

J.P.Morgan

INNOVATION ECONOMY

# Sector Spotlight: Applied Technology

July 2025



# Executive summary

The Applied Technology sector continues to command significant attention from venture investors, driven by its innovative potential and transformative impact on industries. Despite facing macroeconomic challenges—including higher interest rates that put pressure on public market valuations—the sector maintains significant long-term growth potential. Similar to broader trends affecting venture investments, recent shifts in market dynamics have underscored the importance of operational efficiency and strategic cost management. While initial public offerings have been subdued, sales to strategic buyers remain a key driver of liquidity. This shift appears to reflect a deliberate strategy among investors and founders to maximize value through thoughtful consolidation and strategic partnerships. A noticeable pipeline of private companies with solid fundamentals but varying scales of operation underscore the diverse opportunities available for thoughtfully navigating the current investment landscape. Overall, the convergence of innovation, operational discipline and strategic recalibration positions Applied Technology as a dynamic sector with the potential to drive next-generation breakthroughs. As market conditions continue to evolve, the sector’s adaptability and resilience will be vital in sustaining momentum and capturing emerging opportunities.

- Justin Krauss

## Head of Applied Technology



**Justin Krauss**  
Managing Director, Head of Applied  
Technology

## Authors:



**Nick Candy**  
Head of Innovation  
Economy Insights



**Vincent Harrison**  
Innovation Economy  
Insights Analyst



**Julie Tsang**  
Innovation Economy  
Insights Analyst

# Applied Technology definition and taxonomy

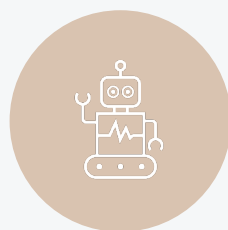
The core focus of Applied Technology is to bridge scientific advances and engineering innovation through state-of-the-art technology applications. The sector plays an important role in driving innovation, economic growth and societal progress through the intersection of hardware and software.

## Industries within Applied Technology<sup>1</sup>



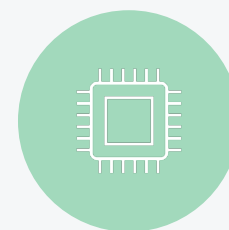
### Defense technology

Includes autonomous military systems, advanced materials and manufacturing, sensing and connectivity security, human-machine interfaces, defense-specific technologies, advanced computing and software, and renewable energy generation and storage.



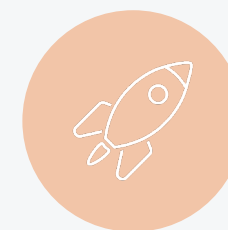
### Robotics, automation & AI

Includes humanoid robotics, robotic process automation (RPA), autonomous robotic systems and application-specific robots (food service, medical and construction robots). Artificial intelligence startups refer to enterprises that leverage artificial intelligence for robotic applications.



### Semiconductors & microelectronics

Includes general purpose semiconductors, application-specific conductors, semiconductor production, other semiconductors (e.g., optoelectronics) and quantum sciences (e.g., quantum computing, nanotechnology and quantum sensing).



### Space technology

Includes space situational awareness technology (space debris tracking and mitigation, orbital traffic management, etc.), satellites, manufacturing, in-space services (mining, in-orbit refueling, etc.), launch services, software and space tourism.

Note: <sup>1</sup>For the purposes of this report, we are concentrating on these four specific industries. Other industries within Applied Technology are not included here, making this a non-exhaustive list.

# Contents

01 Macroeconomic and policy overview

02 Evolution and catalysts

03 Venture investment and exits



# 01

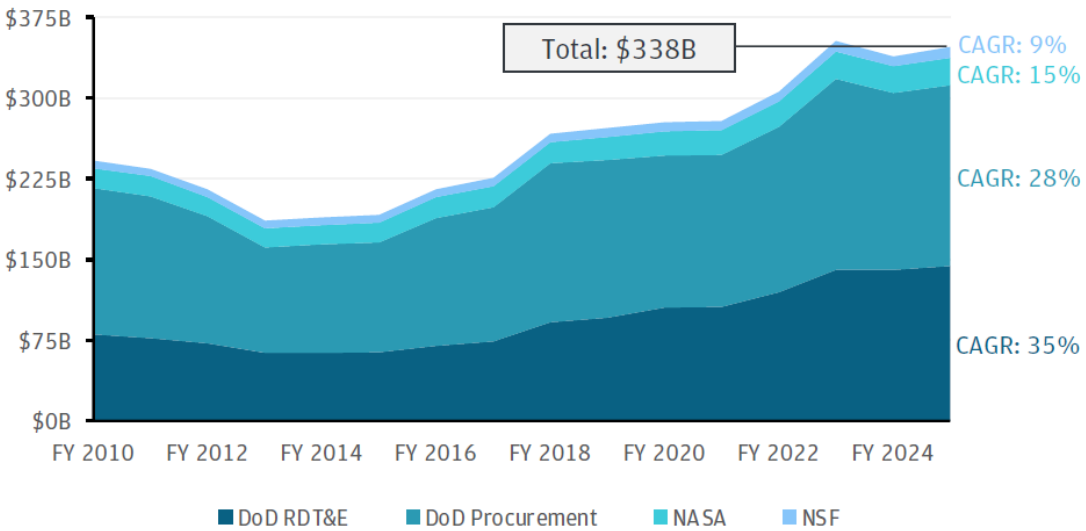
## Macroeconomic and policy overview



# Public and private funding bolster innovation in applied technologies

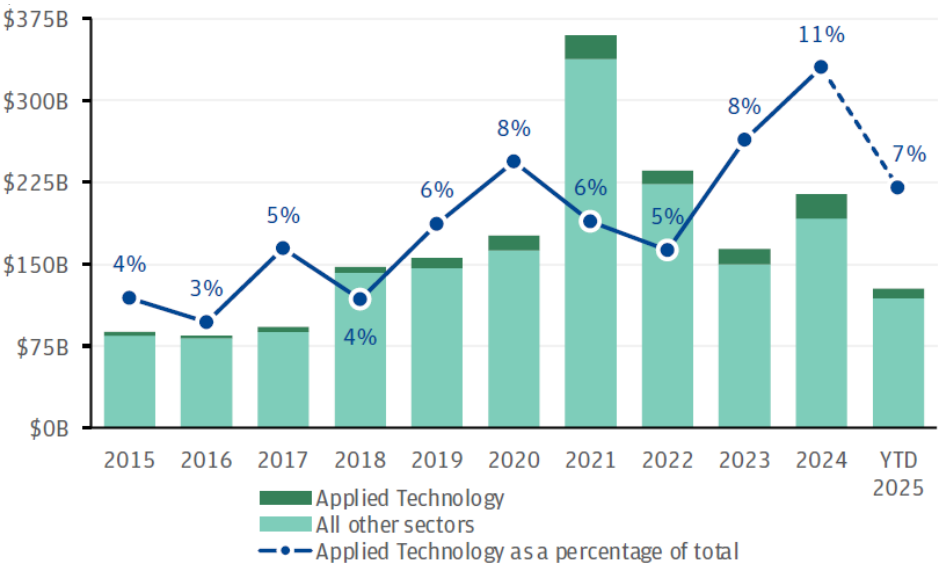
## U.S. GOVERNMENT A MAJOR CATALYST FOR APPLIED TECHNOLOGIES

ANNUAL BUDGET ALLOCATIONS BY KEY U.S. GOVERNMENT AGENCIES<sup>1</sup>



## APPLIED TECHNOLOGY CAPTURED OVER 10% OF U.S. VENTURE DOLLARS IN 2024

U.S. VENTURE INVESTMENT FOR APPLIED TECHNOLOGY VS. ALL OTHER SECTORS<sup>2</sup>

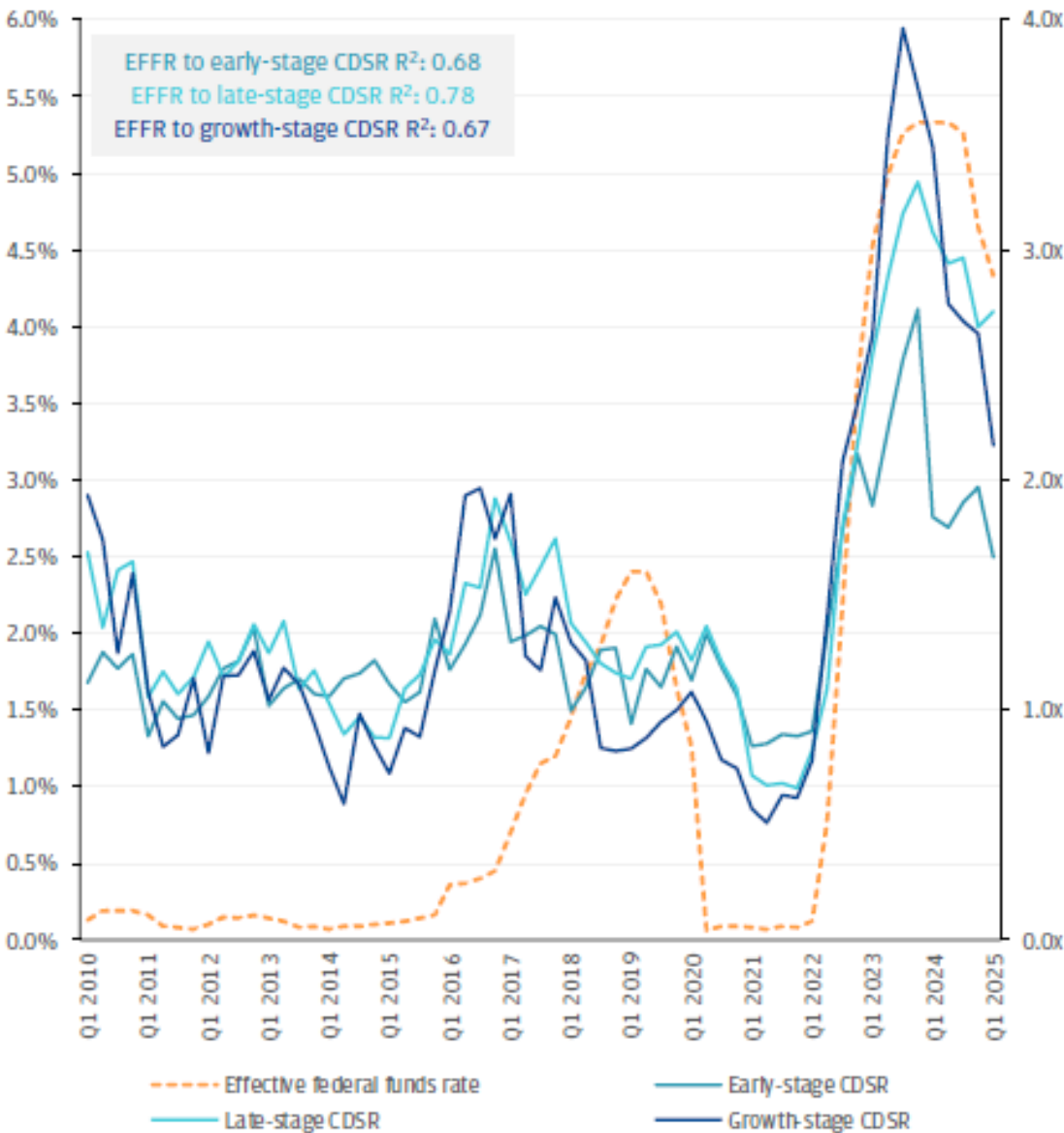


Notes: <sup>1</sup>DoD RDT&E: Department of Defense, Research, Development, Test and Evaluation. DoD Procurement: Department of Defense procurement programs. NASA: National Aeronautics and Space Administration. NSF: National Science Foundation. <sup>2</sup>YTD 2025 is as of April 30, 2025.

<sup>3</sup>A ratio above 1.0x indicates more capital is being demanded from startups than is being supplied by investors.

## DECLINING INTEREST RATES COULD LEAD TO A MORE FLUID FUNDING LANDSCAPE

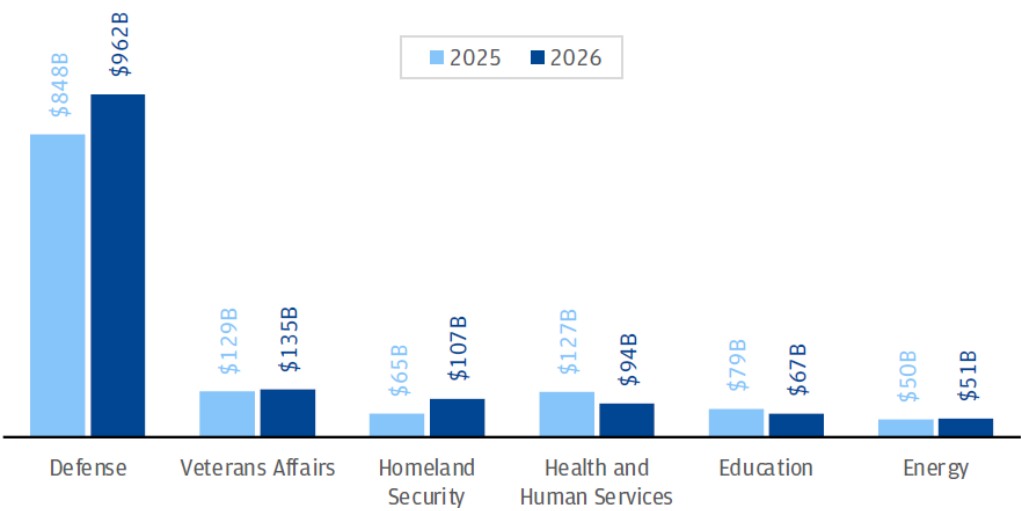
EFFECTIVE FEDERAL FUNDS RATE (EFFR) VS. VENTURE CAPITAL DEMAND TO SUPPLY RATIO (CDSR)<sup>3</sup>



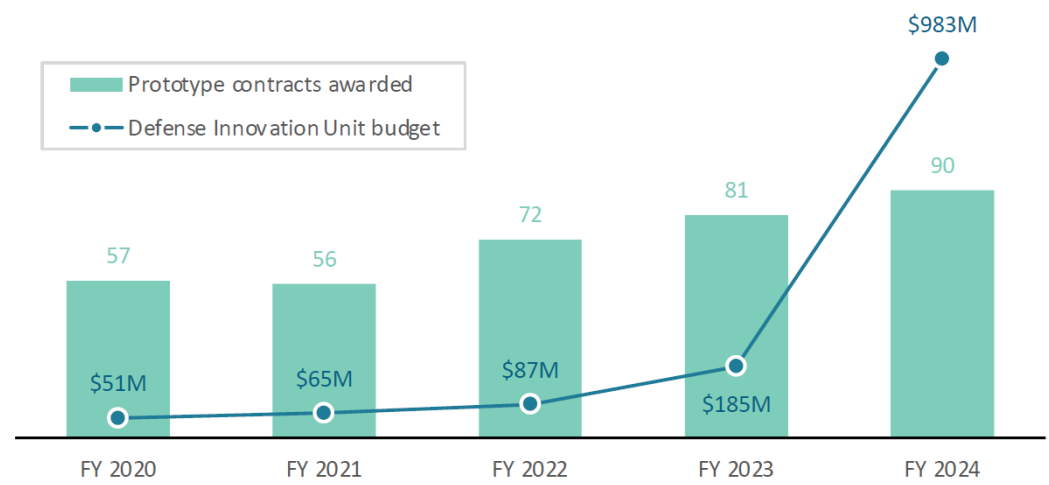
In recent years, increasing budgets among major U.S. federal agencies have helped create a more supportive environment for the Applied Technology sector. These agencies not only influence the sector by providing essential resources, such as grants and strategic investments, but they also signal a public commitment to advanced critical technologies. While overall venture funding is still below peak venture levels, the proportion of funding directed toward Applied Technology has grown steadily, reaching roughly 11% in 2024. Considering the relationship between interest rates and capital availability, a potential easing of monetary policy may result in a more founder-friendly fundraising environment. Overall, the convergence of federal and private funding reinforces a resilient U.S.-centered innovation ecosystem, equipping founders with resources to address emerging technological opportunities.

# Policy plays an essential role in supporting Applied Technology innovation

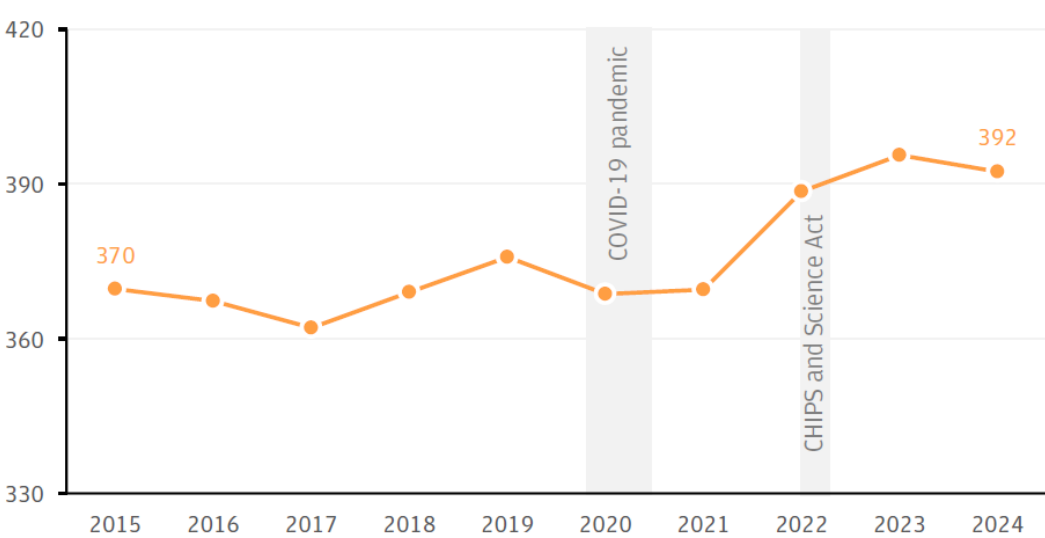
THE ADMINISTRATION CALLS FOR INCREASES TO DEFENSE AND SECURITY BUDGETS  
BASE DISCRETIONARY FUNDING BY U.S. GOVERNMENT DEPARTMENT<sup>1</sup>



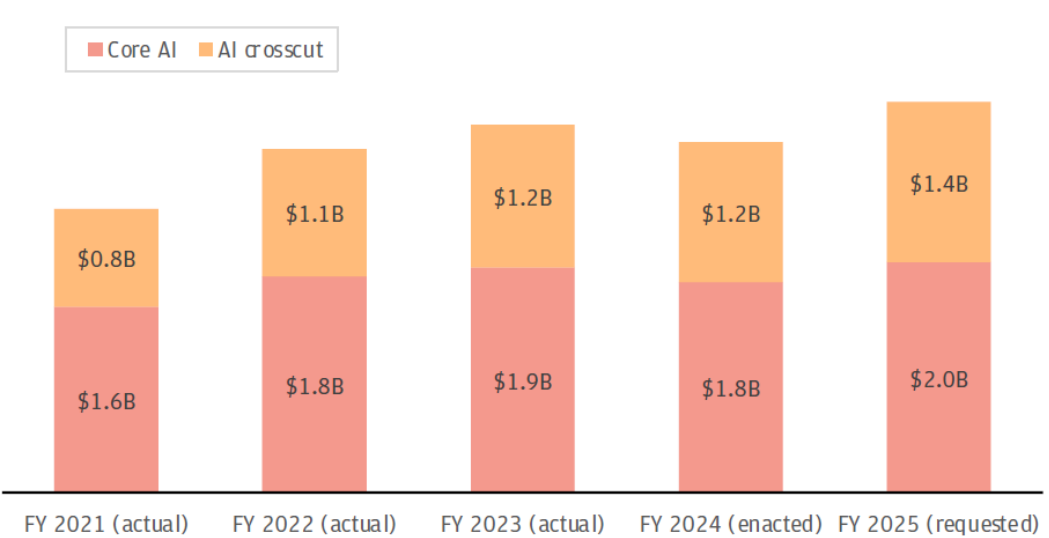
THE DEPARTMENT OF DEFENSE IS SCALING ITS COLLABORATION WITH STARTUPS  
THE DEFENSE INNOVATION UNIT’S FISCAL YEAR BUDGET AND PROTOTYPE CONTRACTS AWARDED<sup>2,3</sup>



THE CHIPS ACT HAS BOLSTERED EMPLOYMENT IN SEMICONDUCTOR MANUFACTURING  
U.S. SEMICONDUCTOR MANUFACTURING EMPLOYEE COUNT (IN THOUSANDS)



THE U.S. GOVERNMENT IS INVESTING IN ARTIFICIAL INTELLIGENCE APPLICATIONS  
U.S. FEDERAL BUDGET FOR ARTIFICIAL INTELLIGENCE RESEARCH AND DEVELOPMENT (R&D)<sup>4</sup>



U.S. policy is an important driver of collaborative networks that fuel the evolution of applied technology. For instance, when key U.S. agencies secure more funding, it often opens the door to explore and integrate innovative solutions across various sectors. This support not only drives advancements in technology but also cultivates an environment where collaborations between government bodies and emerging enterprises become possible. Such alliances may accelerate the development of groundbreaking technologies, as innovators are given new avenues to contribute to national priorities. Moreover, initiatives that bolster domestic capabilities—such as the CHIPS and Science Act, which aims to increase domestic semiconductor manufacturing—may serve to enhance the stability and resilience of the supply chains that underpin modern technology.

Notes: <sup>1</sup>2025 budget is operating under continuing resolution (CR); 2026 figures are based on the administration’s FY 2026 discretionary budget request. <sup>2</sup>The Defense Innovation Unit (DIU) is a DoD organization focused on scaling defense innovation through greater connection and collaboration with private companies. <sup>3</sup>Prototype contracts are awarded to companies to develop prototype projects that address an open DoD solicitation for solutions. <sup>4</sup>Core AI refers to fundamental research advancing AI technologies, while crosscut AI applies AI to other domains to support broader federal missions.



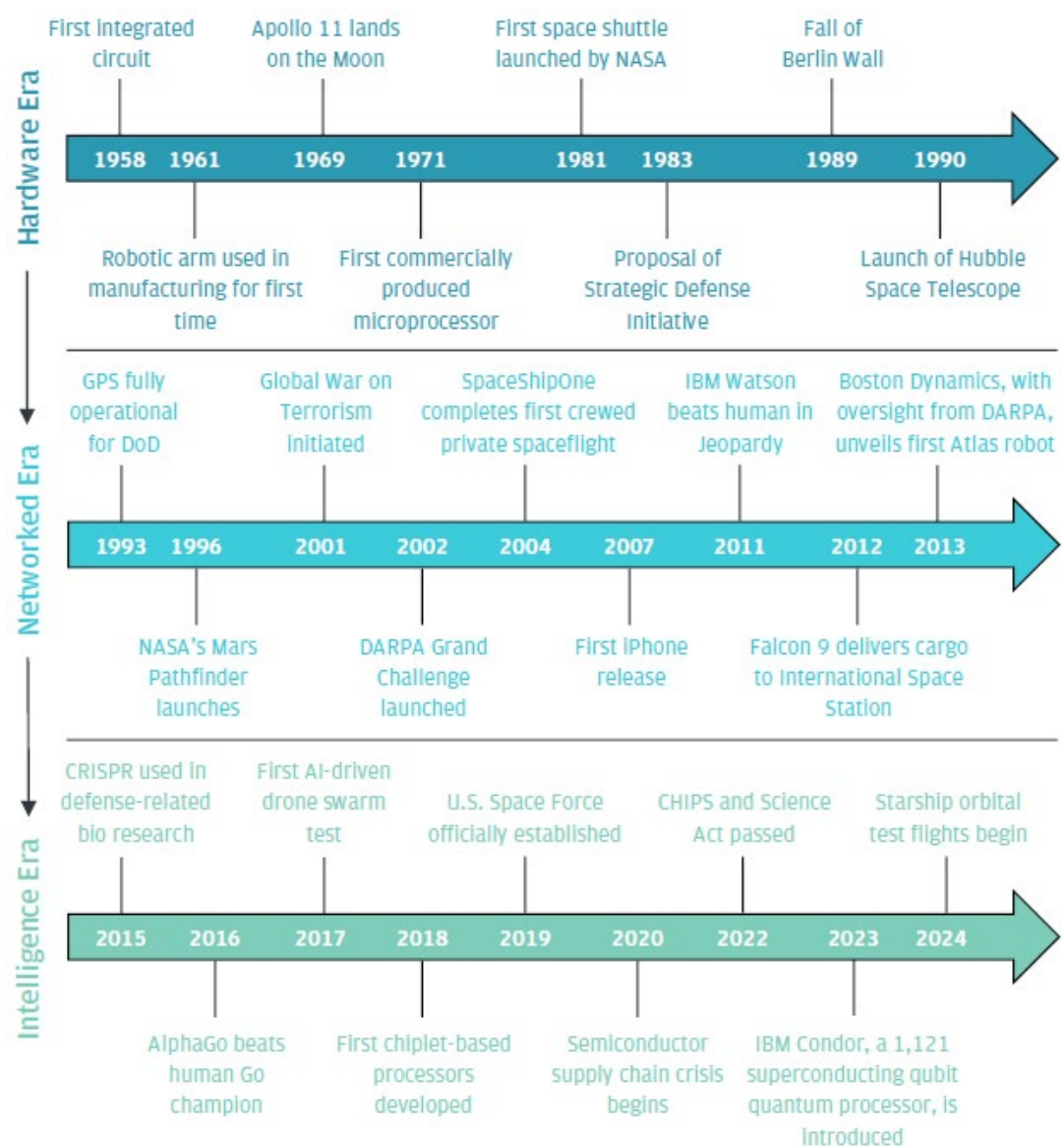
# 02

## Evolution and catalysts

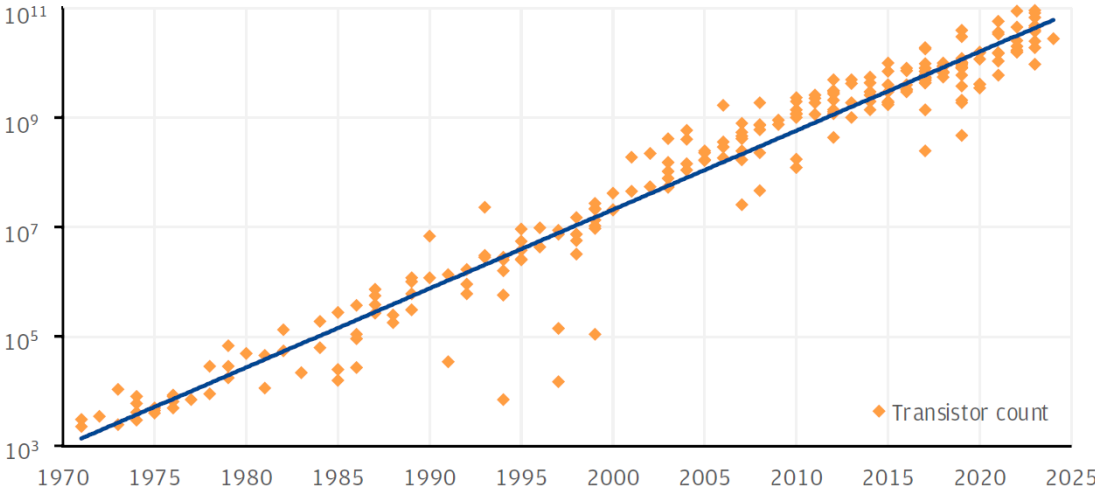


# Yesterday's catalysts have led to today's innovations

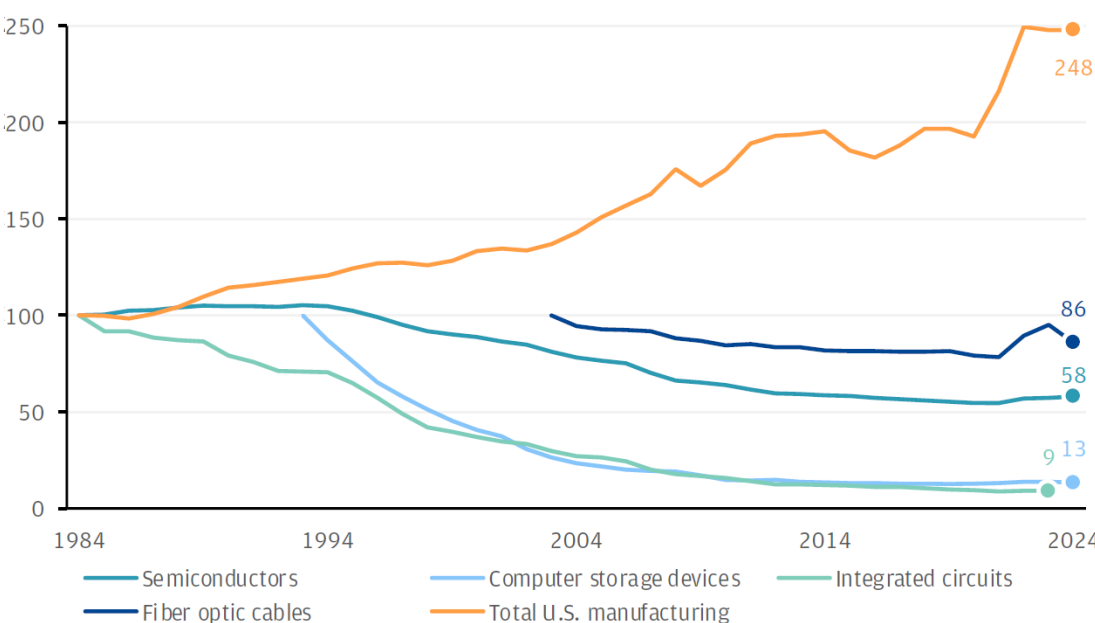
## HISTORICAL CATALYSTS HAVE PAVED THE WAY FOR MODERN INTELLIGENT SYSTEMS APPLIED TECHNOLOGY ADVANCEMENTS AND EVOLUTIONARY CATALYSTS, BY ERA



## MOORE'S LAW HOLDING AS TRANSISTOR GROWTH ENABLES CONTINUED INNOVATION TRANSISTOR COUNT AMONG MODERN MICROPROCESSORS (ANONYMIZED)



## MANUFACTURING COSTS OF KEY COMPONENTS HAVE DECREASED OVER TIME MANUFACTURING PRODUCER PRICE INDEX BY TECHNOLOGY<sup>1,2,3</sup>

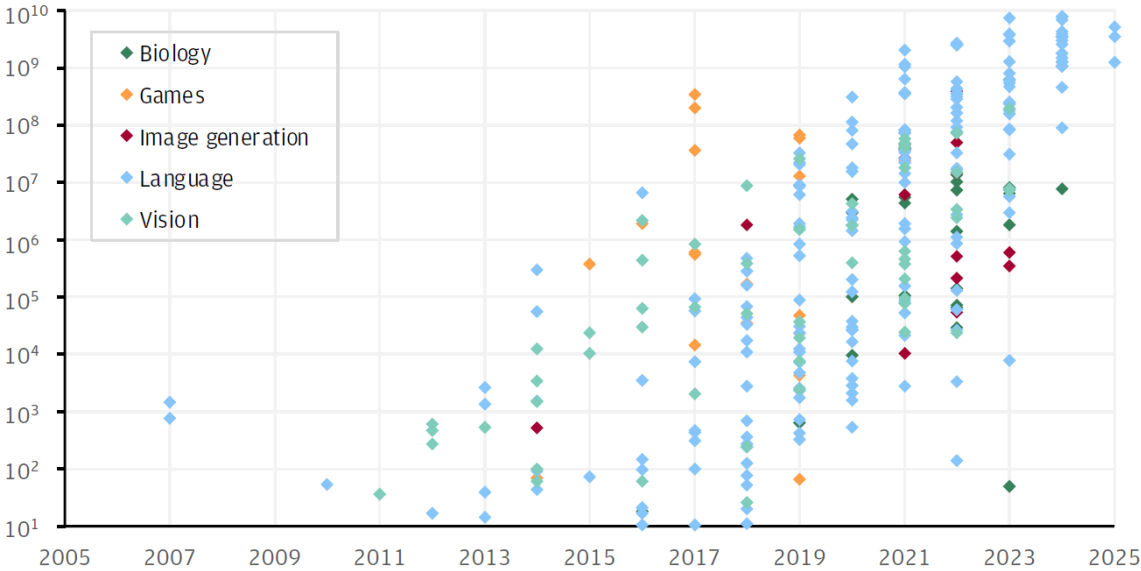


The journey of technological innovation is marked by significant milestones that have laid the groundwork for today's intelligent systems. These historical events, many supported by the U.S. government, have propelled the advancement of critical innovative technologies. The steady march of Moore's Law has not only delivered increasingly powerful microprocessors but has also coincided with declining manufacturing costs for essential components like semiconductors and computer storage devices. For instance, one terabyte of random-access memory (RAM) costs roughly \$1,100 today, but this amount of storage would have cost over \$100 trillion in the 1950s. For founders, the combination of advancements in key technologies, like AI and robotics, the affordability of key components, plus a focus on defense and national security by the current administration, creates opportunities to build.

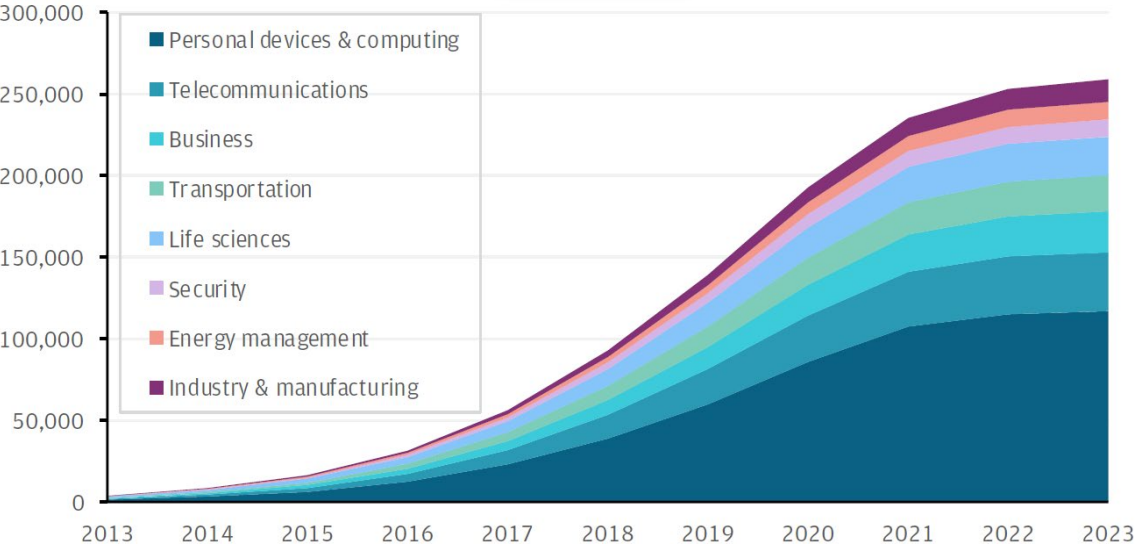
Notes: <sup>1</sup>U.S. only, data as of April 24, 2025. <sup>2</sup>Semiconductors, integrated circuits and total U.S. manufacturing are indexed to 1984. Computer storage devices and fiber optics cables are indexed to 1994 and 2004, respectively. <sup>3</sup>Integrated circuits index is through 2023 due to limited data.

# Continuous discovery, compounded by artificial intelligence, is driving future breakthroughs

**RISING AI MODEL COMPLEXITY ENABLES BROADER AND DEEPER CAPABILITIES**  
COMPUTATION USED TO TRAIN NOTABLE ARTIFICIAL INTELLIGENCE SYSTEMS (ANONYMIZED), BY DOMAIN<sup>1</sup>

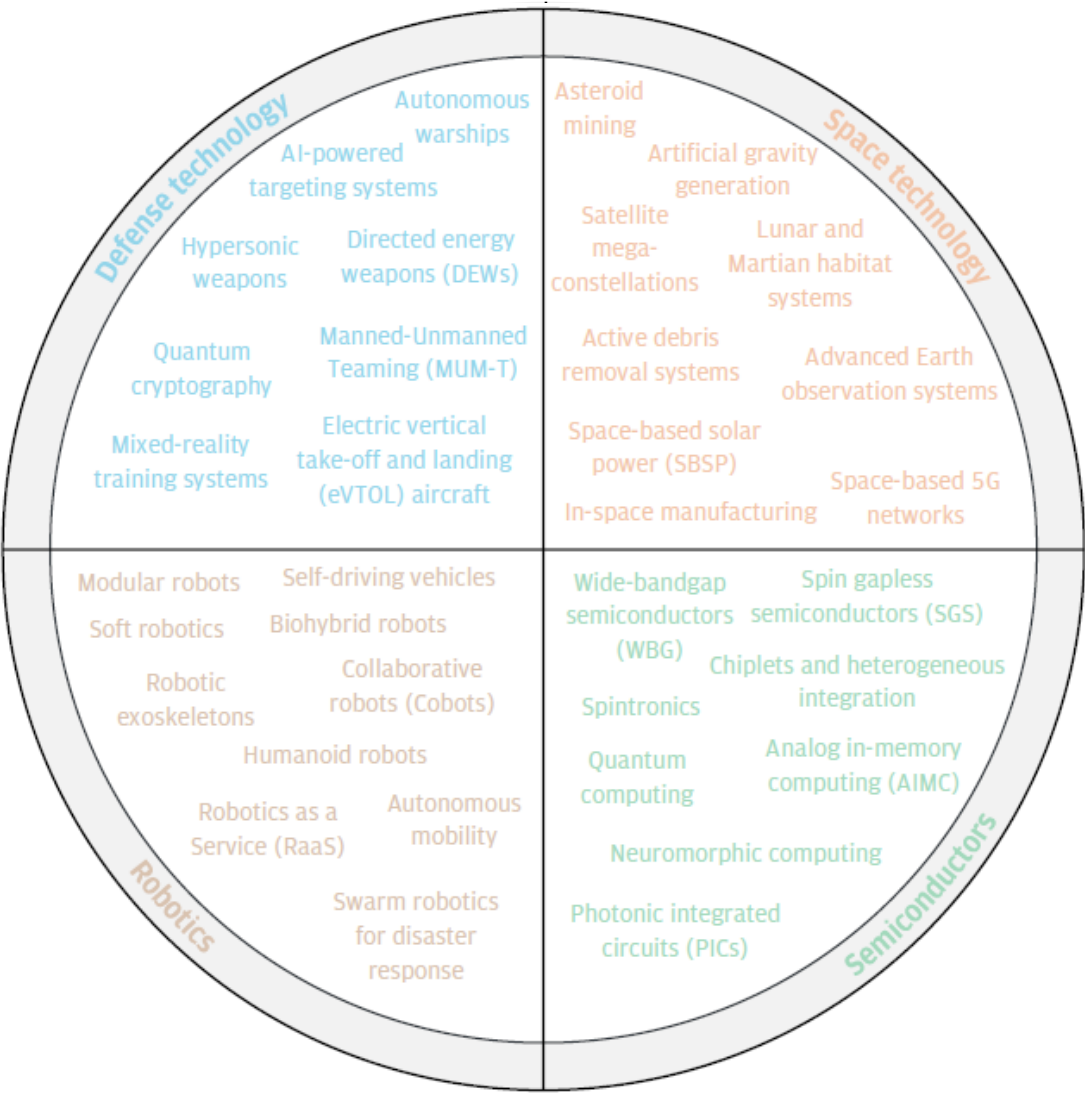


**HEIGHTENED AI PATENT ACTIVITY REFLECTS GROWING R&D EFFORTS**  
CUMULATIVE COUNT OF GLOBALLY GRANTED PATENTS RELATED TO ARTIFICIAL INTELLIGENCE, BY INDUSTRY



Note: <sup>1</sup>Computation is measured in total petaFLOP, which is 10<sup>15</sup> floating-point operations.

**THE APPLIED TECHNOLOGY LANDSCAPE IS RIPE WITH INNOVATION**  
CURRENT AND EMERGING APPLIED TECHNOLOGY APPLICATIONS, BY INDUSTRY



Breakthroughs in applied technology are being profoundly shaped by intensified R&D efforts, with AI serving as a key driver and enabler. As AI models grow in sophistication, they expand the number of use cases and the level of competency within each. For example, the recent development of AI-powered predictive maintenance systems in manufacturing highlights how AI is being leveraged to transform industrial efficiency and safety. From quantum cryptography and autonomous vehicles to neuromorphic computing, applications that would have been inaccessible just a decade ago are now possible thanks to the leaps in hardware and most notably AI development. Furthermore, the steady growth of the U.S. STEM workforce – rising from 22% to 24% of U.S. employees between 2011 and 2021 – fuels these innovations by continually supplying the talent needed to push the boundaries of technology.



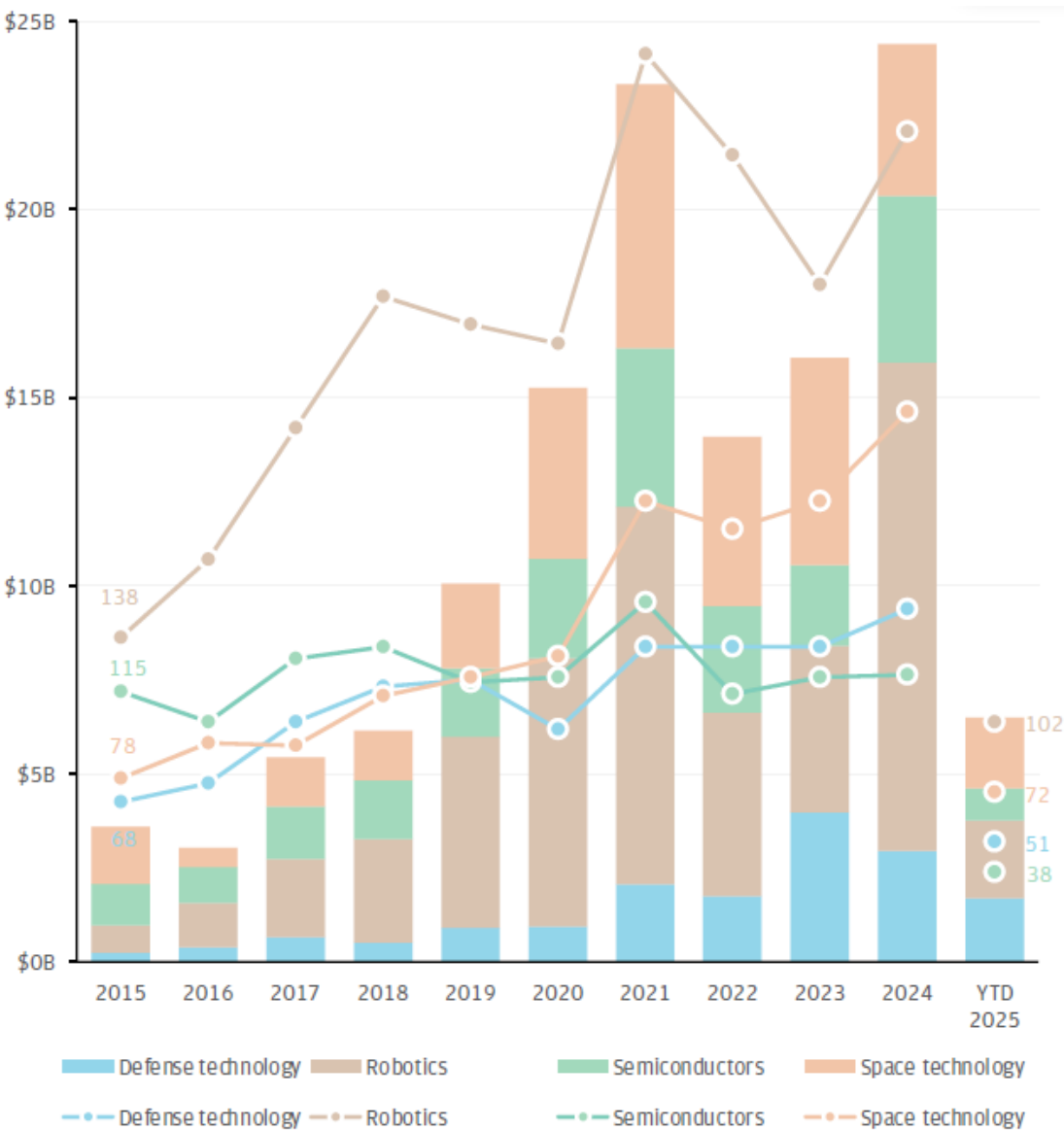
# 03

## Venture investment and exits

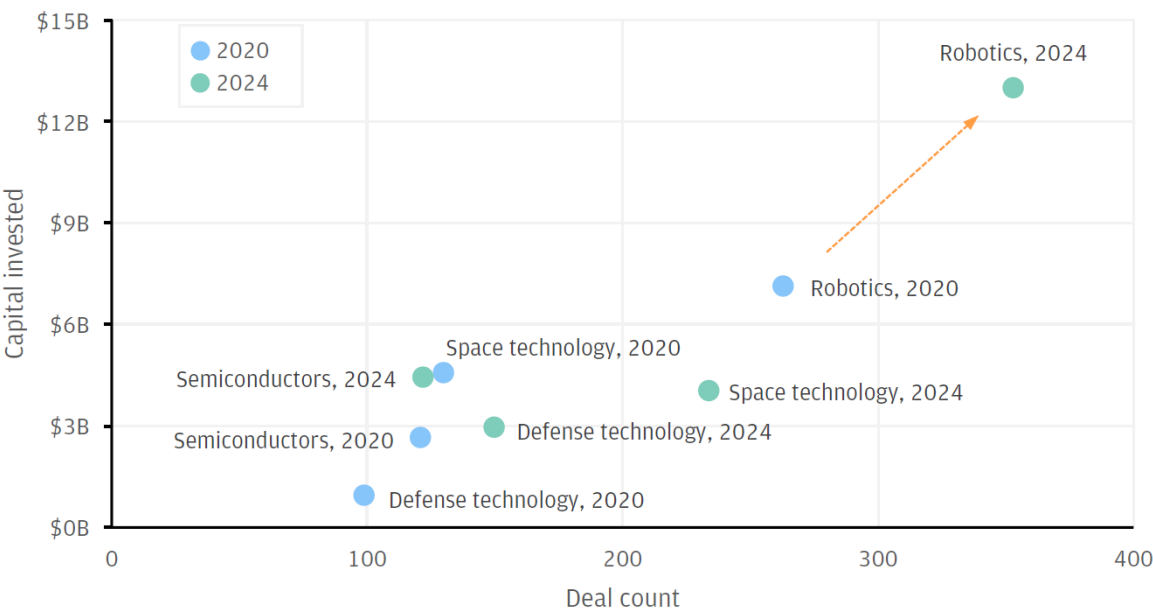


# 2024 venture activity surpasses prior peak, led by larger rounds into fewer companies

VENTURE ACTIVITY SURGES IN 2024, LED PRIMARILY BY ROBOTICS  
TOTAL U.S. VENTURE INVESTMENT AND DEAL COUNT FOR APPLIED TECHNOLOGY INDUSTRIES<sup>1,2</sup>



ROBOTICS INVESTMENT ACTIVITY IS ON THE RISE  
DEAL COUNT VS. CAPITAL INVESTED FOR APPLIED TECHNOLOGY INDUSTRIES (2020, 2024)<sup>2</sup>



NEW DEFENSE TECHNOLOGY AND ROBOTICS STARTUPS IN DEMAND  
U.S. APPLIED TECHNOLOGY INDUSTRIES RANKED BY SEED DEAL ACTIVITY<sup>1,2,3</sup>

Rank	2020	2021	2022	2023	2024	YTD 2025
1	Semiconductors	Space technology	Space technology	Defense technology	Defense technology	Robotics
2	Robotics	Robotics	Semiconductors	Robotics	Robotics	Defense technology
3	Space technology	Defense technology	Robotics	Semiconductors	Space technology	Semiconductors
4	Defense technology	Semiconductors	Defense technology	Space technology	Semiconductors	Space technology

Total venture investment in 2024 slightly exceeded the 2021 peak, driven by a small number of very large deals that increased the overall average deal size from \$35 million to roughly \$44 million. Notably, investments into robotics startups in 2024 grew substantially, nearly double the amount invested in 2020. This surge likely reflects growing investor interest in robotics, driven by advancements in AI, the expansion of industrial applications and an increased focus by organizations on boosting productivity through automation. Industries that are less reliant on venture due to access to government funding, such as defense technology and semiconductors, have made up a smaller proportion of total investment. However, the focus on national security and continued supply chain vulnerabilities may increase investor appetite in these strategically important industries, creating new opportunities for founders.

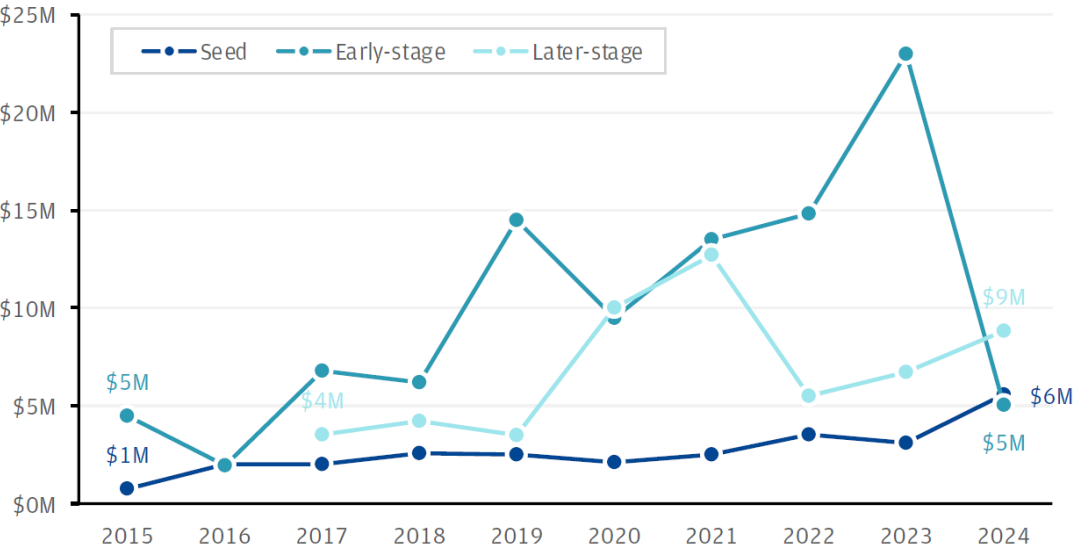
Notes: <sup>1</sup>YTD 2025 is as of April 30, 2025. <sup>2</sup>Industries are not mutually exclusive. <sup>3</sup>Activity is a ratio of the trailing six-month average Seed deal count/trailing 36-month average seed deal count.



# Despite some variability, deal sizes are mostly trending upward

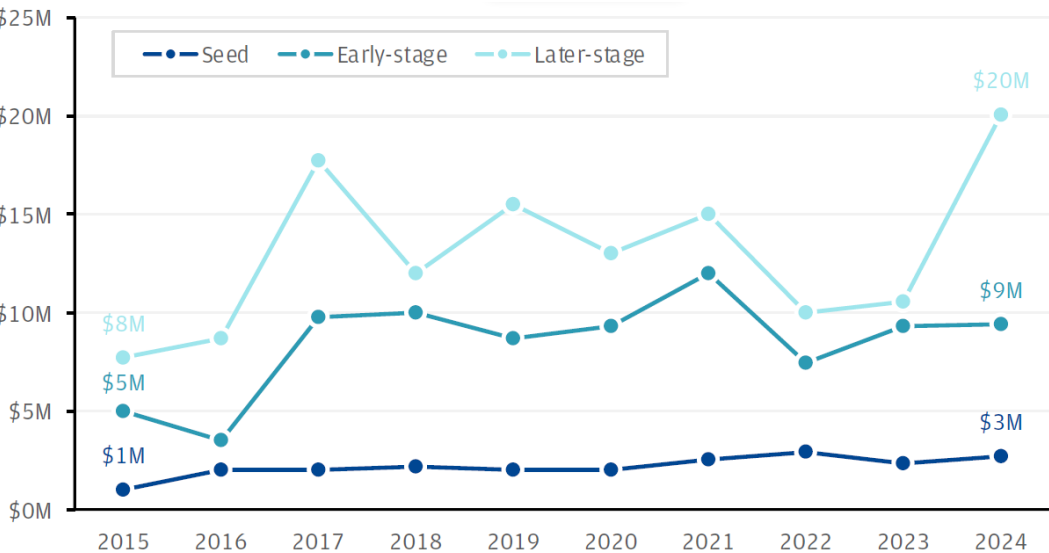
## DEFENSE TECHNOLOGY EARLY-STAGE DEAL SIZES DECLINE AFTER 2023 POP

MEDIAN U.S. DEFENSE TECHNOLOGY DEAL SIZE BY STAGE<sup>1,2,3,4</sup>



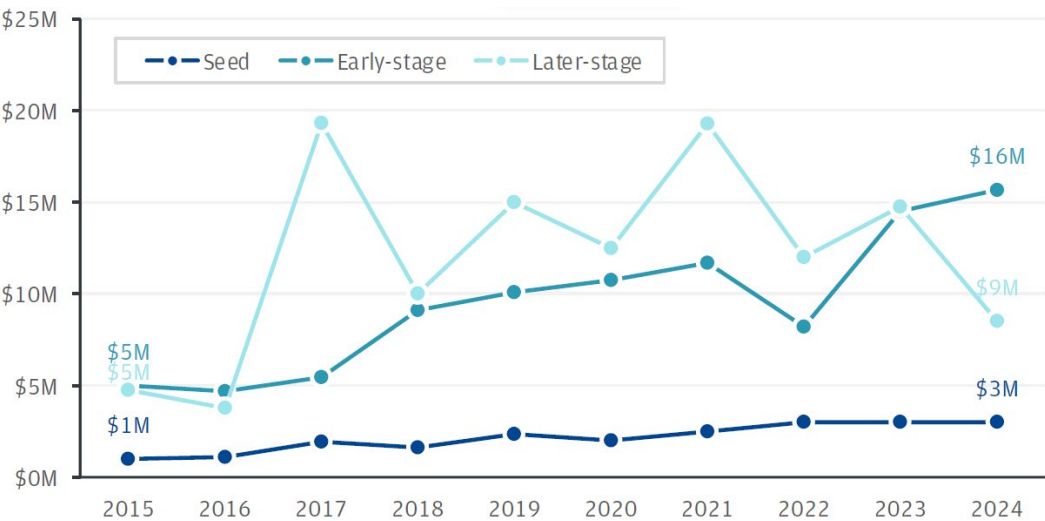
## ROBOTICS DEAL SIZES STABLE AT EARLIER STAGES, ACCELERATING AT LATER-STAGES

MEDIAN U.S. ROBOTICS DEAL SIZE BY STAGE<sup>1,2,3</sup>



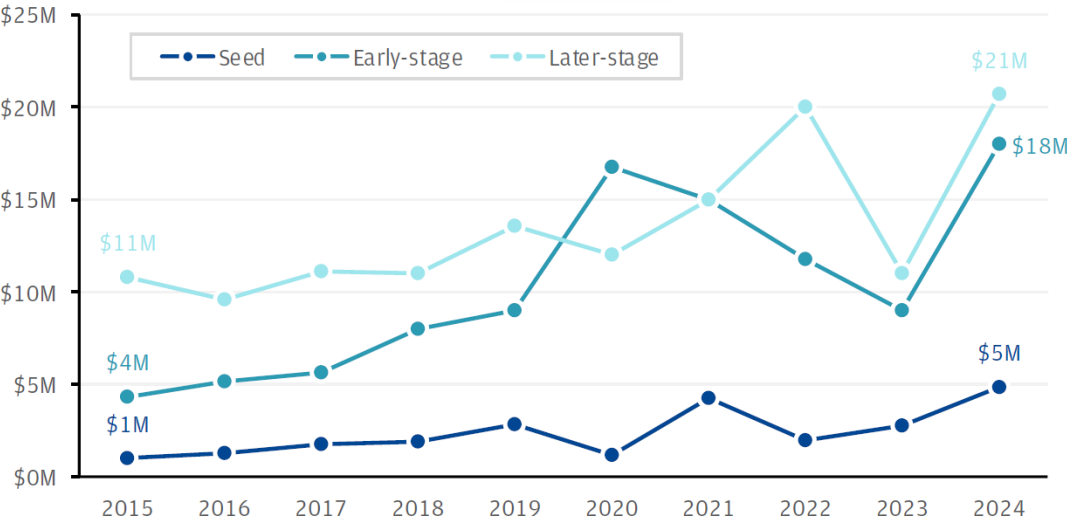
## SPACE TECHNOLOGY LATER-STAGE DEAL DECLINE BUT EARLY-STAGE IS RISING

MEDIAN U.S. SPACE TECHNOLOGY DEAL SIZE BY STAGE<sup>1,2,3</sup>



## SEMICONDUCTOR DEAL SIZES ARE PICKING UP ACROSS ALL STAGES

MEDIAN U.S. SEMICONDUCTORS DEAL SIZE BY STAGE<sup>1,2,3</sup>



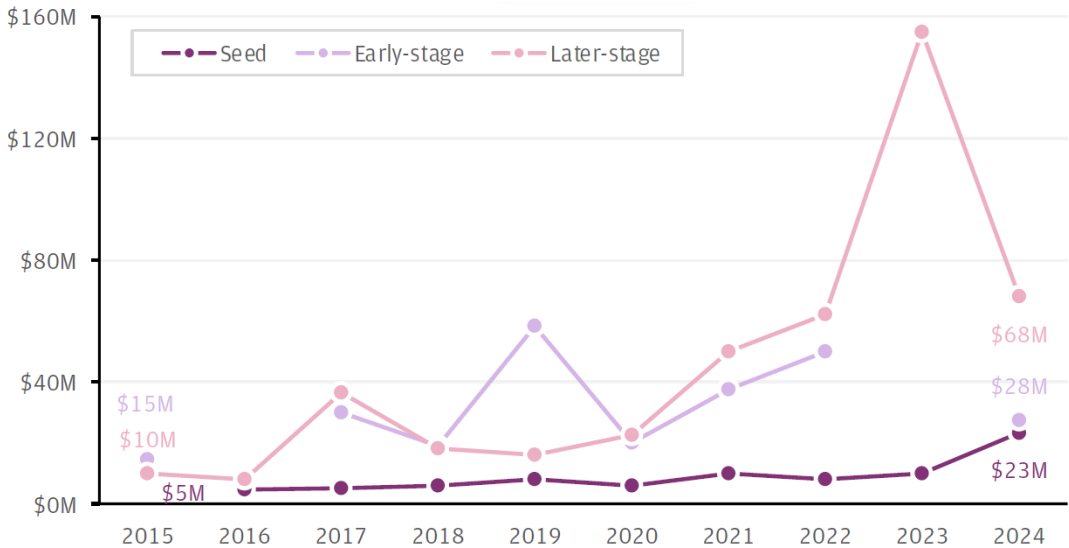
Over the past decade, Applied Technology startups have generally seen an increase in check sizes, particularly at the early-stage. This could signal the next wave of startups starting to mature, as they move from concept to commercialization. The semiconductor and robotics industries have higher deal sizes, likely reflecting greater capital requirements to scale. In space technology, deal sizes have generally trended upward; however, in 2024, later-stage deal sizes declined primarily due to an influx of mature startups raising relatively small rounds. Surprisingly, for defense technology, early-stage deal sizes have been higher than the later-stage, likely reflecting the heavy upfront investment required for securing contracts, navigating regulations and building critical systems. Overall, these trends suggest a funding environment that is supportive and attuned to transformative breakthroughs, emblematic with these industries.

Notes: <sup>1</sup>2025 excluded due to low data counts. <sup>2</sup>Early-stage: company was founded fewer than five years by the time of the deal, and if a series is specified, it is Series A or B. Later-stage: company is five years old or older regardless of series. Alternatively, if a series is specified, it is Series C+ regardless of time since founded. <sup>3</sup>Industries are not mutually exclusive. <sup>4</sup>Some data points are omitted due to low data counts.

# Seed and early-stage valuations demonstrate resiliency

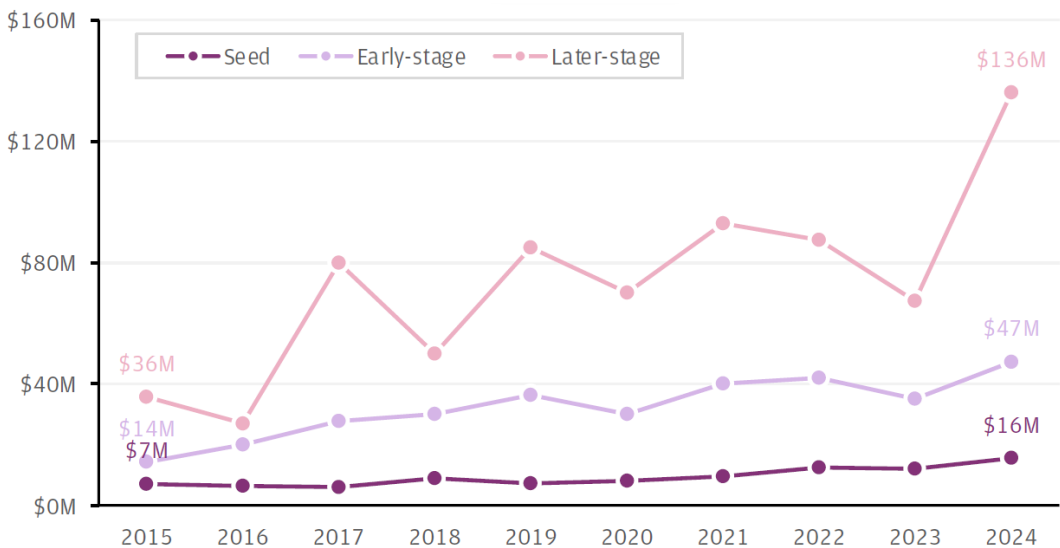
## DEFENSE TECHNOLOGY SEED STAGE VALUATIONS EXHIBIT STRONG GROWTH

MEDIAN U.S. DEFENSE TECHNOLOGY PRE-MONEY VALUATION BY STAGE<sup>1,2,3,4</sup>



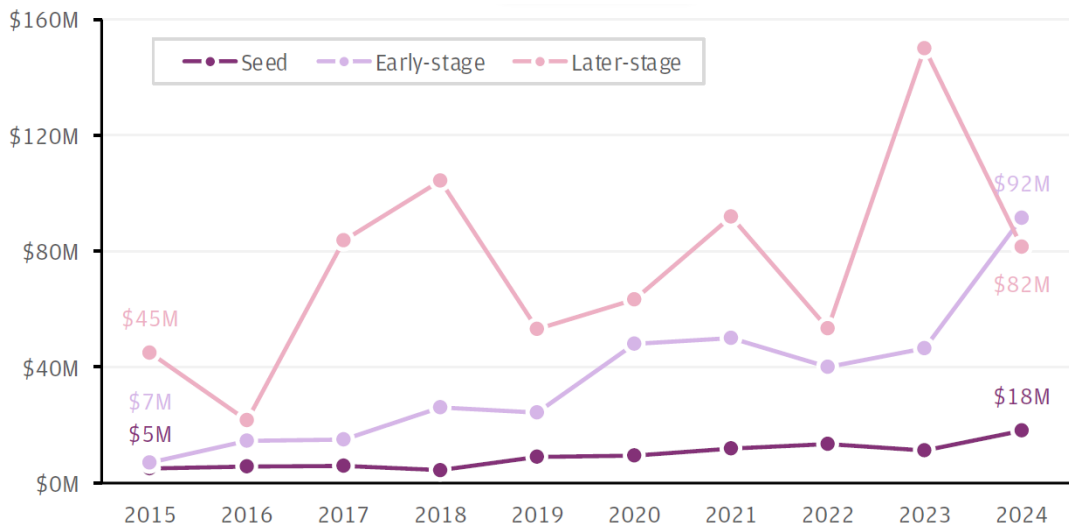
## ROBOTICS VALUATIONS ARE INCREASING, PARTICULARLY AT THE LATER-STAGE

MEDIAN U.S. ROBOTICS PRE-MONEY VALUATION BY STAGE<sup>1,2,3</sup>



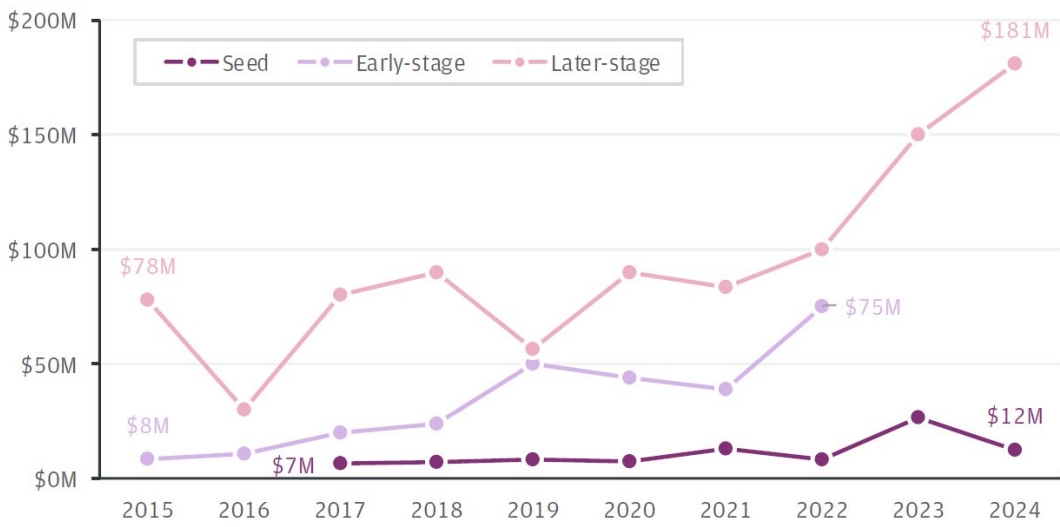
## SPACE TECHNOLOGY VALUATIONS INCREASE, WITH THE EXCEPTION OF LATER-STAGE

MEDIAN U.S. SPACE TECHNOLOGY PRE-MONEY VALUATION BY STAGE<sup>1,2,3</sup>



## SEMICONDUCTOR VALUATIONS STEADILY RISING, SEED DECLINED SLIGHTLY IN 2024

MEDIAN U.S. SEMICONDUCTORS PRE-MONEY VALUATION BY STAGE<sup>1,2,3,4</sup>



Across applied technology, seed and early-stage pre-money valuations have remained relatively resilient over the past several years, reflecting sustained investor belief in the long-term promise of these industries. Later-stage valuations have fluctuated year to year, reflecting broader market dynamics. Robotics and semiconductor valuations increased at the later-stage in 2024, which may signal renewed optimism in near-term commercialization potential and strong demand for automation and domestic chip production. Meanwhile, the softening of later-stage valuations in space and defense technology in 2024 could reflect longer procurement cycles or delayed commercial outcomes. However, these valuations are still well above levels seen nearly a decade ago, highlighting long-term value creation. Going forward, clear go-to-market strategies and dual-use potential will likely remain key levers in securing investor support.

Notes: <sup>1</sup>2025 excluded due to low data counts. <sup>2</sup>Early-stage: company was founded fewer than five years by the time of the deal, and if a series is specified, it is Series A or B. Later-stage: company is five years old or older regardless of series. Alternatively, if a series is specified, it is Series C+ regardless of time since founded. <sup>3</sup>Industries are not mutually exclusive. <sup>4</sup>Some data points are omitted due to low data counts.



## KRISTINA NILSSON

*Managing Director,*

*Technology Investment Banking - Global Co-Head of AI*

# 2025 ushers in a future of unprecedented innovation, value creation and transformative possibilities

AI and applied technologies are propelling us into a future of unprecedented innovation, value creation and transformative possibilities.

We see tremendous velocity in new company formation, business model evolution and adoption, and commercialization and scaling. Across the capital and M&A markets, strategic and financial investors and buyers are focusing on these frontier sectors with exceptional interest and demand.

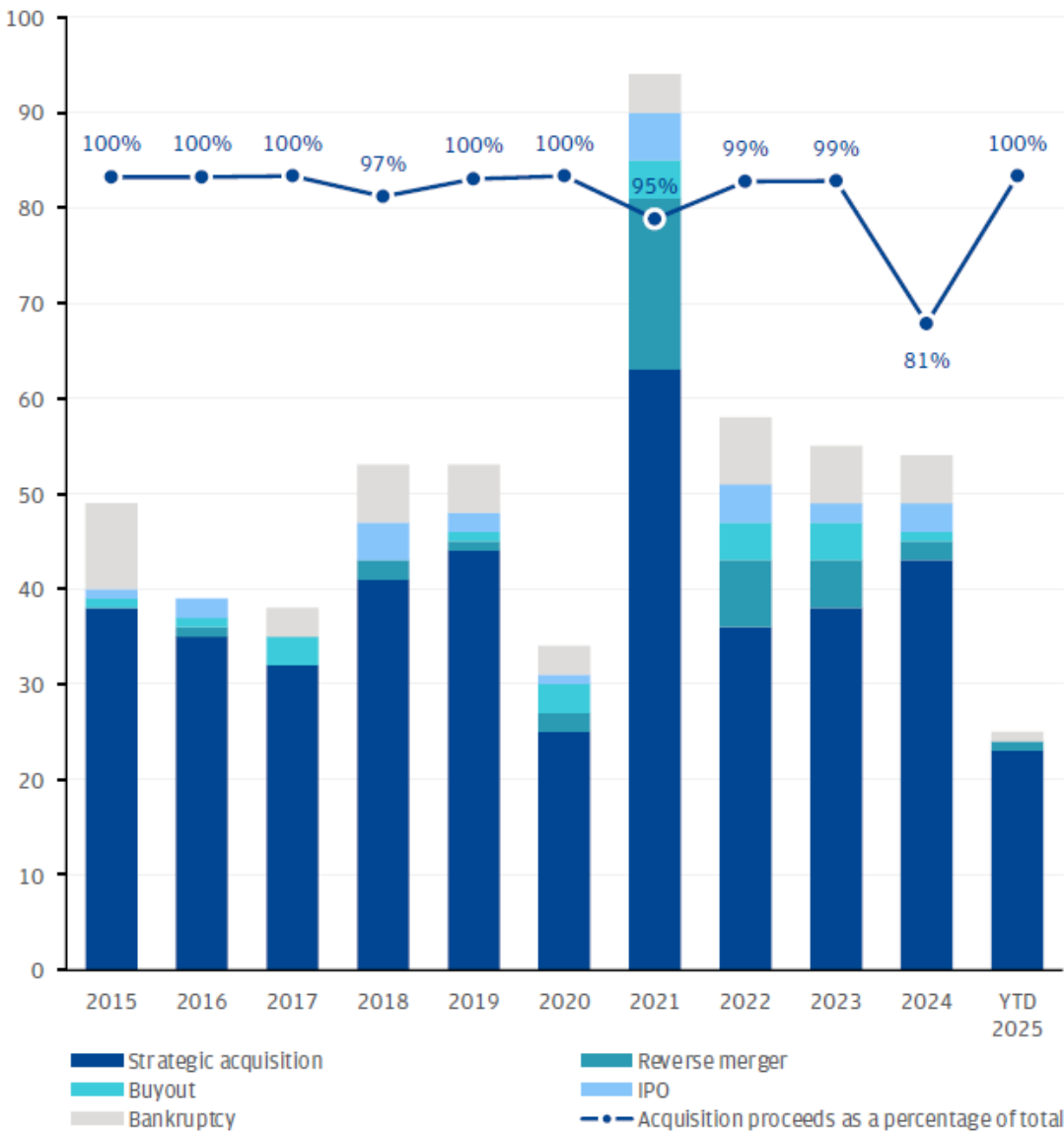
The value proposition is enormously compelling. AI and Applied Technology companies are the key to addressing some of our most challenging global issues, including aging populations, labor shortages, productivity flatlining and supply chain disconnects. Integration of these new technologies and intelligent systems has the potential to unlock and transform the largest parts of the digital and physical economies. Additionally, the demand and competition for talent and capital continues to increase. This is evidenced by the increasing number of acqui-hires, and the strong participation of corporates in new company support through strategic partnership opportunities and capital contributions.

J.P. Morgan is thrilled to help companies in this ecosystem by providing broad-based strategic advice and help with navigating the dynamic capital and M&A markets, introducing companies to our network of corporates and financials, and enabling our clients to meet their strategic and financial objectives. We can't wait to see what you build next!

# Acquisitions an integral piece of the Applied Technology puzzle

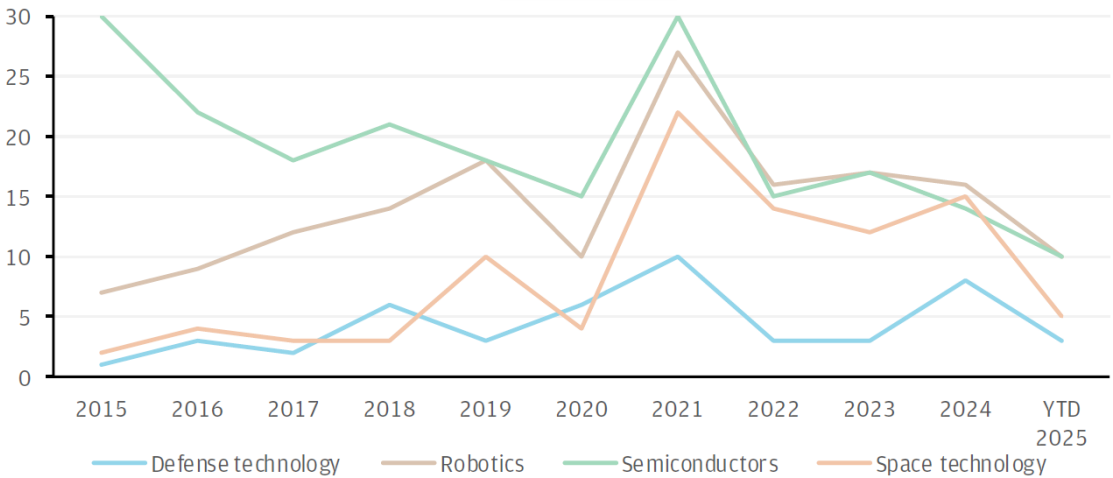
## ACQUISITIONS DRIVE LIQUIDITY FOR APPLIED TECHNOLOGY COMPANIES

EXIT COUNT BY TYPE AND PERCENTAGE OF ACQUISITION PROCEEDS<sup>1,2,3,4</sup>



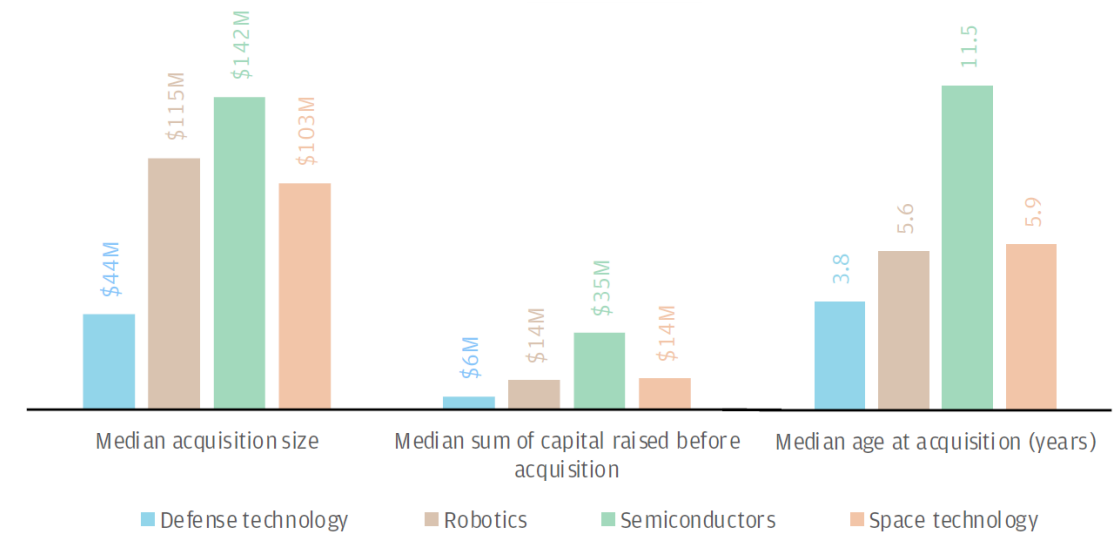
## ROBOTICS AND SEMICONDUCTORS LEAD ACQUISITION ACTIVITY

ANNUAL ACQUISITION COUNT BY INDUSTRY<sup>1,2,3,4</sup>



## SEMICONDUCTOR STARTUPS OFTEN ACQUIRED LATER IN LIFE CYCLE

MEDIAN ACQUISITION SIZE, SUM OF CAPITAL RAISED BEFORE ACQUISITION AND AGE AT ACQUISITION<sup>2,3,4,5</sup>



The sale of Applied Technology startups to strategic buyers is a primary exit strategy in the sector, and acquisitions are often key to boosting acquirers' technological capabilities and market position. Robotics and semiconductors startups lead in acquisition activity, likely driven by strong demand for advanced automation solutions and high-performance chips that power many modern computing platforms. Semiconductor startups tend to be more mature at the time of acquisition relative to other industries, likely due to capital-intensive R&D processes and long development cycles required to bring products from prototype to market. Conversely, defense technology startups are typically acquired early in their lifecycles as buyers are often willing to invest in nascent technologies to accelerate their R&D efforts and address national security concerns.

Notes: <sup>1</sup>YTD 2025 is as of April 30, 2025. <sup>2</sup>Includes only U.S. based companies that were formerly venture-backed and only deals with disclosed deal metrics. <sup>3</sup>Acquisitions includes strategic merger/acquisitions, reverse merger transactions and buyouts. <sup>4</sup>Industries are not mutually exclusive. <sup>5</sup>Age calculated as time between first financing and date of acquisition. All metrics are calculated using acquisitions that occurred between 2015 and YTD 2025.



---

Chase, J.P. Morgan, JPMorgan, JPMorgan Chase, and Story by J.P. Morgan are marketing names for certain businesses of JPMorgan Chase & Co. and its affiliates and subsidiaries worldwide (collectively, "JPMC", "We", "Our" or "Us", as the context may require). The information in this content (website, article, event invitation or other form) does not represent an offer or commitment to provide any product or service. The views, opinions, analyses, estimates and strategies, as the case may be ("views"), expressed in this content are those of the respective authors and speakers named in those pieces, and/or the JPMC departments that publish the content and may differ from those of JPMorgan Chase Commercial Banking and/or other JPMC employees and affiliates. These views are as of a certain date and often based on current market conditions, and are subject to change without notice. Any examples used are generic, hypothetical and for illustration purposes only. Any prices/quotes/statistics included have been obtained from sources deemed to be reliable, but we do not guarantee their accuracy or completeness. To the extent indices have been used in this content, please note that it is not possible to invest directly in an index. This is not a product of the Research Department of J.P. Morgan Securities LLC. This information in no way constitutes research and should not be treated as such. Any information related to cybersecurity provided is intended to help clients protect themselves from cyber fraud, not to provide a comprehensive list of all types of cyber fraud activities nor to identify all types of cybersecurity best practices.

Copying, re-publishing, or using this material or any of its contents for any other purpose is strictly prohibited without prior written consent from JPMorgan. In preparing this material, we have relied upon and assumed, without independent verification, the accuracy and completeness of all information that was acquired from public sources. Any mentions of third-party trademarks, brand names, products and services are for referential purposes only and any mention thereof is not meant to imply any sponsorship, endorsement, or affiliation unless otherwise noted. Notwithstanding anything to the contrary, the statements in this material are not intended to be legally binding. Any products, services, terms or other matters described herein (other than in respect of confidentiality) are subject to, and superseded by, the terms of separate legally binding documentation and/or are subject to change without notice.

The information in this content is not advice on legal, tax, investment, accounting, regulatory, technology or other matters. You should always consult your own financial, legal, tax, accounting or similar advisors before making any financial or investment decisions, or entering into any agreement for JPMC products or services. In no event shall JPMC or any of its directors, officers, employees or agents be liable for any use of, for any decision made or action taken in reliance upon, or for any inaccuracies or errors in or omissions from, the information in this content. We are not acting as your or any client's agent, fiduciary or advisor, including, without limitation, as a Municipal Advisor under the Securities and Exchange Act of 1934. JPMC assumes no responsibility or liability whatsoever to you or any client with respect to such matters, and nothing herein shall amend or override the terms and conditions in the agreement(s) between JPMC and any client or other person.

The information in this content does not include all applicable terms or issues, and is not intended as an offer or solicitation for the purchase or sale of any product or service. Our products and services are subject to applicable laws and regulations, as well as our service terms and policies. Not all products and services are available in all geographic areas or to all customers. In addition, eligibility for particular products and services will be determined by JPMC, including satisfaction of applicable legal, tax, risk, credit and other due diligence, and JPMC's "know your customer", anti-money laundering, anti-terrorism and other policies and procedures. Credit is subject to approval. Rates and programs are subject to change. Certain restrictions apply.

Products and services may be provided by banking affiliates, securities affiliates or other JPMC affiliates or entities. In particular, securities brokerage services other than those that can be provided by banking affiliates will be provided by appropriate registered broker/dealer affiliates, including J.P. Morgan Securities LLC and J.P. Morgan Institutional Investments Inc. Any securities provided or otherwise administered by such brokerage services are not deposits or other obligations of, and are not guaranteed by, any banking affiliate and are not insured by the Federal Deposit Insurance Corporation. Certain financial products and services are required by law to be provided only by licensed representatives and affiliates. Inquiries regarding such products and services will be referred to a licensed representative or a licensed affiliate. The information in this content is not an offer to sell, or solicit an offer to purchase, any securities by anyone in any jurisdiction in which such offer or solicitation is not authorized, or in which JPMC or the person making such an offer is not qualified to do so, or to anyone to whom it is unlawful to make such an offer or solicitation, or to anyone in any jurisdiction outside of the United States. Nothing in this content constitutes any commitment by JPMC to underwrite, subscribe for or place any securities, or to extend or arrange credit, or to provide any other product or service. JPMC contact persons may be employees or officers of any JPMC subsidiary or affiliate.

Any information requested on this invitation, page or other relevant registration form will be processed for the purposes of preparation and administration of this event. Providing the requested information will also assist us in ensuring that the event is properly tailored to meet the requirements of the attendees. By providing the information requested, you are consenting to your data being processed by employees and agents of JPMC as well as potential co-organizers for these purposes. You expressly consent to our use of your information in the manner described herein and in our privacy policy ([www.jpmorgan.com/privacy](http://www.jpmorgan.com/privacy)).

Please note that any JPMC-hosted event or webinar that you register to attend may be recorded, and videos, photographs and other recordings may be taken, where you may be captured participating in the event. By providing the information requested on the registration form, you consent to the publication of such photographs, videos, recordings and/or likenesses (whether edited, adapted, modified or copied), and their use by us and those that we authorize, without prior notice or compensation, in any way which we may see fit now or in the future, including but not limited to, marketing and advertising. Further, you release JPMC and its employees and agents from all claims of every kind on account of such use. You also acknowledge and agree that the replay links, if any, will be shared with JPMC clients and prospects who were invited but did not register/attend, and also potentially to other third parties if the topics are relevant to them. If you do not agree with any statements in this paragraph, please make a member of our staff aware on the day of the event.

The statements made in this content or during this event, or provided in materials as part of this event, are proprietary to JPMC and are not intended to be legally binding. Any products and services described during these events are offered by JPMC subject to applicable laws and regulations and service terms.

We will provide reasonable accessibility accommodations brought to our attention.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: <https://www.jpmorgan.com/IBOR>.

© 2025 JPMorgan Chase & Co. All rights reserved. JPMorgan Chase Bank, N.A. Member FDIC. JPMorgan Chase Bank, N.A., organized under the laws of the U.S.A. with limited liability. Deposits held in non-U.S. branches, are not FDIC insured.