbon credits, and has been pushing buyers toward removal-based credits that are easier to prove the integrity of. New independent standards are emerging, and while there are no obligations for credit providers to follow them, they provide the means to show high integrity and reassure buyers.

VCMs provide companies and individuals a way to reduce their overall emissions profile by purchasing credits that represent a reduction in carbon from elsewhere—including reforestation, prevention of ecosystem destruction, replacement of high-carbon fuel and energy sources, and carbon sequestration. Since they can be purchased as they are needed, they represent a means for companies to rapidly meet decarbonization targets, without having to install decarbonization hardware, or switch to low-carbon processes. This has made them valuable tools for meeting corporate emissions reduction targets, particularly for industries that are more challenging or expensive to decarbonize, such as aviation.

2023 has marked a difficult year for VCMs. Early in 2023, an investigation into certain carbon offsets found that they did not accurately represent the emissions reduction that they claimed,<sup>3</sup> though the carbon-credit company refutes this finding.<sup>4</sup> Coupled with similar previous issues around the use of carbon credits, companies are rethinking their use of carbon credits and the types of credits they buy. It is generally more difficult to show the integrity of credits based on the prevention of damage to ecosystems such as forests, as this requires detailed knowledge of the damage that would otherwise have occurred, and the emissions that would have resulted. Proving integrity also requires proof that protecting areas does not simply move damage to other areas, resulting in the same overall damage known as "leakage."

These events reduced confidence in VCMs, with lower 2023 trade volumes, and several high-profile companies such as Nestle and Gucci moving away from their use of carbon credits.<sup>5</sup> Despite this, there are tailwinds for VCMs. They still provide means to decarbonize certain processes for which other options are costly or challenging to implement, and they can be used while internal decarbonization efforts are being developed. With 2030 targets rapidly approaching, carbon credits will remain a vital tool for many companies to fulfil their climate commitments.

<sup>3: &</sup>quot;Revealed: More Than 90% Of Rainforest Carbon Offsets by Biggest Certifier Are Worthless, Analysis Shows," the Guardian, Patrick Greenfield, January 18, 2023.

<sup>4: &</sup>quot;Verra Response to Guardian Article on Carbon Offsets," Verra, January 18, 2023.

<sup>5: &</sup>quot;Carbon Credit Market Confidence Ebbs as Big Names Retreat," Reuters, Susanna Twidale and Sarah Mcfarlane, September 1, 2023.



Further, new standards developed earlier in 2023 by independent bodies such as The Integrity Council for the Voluntary Carbon Market as well as the Voluntary Carbon Markets Integrity Initiative aim to bring additional clarity around carbon credits, providing transparency and highlighting integrity for those credits that are high quality.<sup>6</sup> Given that uncertainty around carbon-credit integrity has been a core factor behind the decline in trade volume, the formation of independent standards is a key step in rebuilding trust in carbon-credit integrity and increasing transparency, though there is no guarantee that these standards will be adopted on a global scale.

The current challenges for VCMs mainly stem from a lack of data and transparency. This has benefitted certain types of credits such as removal-based credits, which are more straightforward from a measurement, reporting, and verification perspective, though improvements to data collection and reporting are critical across credit types. VC-backed technology companies are developing methodologies that incorporate additional data and transparency to carbon-credit generation, and VC deal activity has been growing since 2018. New standards may bring renewed uptake of avoidance-based carbon credits, but these are still perceived as more complex to understand, and in the shorter term, companies will likely still favor removal-based credits.

#### Risks

Carbon credits have been a popular decarbonization option for companies due to the lack of logistical and development challenges that exist with internal application of decarbonization technologies. The period of uncertainty around voluntary carbon markets has pushed some large companies to instead focus on internal decarbonization, reducing their use of carbon credits. New standards for high-integrity carbon credits may not see widespread adoption.

#### Carbon & emissions tech VC deal activity



Source: PitchBook • Geography: Global • \*As of December 4, 2023



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#### **CLEAN ENERGY**

## Outlook: US clean hydrogen technology companies will become acquisition targets.

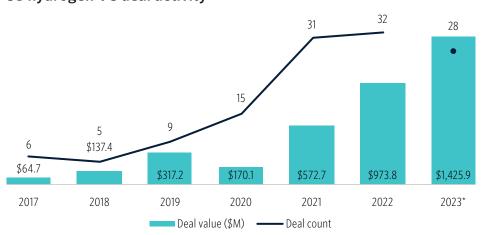
### Rationale

Low-carbon hydrogen is seen as a key component of global decarbonization efforts, particularly for certain industrial applications and heavy transportation. Earlier this year, the US Department of Energy allocated \$7 billion to a program to develop seven hydrogen hubs across the US, to produce, store, and distribute hydrogen. Companies involved in these hubs are varied, including energy and oil & gas companies that have experience with large-scale energy projects, but will likely look to close technology gaps through acquisitions.

Low-carbon hydrogen has widespread applications in low-carbon pathways as a replacement for hydrocarbon fuels, for low-carbon chemical production, and for industrial applications. In particular, conventional steelmaking processes are considered hard to decarbonize due to emissions from chemical processes unrelated to fuel combustion, but hydrogen provides a way to avoid these carbon dioxide emissions entirely. Historically, hydrogen adoption has been hampered by limited distribution and storage infrastructure, resulting in most applications consisting of long-term agreements between producers and high-volume consumers, such as green steel producers.

The US is working to position itself as a global leader in clean hydrogen, and launched the "Hydrogen Shot" initiative in 2021, aiming to reduce the cost of clean hydrogen to \$1 per kilogram in the span of a decade—a substantial reduction in

#### US hydrogen VC deal activity



Source: PitchBook • Geography: US • \*As of December 16, 2023

Note: Companies included focus on low-carbon hydrogen, and have an office location in the US.

7: "Biden Awards \$7 Billion for Clean Hydrogen Hubs Across the Country To Help Replace Fossil Fuels," The Associated Press, Matthew Daly, October 13, 2023.

8: "Biden-Harris Administration Announces \$7 Billion for America's First Clean Hydrogen Hubs, Driving Clean Manufacturing and Delivering New Economic Opportunities Nationwide," U.S. Department of Energy, October 13, 2023.



cost from the almost \$5 per kilogram at the time. 2022 saw additional support via production tax credits in the Inflation Reduction Act, which—coupled with growing desire for low-carbon fuels—has resulted in strong growth in VC deal activity for hydrogen companies with US operations.

In October 2023, the US Department of Energy announced \$7 billion in funding for seven "hydrogen hubs"—locations to produce, store, and distribute low-carbon hydrogen for the energy, industrial, and transportation sectors. This mirrors similar funding from August 2023 for two direct-air-capture (DAC) hubs. <sup>10</sup> However, whereas the DAC hubs include significant direct involvement from VC-backed DAC companies, the hydrogen hubs involve a wide range of participants including utilities businesses, as well as large oil & gas, industrial, and energy companies. Many of these companies have extensive experience relevant to hydrogen production, storage, and distribution, but may have technology gaps particular to large-scale hydrogen operations.

The VC-backed hydrogen technology space is highly varied and contains a wide range of applications. Deal value in this space has been growing, with developing technologies across the hydrogen value chain ranging from more efficient hydrogen generation approaches to better transportation and storage technologies. Many of these companies represent ideal acquisition targets for larger energy companies looking to rapidly position themselves as leaders in the US clean hydrogen space. The general increasing interest in clean hydrogen for decarbonization—in addition to the formation and development of these hydrogen hubs—is increasing the potential value of niche hydrogen technologies for companies looking to build out their coverage as a one-stop shop for clean hydrogen production and distribution.

#### Risks

Widespread adoption of hydrogen is uncertain and will ultimately depend on the cost reductions that can be achieved through development and scaling of hydrogen technologies.



## 2024 PitchBook industry & technology outlooks

	AI & ML	Open-source GenAl orchestration projects will create multiple unicorn startups in early-stage deals.			
Enterprise tech	Enterprise fintech	A rise in partnerships and demand for growth will drive an acceleration in M&A.			
	Infosec	Infosec leaders will make multiple IAM acquisitions.			
	Infrastructure SaaS	Data software & systems will drive infrastructure investment higher, as enterprises seek to capture and monetize their data.			
	Enterprise SaaS	Enterprise vendors will employ recent AI & ML breakthroughs to develop more mature and impactful solutions.			
	Crypto	The crypto market will shift toward centralized financial structures, influenced by greater institutional adoption.			
	Insurtech	Insurtech investments across VC and M&A will increase, driven by incumbent capital deployment.			
	E-commerce	Composable commerce startup activity will rebound, spurred by a focus on discrete points of friction in the shopping experience and B2B digital commerce growth.			
	Agtech	Autonomous farming technology will see an increased pace of adoption.			
Industrial tech	loT	Supporting the expansion of private 5G networks will create unicorn opportunities for startups.			
strial	Supply chain tech	Federal approvals for drone delivery will expand, and commercialization will commence.			
Indu	Carbon & emissions tech	The carbon-credit trading market will see growth in removal-based credits.			
	Clean energy	US support of the clean hydrogen space will lead to more acquisitions of VC-backed hydrogen startups.			
	Foodtech	Advances in health consciousness, diabetes medication, and AI tools will drive record investment in personalized nutrition companies.			
Consumer tech	Mobility tech	Software efforts at automakers will get a reboot as automakers seek to enhance their share of the emerging mobility platform market. Consumer electronics contract manufacturer Foxconn will begin producing vehicles, further pressuring traditional auto manufacturing.			
sume	Consumer fintech	Undervalued consumer fintech companies will see positive reratings.			
Con	E-commerce	AI-powered personal assistants will generate record funding.			
	Gaming	$VC\ penetration\ into\ emerging\ markets\ will\ progress\ as\ the\ industry\ looks\ to\ onboard\ the\ next\ 1\ billion\ consumers.$			
	Healthcare (overall)	Healthcare will decrease as a share of both PE and VC global deal count.			
	Healthcare services	PE healthcare services platform trades will not resume until the Fed begins cutting rates in earnest.			
	Digital health	Although digital health IPOs will fall short of optimistic projections, at least three candidates will go public.			
d)	Biopharma	Biopharma startups will require more robust clinical validation prior to pursuing IPOs.			
Healthcare	Biopharma	The interval between funding rounds for biopharma companies will lengthen from the baseline set in 2021 by several months, not accounting for startups that cease operations or fail to secure additional funding.			
	Digital health	GenAl will begin to disrupt care coordination as the technology accelerates efficiencies in care search and health benefits navigation.			
	Pharmatech	Despite challenges in public markets and limited exit opportunities, AI-driven biotech startups will maintain robust growth and high valuations in their early stages.			
	Medtech	Surgical robotics will continue to be a leading VC category—surpassing 2023 funding levels.			
	Healthcare IT	There will be at least two VBC enabler acquisitions.			

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