



EMERGING TECH RESEARCH

Q4 2021

Emerging Tech Indicator

Web3 & DeFi, fintech, and health & wellness tech lead funding activity





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Note: All Q3 numbers have been revised from the previous ETI report to reflect the latest funding data available. Linked companies will direct PitchBook clients to the respective company page in the PitchBook Platform.



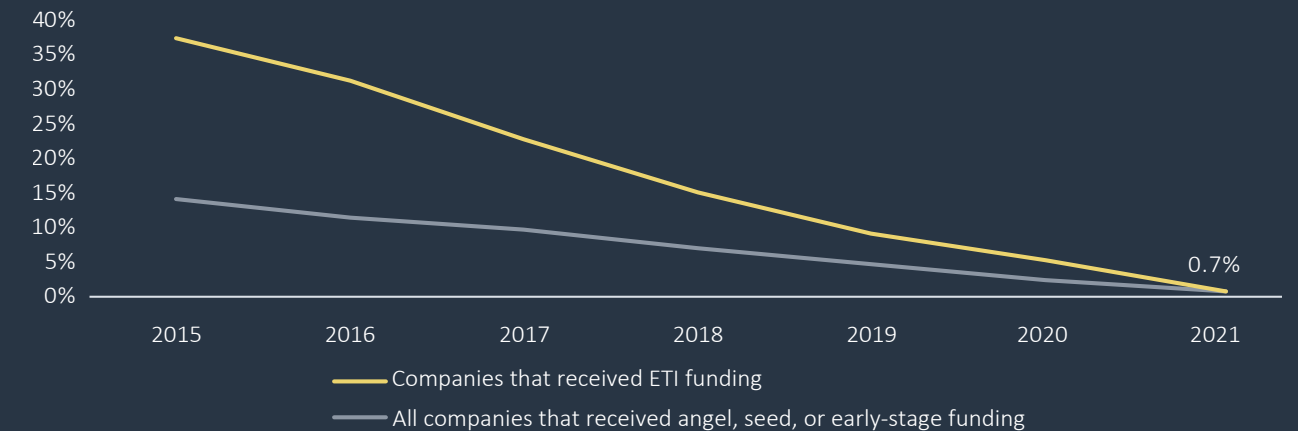
Introduction

The Emerging Tech Indicator report provides a quarterly overview of startups receiving seed- and early-stage investments from a limited subset of top performing VC firms. It is meant to provide a unique perspective on the products and technologies that are driving early growth opportunities.

In the fourth quarter of 2021, we tracked 221 early- and seed-stage deals that involved the top 15 VC firms. These firms are determined each quarter based on the success of their investments over time in terms of exits and valuations.¹ This report provides a summary of this deal activity—which we refer to as “emerging tech indicator (ETI) deals”—with a primary focus on analyzing the kinds of products and technologies receiving capital. As illustrated in Figures 1 and 2, the startups identified via our top 15 methodology have strongly outperformed the broader VC industry.

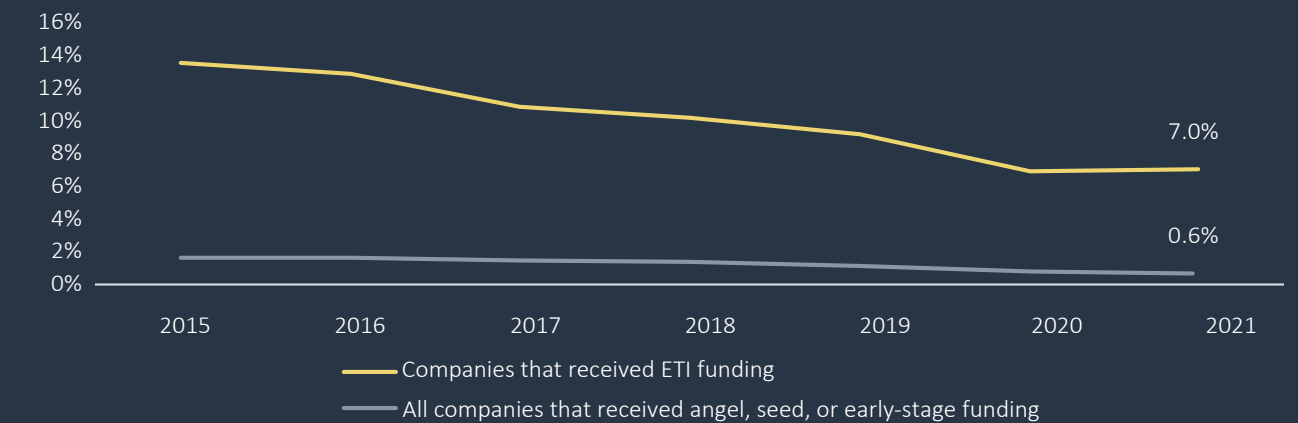
1: Emerging Tech Indicator ranking methodology can be found [here](#).

Figure 1. SHARE OF COMPANIES THAT RECEIVED ETI FUNDING THAT WENT ON TO EXIT



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 2. SHARE OF COMPANIES THAT RECEIVED ETI FUNDING THAT WENT ON TO UNICORN STATUS



Source: PitchBook | Geography: Global | *As of December 31, 2021



Key takeaways

Q4 was a blowout quarter for VC: ETI investment reached \$10.2 billion across 221 deals in the quarter, the highest amount on record and well above the prior peak of \$6.9 billion set in Q3 2021. Total deal count declined to 221 in Q4 from 227 in Q3 due to several outsized deals.

Large deals surge: We recorded 26 ETI deals sized \$100 million or larger, well above the historical quarterly average of four (back to 2015) and Q3's prior record of 14. We tracked 56 deals sized \$50 million or larger, up from 33 in Q3 and easily topping the historical quarterly average of 12. The largest deal of the quarter was a \$725 million Series B for **Forte**, a technology platform that helps game developers integrate crypto economics. There were also three other \$500 million+ deals: a \$555 million Series A for crypto payment startup **MoonPay**, a \$500 million Series A for flying car startup **Xpeng HT**, and a \$500 million early-stage round raised by cloud kitchen platform **Wonder**.

Crypto tops deal value again: For the second consecutive quarter, Web3 & DeFi was the largest area of ETI investment, with \$2.4 billion invested across 26 deals, almost twice the \$1.2 billion invested in Q3 and well above the next largest segment, fintech, which reached \$824 million. Health & wellness tech (\$793 million), foodtech (\$652 million), and proptech (\$582 million) rounded out the top five segments. Across all technology segments, we recorded \$1.3 billion invested in startups that market their use of artificial intelligence and machine learning (AI & ML) to power core products or vertical applications, a significant increase from \$675 million in Q3. However, AI-focused horizontal platform startup activity was relatively low in Q4 at \$242 million.



Deal activity

Q4 ETI deal activity reflected the surging VC environment as deal value reached \$10.2 billion, up from \$6.9 billion in Q3 and the highest quarter on record (back to 2015). Deal counts of 221 were well above the average 157, but down from Q3's 227. (See our [Q4 2021 Venture Monitor](#) for an overview of broader VC market activity.) We tracked a record 26 \$100 million+ ETI deals in Q4, a sharp increase from 14 in Q3 and well above the historical average of four. The largest deal was a \$725 million Series B for [Forte](#), a technology platform intended to help game developers integrate crypto economics. There were also three other \$500 million+ deals: a \$555 million Series A for crypto payment startup [MoonPay](#), a \$500 million Series A for flying car startup [Xpeng HT](#), and a \$500 million early-stage round raised by cloud kitchen platform [Wonder](#). ETI deal activity represented 11.9% of total VC funding in the quarter—slightly above historical averages in the 10% range.

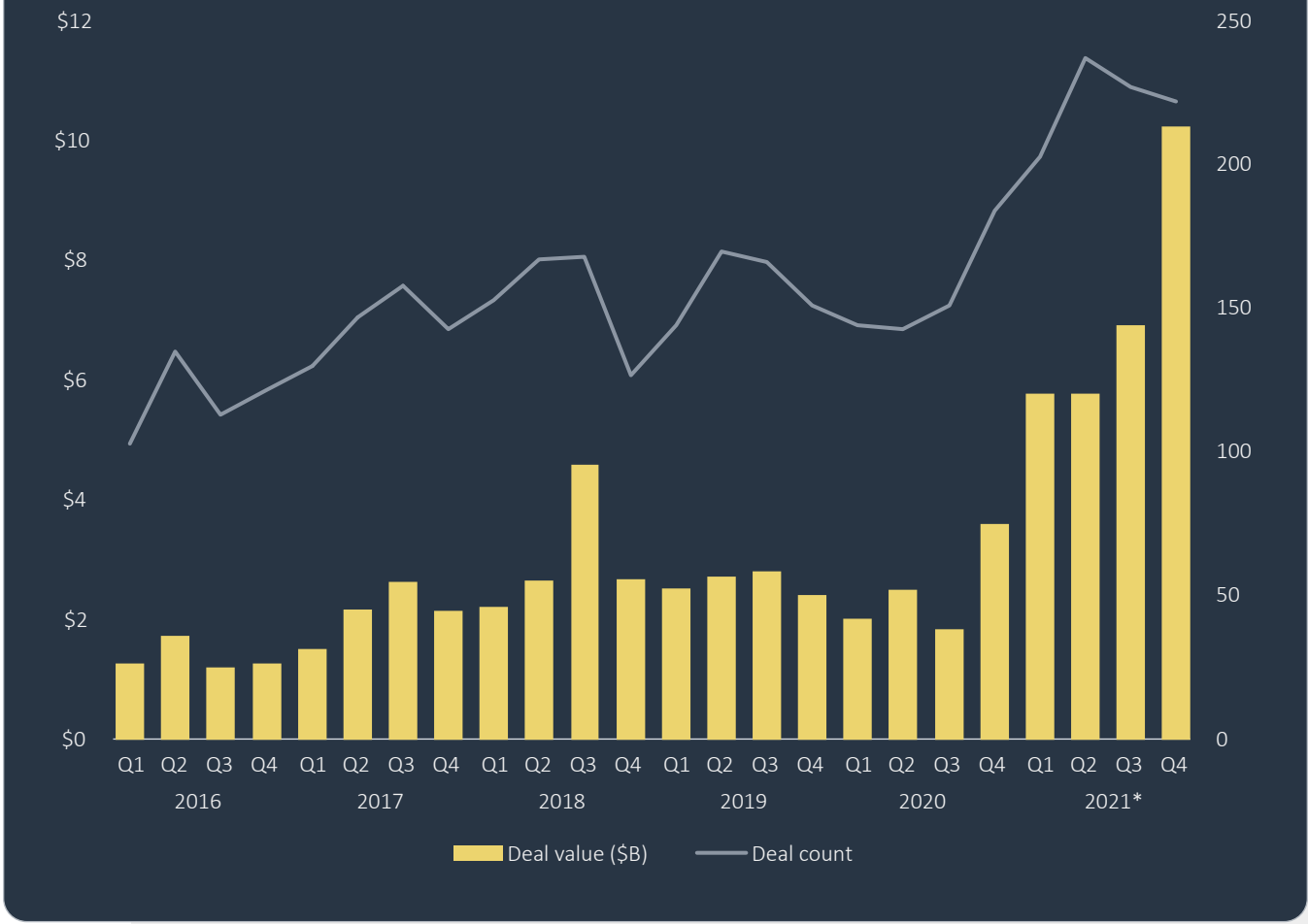
For a quantitative analysis of how “startup friendly” the current funding environment has been, see our latest [VC Dealmaking Indicator](#).

In Q4, we tracked ETI deals across 30 market segments, with Web3 & DeFi representing the largest area of investment, accounting for \$2.4 billion across 26 deals. This was followed by fintech (\$824 million across 23 deals), health & wellness tech (\$793 million across 21 deals), and foodtech (\$652 million across five deals).

PitchBook clients can access the latest Emerging Tech Indicator report via the [Research Center](#). Prospective clients can access a report preview [here](#).



Figure 3. ETI DEAL ACTIVITY

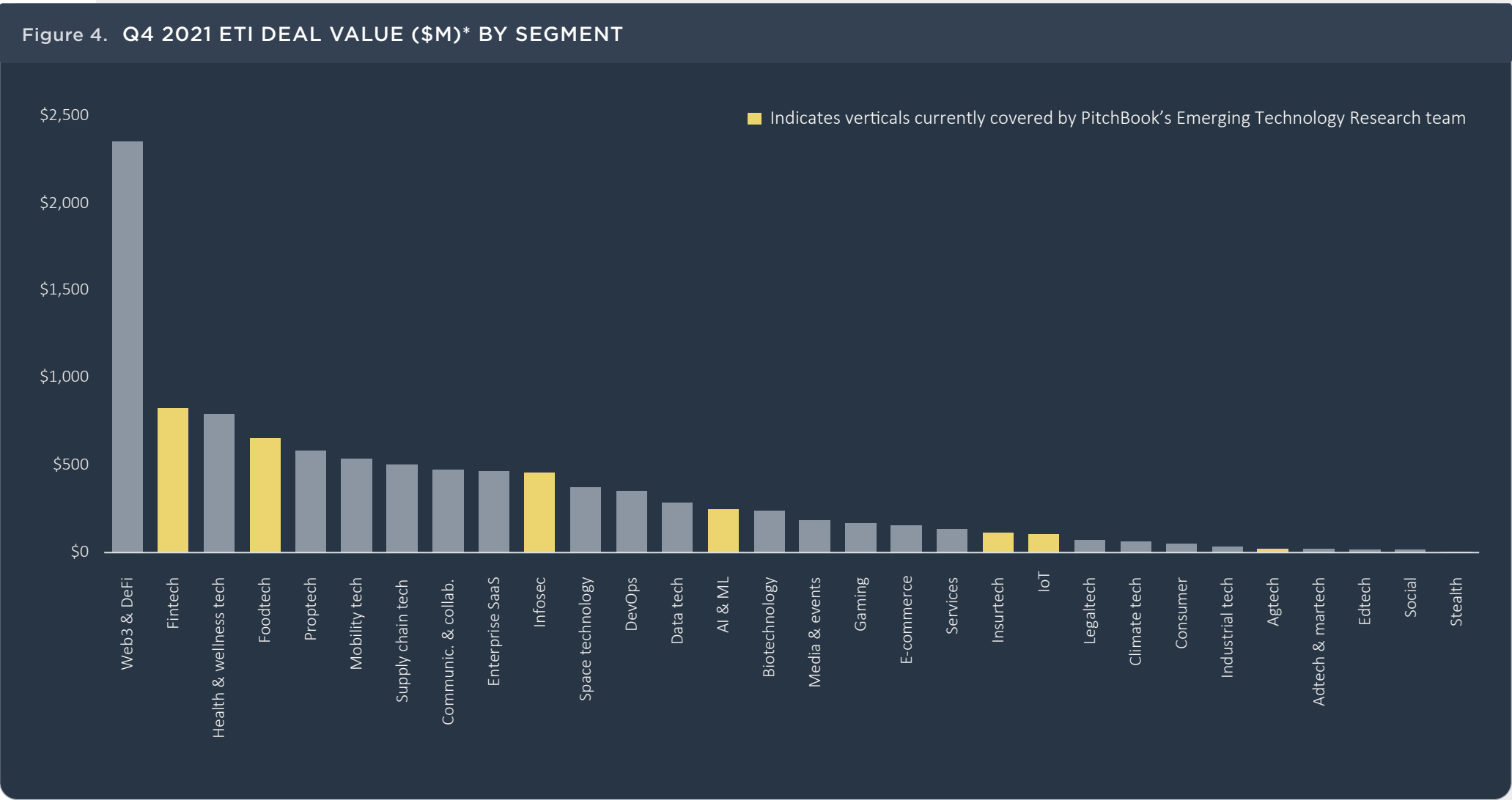


Source: PitchBook | Geography: Global | *As of December 31, 2021



Areas of investment

Compared to ETI deal trends on a cumulative four-quarter basis, Q4 deal activity was notable for the sustained surge in Web3 & DeFi funding, as well as the presence of multiple massive deals. There were 26 deals sized \$100 million or larger compared to 34 total in the three prior quarters. There were also four early-stage raises of \$500 million or larger, including a \$725 million deal, relative to only two deals over \$500 million in the prior three quarters.

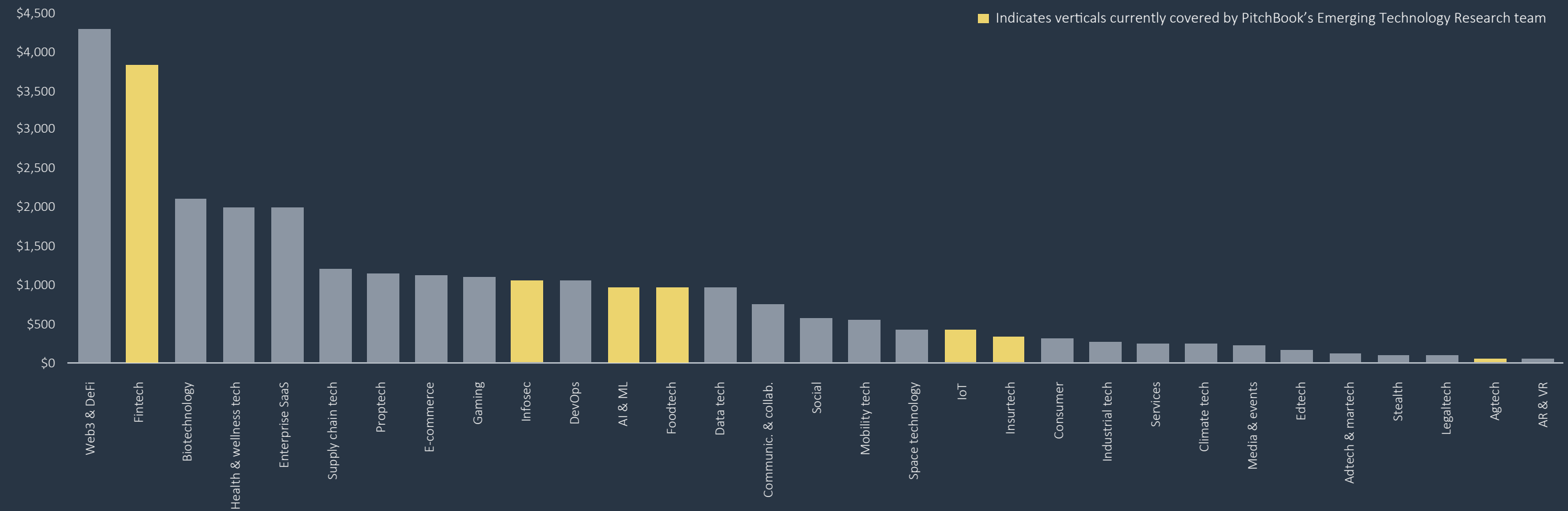


Source: PitchBook | Geography: Global | *As of December 31, 2021



AREAS OF INVESTMENT

Figure 5. EARLY- AND SEED-STAGE ETI DEAL VALUE (\$M) IN TTM BY SEGMENT*

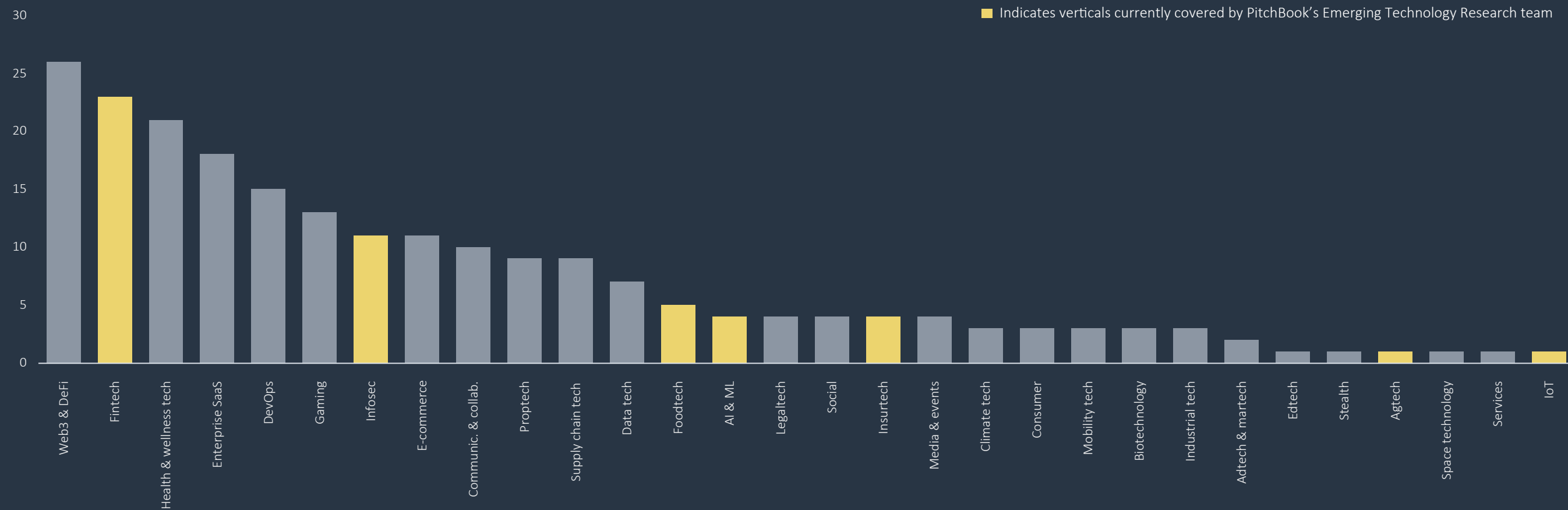


Source: PitchBook | Geography: Global | *As of December 31, 2021
Note: Trailing 12 month (TTM) through Q4 2021.



AREAS OF INVESTMENT

Figure 6. Q4 2021 ETI DEAL COUNT BY SEGMENT

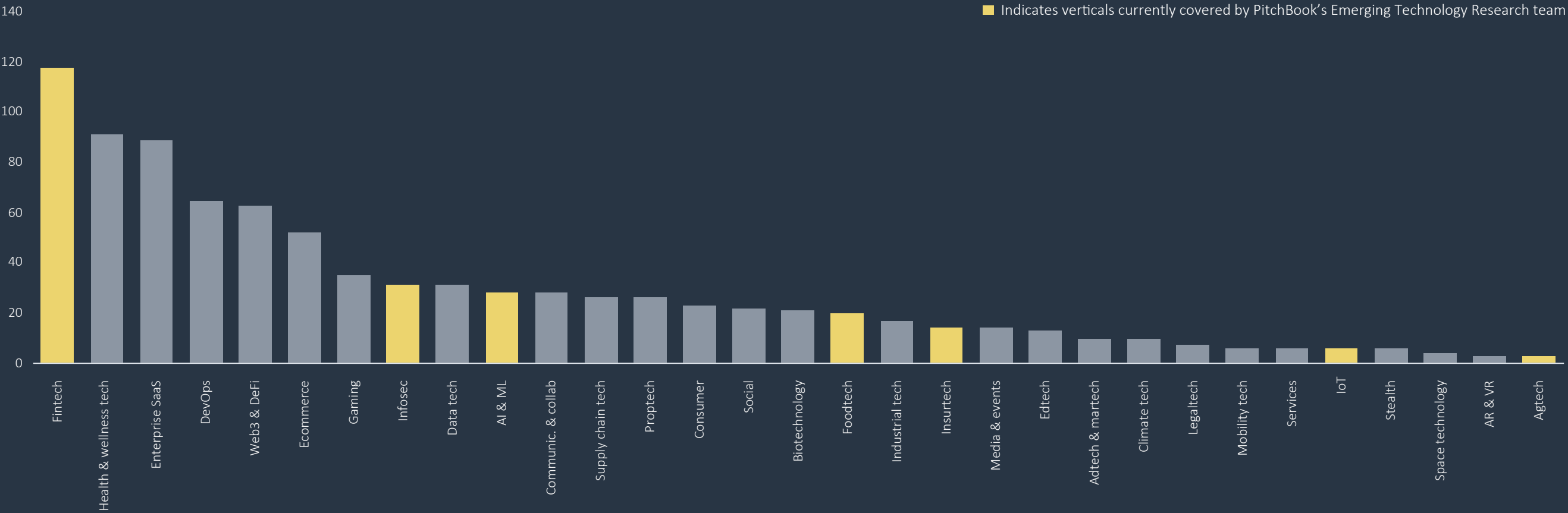


Source: PitchBook | Geography: Global | *As of December 31, 2021



AREAS OF INVESTMENT

Figure 7. EARLY- AND SEED-STAGE ETI DEAL COUNT IN TTM BY SEGMENT*

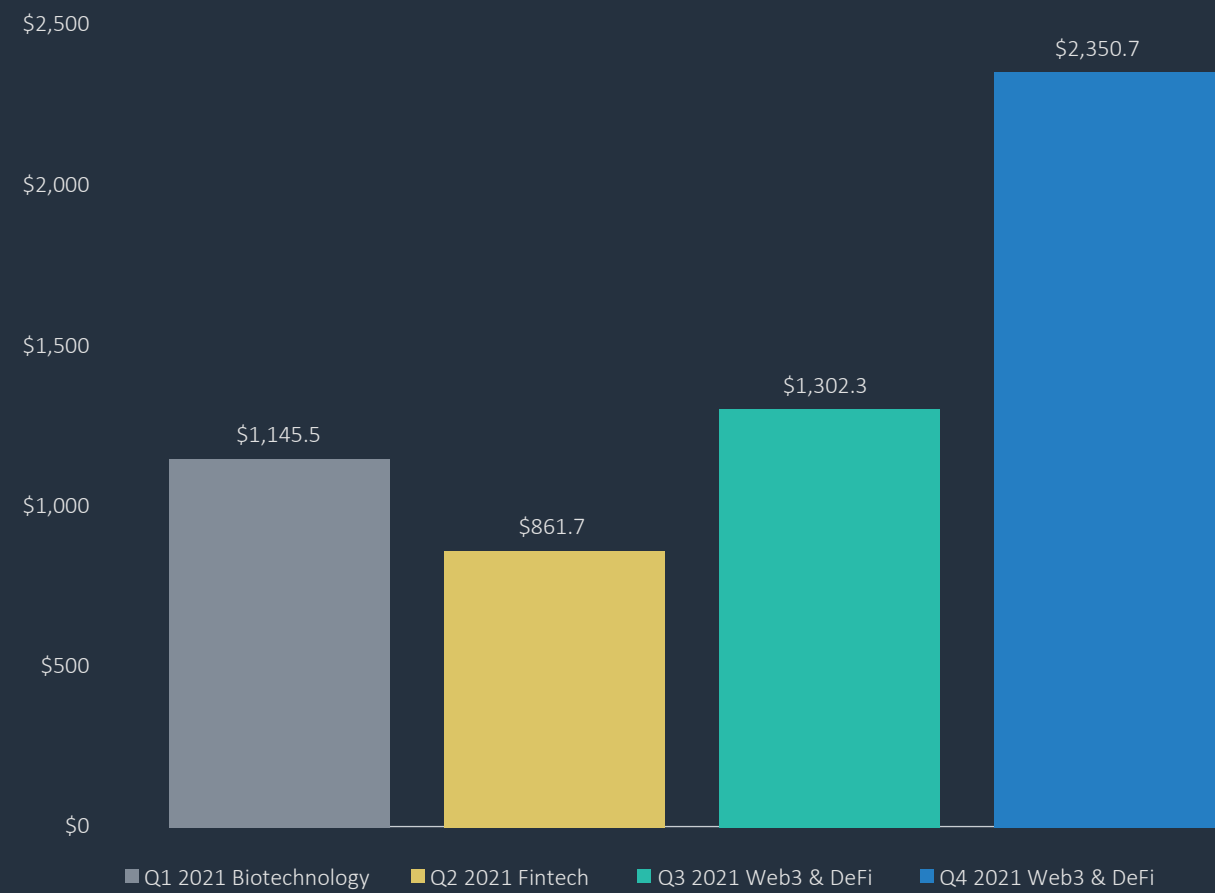


Source: PitchBook | Geography: Global | *As of December 31, 2021
Note: Trailing 12 month (TTM) through Q4 2021.



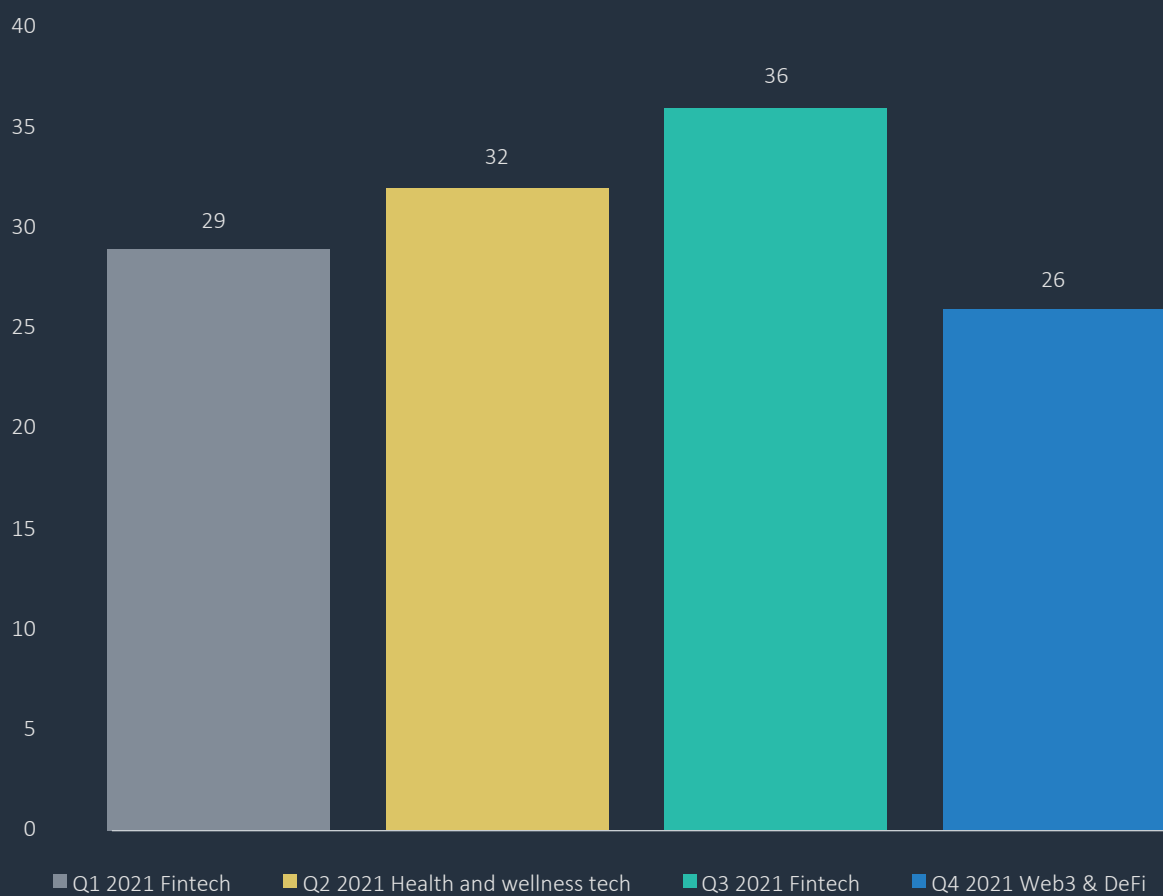
AREAS OF INVESTMENT

Figure 8. TOP ETI SEGMENTS OVER THE LAST FOUR QUARTERS BY DEAL VALUE (\$M)*



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 9. TOP ETI SEGMENTS OVER THE LAST FOUR QUARTERS BY DEAL COUNT*



Source: PitchBook | Geography: Global | *As of December 31, 2021

ETI deal segment spotlights



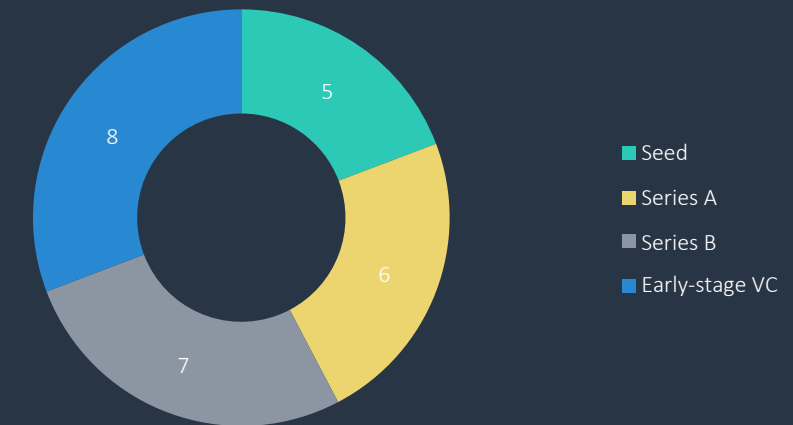
Web3 & DeFi

Following a breakout Q3, Web3 & DeFi continued to dominate the ETI investment landscape in Q4, with \$2.4 billion invested across 26 deals (up from \$1.2 billion across 11 deals in Q3). This was by far the largest segment of investment and brings the total 2021 ETI investment in this category to \$4.3 billion. While “Web3” has emerged as a term used to refer broadly to the emerging industry for decentralized software protocols and blockchain products, DeFi can be thought of as the emerging class of financially focused products within it. Yet the landscape for startups focused on this opportunity is broad and represents a diverse collection of emerging opportunities, including non-fungible token (NFT)-based solutions and gaming applications.

The overlap between Web3 technologies and gaming trends was on full display in Q4, with several large deals focused on the opportunity to integrate the inherent economics of blockchains (self-sustaining, decentralized, and interoperable) within gaming environments. This included a massive \$725 million Series B for **Forte**, which is developing a technology platform to help game developers incorporate NFTs and “cryptonomics” into their games. **Axie Infinity** raised a \$152 million Series B to build out its Ethereum-based gaming studio, and **OnChain Studios** raised a \$7 million seed round to build out its line of NFT “Cryptoys.” Other large deals in Q4 included a \$555 million Series A for **MoonPay**, which is developing a crypto exchange and consumer payment wallet, and a raise for high-profile NFT and exchange platform **FTX**, which tacked on an additional \$421 million Series B (with a further \$400 million Series C announced in Q1 2022), bringing its total raised to \$1.9 billion. We also saw several deals focused on infrastructure solutions, including network security monitoring (**CertiK**); on-chain analytics (**Nansen**); and compliance, fraud, and risk management (**TRM Labs**).

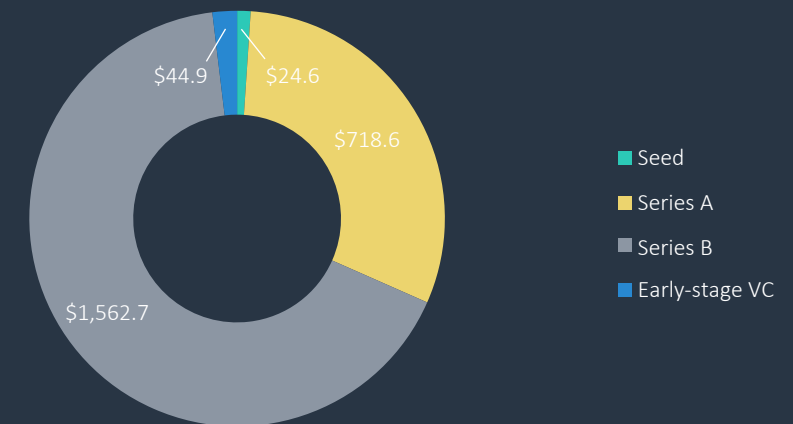
For a more detailed overview of DeFi trends, download PitchBook’s industry primer [here](#).

Figure 10. Q4 2021 WEB3 & DEFI ETI DEAL COUNT* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 11. Q4 2021 WEB3 & DEFI ETI DEAL VALUE (\$M)* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021



WEB3 & DEFI

Figure 12.

Web3 & DeFi ETI deals

COMPANY	FOCUS	DEAL TYPE	DEAL SIZE (\$M)*	POST-MONEY VALUATION (\$M)*
Forte	NFT marketplace and developer platform for gaming	Series B	\$725.0	N/A
MoonPay	Crypto exchange and consumer wallet	Series A	\$555.0	\$3,400.0
FTX	Cryptocurrency derivative exchange	Series B1	\$420.7	\$25,000.0
Axie Infinity	NFT-based crypto gaming with native crypto token AXS	Series B	\$152.0	\$3,000.0
CertiK	Network security monitoring solution for blockchains and crypto	Series B2	\$80.0	\$1,000.0
Nansen	On-chain crypto analytics platform	Series B	\$75.0	N/A
TRM Labs	Digital asset compliance, fraud, and risk management	Series B	\$60.0	\$590.0
Royal Markets	Platform for buying and selling ownership in songs	Series A	\$55.0	\$335.0
Matter Labs	Ethereum scaling protocol	Series B	\$50.0	N/A
Mysten Labs	Blockchain infrastructure technology platform	Series A	\$36.0	N/A
Element Finance	Crypto financing	Series A	\$32.0	\$332.0
Iron Fish	Blockchain network focused on increasing privacy of crypto transactions	Series A	\$27.6	\$151.6
Forta Protocol	Smart contract security and threat detection	Early-stage VC	\$23.0	N/A
Nym	Blockchain-based network security service	Series A	\$13.0	\$270.0
Friends With Benefits	Decentralized crypto-based social organization	Early-stage VC	\$10.0	\$100.0
OnChain Studios	Developer of digital, fully interactive NFTs called Cryptoys	Seed	\$7.1	\$27.1
Danvas	Digital art display platform and screens	Seed	\$7.0	\$16.0
Beta Finance	DeFi protocol for lending, borrowing, and shorting crypto	Early-stage VC	\$5.8	N/A
Kosen Labs	AI-based tool for optimizing crypto network economics	Seed	\$5.0	N/A
Hawku	Marketplace for gaming and NFTs	Seed	\$4.0	N/A
Mem Protocol	Decentralized social platform	Early-stage VC	\$3.1	N/A
Runloop	Simulation environments to train agents to find trading opportunities	Early-stage VC	\$3.0	\$13.0
InfinitySwap	Blockchain platform for staking and swapping crypto	Seed	\$1.5	\$10.0
PleasrDAO	DAO focused on buying digital art and NFTs	Early-stage VC	N/A	N/A
OnJuno	Consumer neobank for crypto and cash management	Early-stage VC	N/A	N/A
Parallel Finance	Staking and lending token for DeFi liquidity	Early-stage VC	N/A	\$250.0

Source: PitchBook | Geography: Global | *As of December 31, 2021

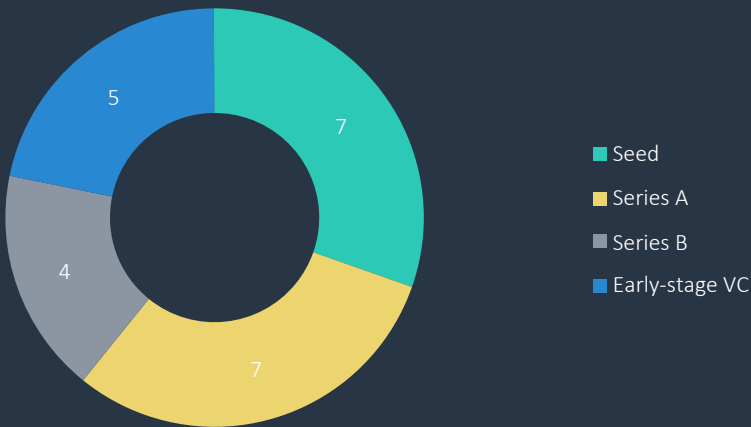


Fintech

Fintech was the second-largest area of ETI investment in Q4 at \$824 million across 23 deals. It was also the second-highest area of investment for the entirety of 2021 at \$3.8 billion but had the highest deal count at 118. A look across fintech ETI deal activity reveals a deep and broad opportunity set as startups pursue a wide range of strategies to sell products and services into the global financial ecosystem. Among the largest deals, **Pismo** raised a \$108 million Series B to finance efforts to build a broad set of banking and payment infrastructure services for the Brazil market. The next two largest deals included a \$77 million seed round from **Torpago**, which focuses on corporate cards and expense management, and a \$75 million Series B from **OpenStore**, which provides a liquidity financing solution for Shopify sellers. Notably, the next two largest deals—one \$70 million Series A to the Mexico-based small business credit provider **Uni Cards** and another \$70 million Series B to the India-based corporate expense management platform **Clara**—went to non-US based startups, meaning that of the top five deals, only two went to US-based startups. For all Q4, US-based ETI funding represented only 44% of the total. This trend underscores how global the fintech opportunity has become and the extent to which leading VC firms (mostly US-based firms) are casting a wide and international net.

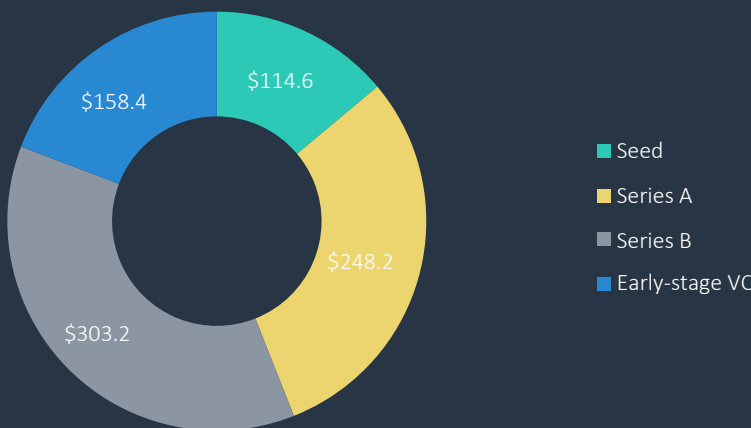
Among the more novel deals that went to infrastructure-focused startups was a \$22 million Series A for Atomic Fi, which seeks to make it easier for fintech customers to switch direct deposit accounts. Direct deposit is a very sticky service for incumbent banks, and Atomic Fi’s platform is poised to help consumers redirect their direct deposits to different institutions. Notable seed-level startups focused on the B2B payment opportunity include **Cacheflow**, which seeks to build a B2B payments platform that enables SaaS vendors to offer digital automated payment plans, and **Topi**, which aims to bring buy-now-pay-later financing options to the commercial buyer market. Other notable large deals include \$64 million for **Valon Mortgage**, which provides mortgage management tools for consumers, and a \$60 million Series A for **Embed**, which provides clearing, settlement, and custody APIs that allow brokers to build custom trading experiences.

Figure 13. Q4 2021 FINTECH ETI DEAL COUNT* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 14. Q4 2021 FINTECH ETI DEAL VALUE (\$M)* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021



FINTECH

Figure 15.

Fintech ETI deals

COMPANY	FOCUS	DEAL TYPE	DEAL SIZE (\$M)*	POST-MONEY VALUATION (\$M)*
Pismo	Brazilian banking and payments infrastructure platform	Series B	\$108.0	N/A
Torpago	Corporate card and expense management platform	Seed	\$77.0	\$1,000.0
OpenStore	Liquidity for Shopify sellers	Series B	\$75.0	\$750.0
Uni Cards	Small business credit services	Series A	\$70.0	\$350.0
Clara	Corporate expense management system	Series B	\$70.0	\$1,000.0
Valon Mortgage	Consumer mortgage management platform	Early-stage VC	\$64.4	N/A
Embed	Clearing, settlement, and custody infrastructure for broker/dealers	Series A	\$60.0	N/A
Anyfin	Loan refinancing platform	Early-stage VC	\$52.0	N/A
Primer	Low-code e-commerce payment process builder	Series B	\$50.2	\$427.1
Zolve	US bank account for citizens of India	Series A	\$40.0	\$210.0
Pomelo	Financial infrastructure software focused on Latin America	Series A	\$35.0	N/A
Endowus	Digital wealth management platform	Early-stage VC	\$27.0	N/A
Atomic FI	Payroll direct deposit integration platform for fintechs	Series A	\$22.0	\$92.0
Sequence	Currently in stealth	Early-stage VC	\$15.0	\$70.0
Frankieone	Platform that connects banks to KYC/AML fraud monitors	Series A	\$14.6	N/A
Copper Banking	Digital bank focused on the teen market	Seed	\$13.3	\$31.8
Payitoff	Student loan repayment platform	Seed	\$8.5	\$38.5
Trinkerr	Social trading and portfolio monitoring platform focused on India market	Series A	\$6.6	N/A
Cacheflow	Payments platform focused on SaaS vendors	Seed	\$6.0	\$26.0
Topi	B2B-focused buy-now-pay-later platform	Seed	\$4.5	N/A
Trica	Equity and cap table management software focused on India market	Seed	\$3.0	N/A
Amenli	Digital insurance agency	Seed	\$2.3	N/A
Payrails	Payments operating system	Early-stage VC	N/A	N/A

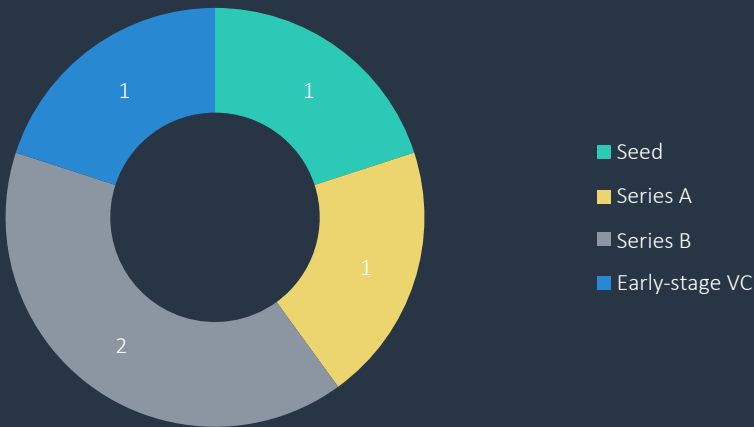
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Foodtech

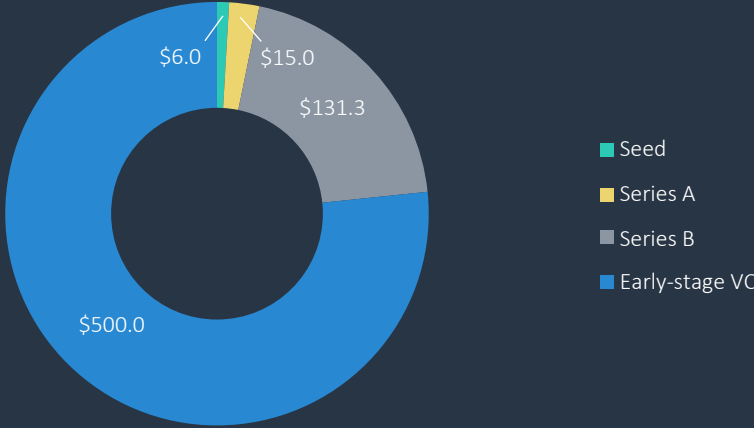
Foodtech ETI deal activity totaled \$652 million across five deals in Q4. The space generally includes startups focused on creating new kinds of food, but it also includes startups focused on opportunities to change how food is prepared and delivered. The segment is typically not high in deal count among ETI investors, but Q4 stands out given the presence of massive deals focused primarily on food delivery and prep. The first was a \$500 million early-stage investment in **Wonder**, a company that develops mobile cloud kitchens that enable gourmet food to be prepared and delivered on-demand to affluent customers. This business is poised to benefit from work-from-home-related themes as professionals who have relocated away from cities seek more high-end restaurant choices. Also focused on the delivery opportunity is **Zapp**, which announced a \$100 million Series B in Q4 (a deal that ultimately closed as a \$200 million round in Q1 2022). **Zapp** provides a quick delivery service for grocery essentials in the UK market. Startup **Foodology** closed a \$15 million Series A to provide virtual kitchens to the Latin American market. The last two foodtech deals in the quarter included a \$31 million Series B for **Nowwa Coffee**, a China-based coffee chain, and a \$6 million seed round for plant-based meal kit delivery startup **Mosaic Foods**.

Figure 16. Q4 2021 FOODTECH ETI DEAL COUNT* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 17. Q4 2021 FOODTECH ETI DEAL VALUE (\$M)* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021



FOODTECH

Figure 18.
Foodtech ETI deals

COMPANY	FOCUS	DEAL TYPE	DEAL SIZE (\$M)*	POST-MONEY VALUATION (\$M)*
Wonder	Cloud kitchen food delivery	Early-stage VC	\$500.0	N/A
Zapp	Rapid food delivery in the UK market	Series B	\$100.0	N/A
Nowwa Coffee	Coffee chain focused on the China market	Series B	\$31.3	N/A
Foodology	Ghost kitchen platform focused on the Latin American market	Series A	\$15.0	N/A
Mosaic Foods	Plant-based meal delivery kits	Seed	\$6.0	\$26.0

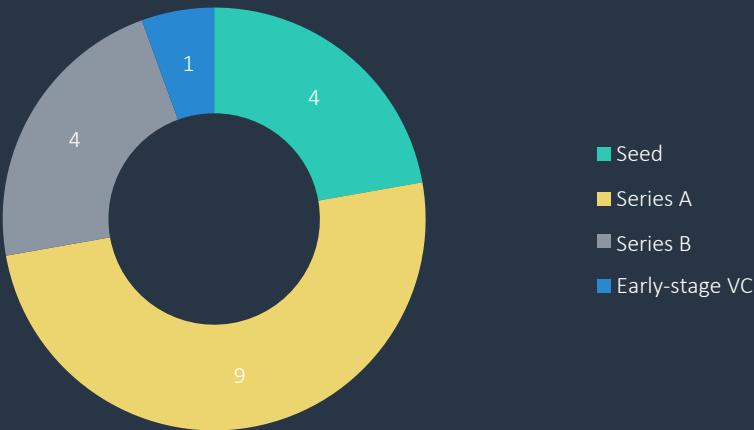
Source: PitchBook | Geography: Global | *As of December 31, 2021



Enterprise SaaS

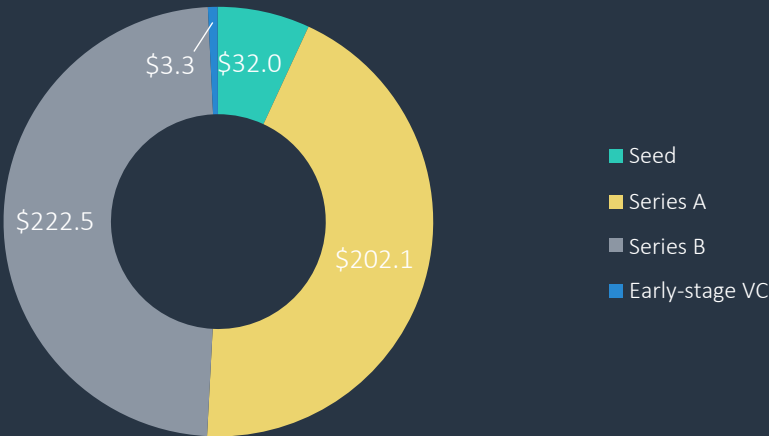
Enterprise SaaS represents a broad category of B2B software and a consistently large area of ETI investment, with more than \$2 billion invested in all of 2021 and \$460 million invested in Q4. While providers in this segment run the gamut of enterprise applications, recruiting- and HR-based use cases continued to be a prevalent theme in Q4. Deals included a \$100 million Series B for [Wrapbook](#), which provides an HR onboarding and payroll platform focused on the production industry; a \$20 million Series B for interview platform [BrightHire](#); \$19 million for workforce engagement platform [AmplifAI](#); a \$17 million Series A for recruiting and retention software [Searchlight.ai](#); and a \$15 million seed round for [Groundswell](#), which enables employee-driven charitable giving accounts. Other large deals for the segment in the quarter included a \$100 million Series A for [Rossum](#), which offers an AI-driven document data capture and automation platform; a \$62 million Series B for [Reprise](#), which helps teams develop software demo videos; and a \$40 million Series B for [Ontic](#), which provides data-driven physical threat detection and monitoring services with a focus on Fortune 500 companies.

Figure 19. Q4 2021 ENTERPRISE SAAS ETI DEAL COUNT* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 20. Q4 2021 ENTERPRISE SAAS ETI DEAL VALUE (\$M)* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021



ENTERPRISE SAAS

Figure 21.
Enterprise SaaS ETI deals

COMPANY	FOCUS	DEAL TYPE	DEAL SIZE (\$M)*	POST-MONEY VALUATION (\$M)*
Wrapbook	HR services platform focused on the production industry	Series B	\$100.0	\$1,040.0
Rossum	Document process automation	Series A	\$100.0	N/A
Reprise	Software demo creation platform	Series B	\$62.0	\$435.0
Ontic	Enterprise security and threat monitoring platform	Series B	\$40.0	\$270.0
BrightHire	Zoom-integrated interview platform	Series B	\$20.5	\$205.5
AmplifAI	Workforce engagement and performance management platform	Series A	\$18.5	\$65.5
Searchlight.ai	AI-powered recruiting and retention software	Series A	\$17.0	\$64.0
TruePlan	Financial forecasting for headcount management	Series A	\$17.0	\$77.0
Groundswell	Employee charitable giving accounts platform	Seed	\$15.0	\$43.2
OfferFit	AI-based platform to guide customer personalization journeys	Series A	\$14.9	\$59.9
AutoLeap	ERP software for auto repair shops	Series A	\$14.2	N/A
Elevate	Employee benefits management	Series A	\$12.0	N/A
Practice	Software to manage coaching and consulting businesses	Seed	\$9.9	N/A
Double Atelier	Online platform for finding task assistants	Series A	\$8.5	N/A
Jump	Business management platform for freelancers	Seed	\$4.6	N/A
ModernLoop	Interview scheduling platform	Early-stage VC	\$3.3	N/A
OSlash	URL link shortcut generator platform	Seed	\$2.5	N/A
Treelab	Business intelligence platform	Series A	N/A	N/A

Source: PitchBook | Geography: Global | *As of December 31, 2021

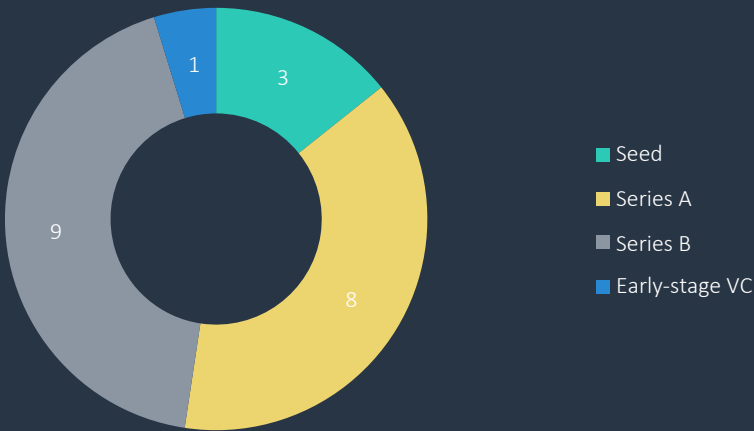


Health & wellness tech

The health & wellness tech segment represented the third-highest area of ETI investment in Q4 at \$793 million, and it was the fourth-highest in 2021 at \$2 billion. Virtual care delivery & monitoring continues to be an important subsegment, with more startups focusing on developing connected tools that cater to specific conditions, illnesses, or customer groups. **Notable** deals from Q4 include a \$100 million Series B for **Cadence Solutions**, which provides virtual care and monitoring for chronic illness; a \$57 million Series A for **Patina Health**, which focuses on in-home elderly primary care; a \$50 million Series B for virtual opioid treatment provider **Ophelia**; a \$23 million Series A for **Oshi Health**, which offers virtual gastrointestinal care; a \$22 million Series A for oncology-focused virtual care provider **Thyme Care**; and a \$9 million seed round for **Marley Medical**, which develops a virtual blood pressure monitoring solution.

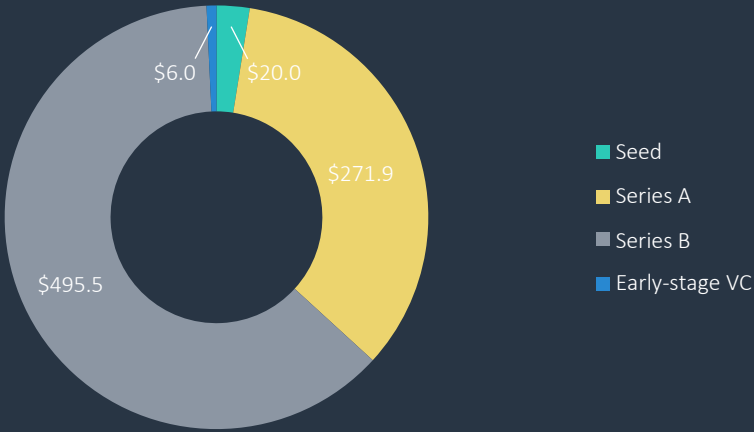
Clinical automation tools also attracted significant capital, including a \$100 million Series B for clinical process automation startup **Notable** and a \$30 million Series A for **DeepScribe**, which offers automated notetaking and documentation tools. There are also several startups developing consumer-focused wellness and lifestyle applications—such as health, exercise, and wellness apps—that completed deals in the quarter, including **Well Dot** for \$70 million, **FitOn** for \$18 million, **Open** for \$9 million, and **Mindhouse** for \$6 million. **Glorify** and **Hallow** each raised \$40 million to further develop religious prayer- and meditation-focused apps.

Figure 22. Q4 2021 HEALTH & WELLNESS TECH ETI DEAL COUNT* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 23. Q4 2021 HEALTH & WELLNESS TECH ETI DEAL VALUE (\$M)* BY STAGE



Source: PitchBook | Geography: Global | *As of December 31, 2021



HEALTH & WELLNESS

Figure 24.

Health & wellness ETI deals

COMPANY	FOCUS	DEAL TYPE	DEAL SIZE (\$M)*	POST-MONEY VALUATION (\$M)*
Cadence Solutions	Virtual healthcare and patient monitoring platform focused on chronic illness	Series B	\$100.0	\$1,000.0
Notable	Healthcare delivery automation platform	Series B	\$100.0	\$628.0
Ablaze Pharmaceuticals	Radiation therapy technology	Series A	\$75.0	N/A
Well Dot	Consumer health and wellness app	Series B	\$70.0	\$170.0
Patina Health	In-home primary care for the elderly	Series A	\$57.0	N/A
Ophelia	Virtual treatment platform for opioid dependence	Series B	\$50.0	\$275.0
Garner Health	Employee benefits management	Series B	\$45.0	\$365.1
Overjet	AI-based dental care delivery platform	Series B	\$42.5	\$432.5
Glorify	Prayer and meditation app	Series A	\$40.0	\$250.0
Hallow	Catholic prayer and meditation app	Series B	\$40.0	\$217.5
DeepScribe	Healthtech and wellness	Series A	\$30.0	\$180.0
Medallion	Medical licensing and credentialing software	Series B1	\$30.0	\$135.0
Oshi Health	Virtual gastrointestinal-focused care platform	Series A	\$23.0	\$33.0
Thyme Care	Personal oncology care management platform	Series A	\$22.0	\$83.0
FitOn	On-demand fitness app	Series B	\$18.0	N/A
Rimsys	Healthtech and wellness	Series A	\$15.9	\$35.8
Open	Online and in-person meditation, exercise, and wellness studio	Series A	\$9.0	N/A
Marley Medical	Virtual blood pressure monitoring platform	Seed	\$9.0	\$29.0
Eearable	In-ear sleep monitoring and improvement system	Seed	\$8.0	\$15.0
Mindhouse	Meditation and lifestyle wellness app	Early-stage VC	\$6.0	\$24.1
Phrase health	EHR data analytics and optimization platform	Seed	\$3.0	\$13.0

Source: PitchBook | Geography: Global | *As of December 31, 2021



Other notable activity

Communications and collaboration: The pandemic has been an important catalyst for the development of technologies that help people and businesses communicate and collaborate. This segment of ETI deal activity experienced substantial rounds in Q4, including \$275 million for team workspace platform Notion, which drove the startup to achieve a \$10 billion valuation. Other notable deals include virtual community platform Gather, which raised a \$50 million Series B, and a \$33 million Series A for **Cord**, which provides APIs that make it easy to add interactive and collaborative features to existing software products. Startups also raised funding to develop vertical-specific collaboration tools, including **CurrentCAD** for design engineering and Flux for electrical engineering.

Urban air mobility: China-based electric carmaker **Xpeng** raised a \$500 million Series A to fund its internal startup, HT Aero, which seeks to develop urban air taxis and flying cars. Prototypes are expected to be ready in 2024, but there is no timeline for a full launch. While electric aircraft technology has made significant strides in recent years, regulations remain critical hurdles to adoption.

Space tech: The space tech industry has only attracted four ETI deals in the last year, with the largest occurring in Q4 2021 for **ABL Space Systems**, which raised a \$370 million Series B and achieved a \$2.4 billion valuation. The company is developing a rocket system that can launch small payloads, such as satellites, at a lower cost (\$12 million) with more frequency than larger rockets. The company has already signed deals from customers including Lockheed Martin. ABL's subsequent test launch in January 2022 resulted in a crash of its experimental rocket.



OTHER NOTABLE ACTIVITY

Figure 25.
Q4 2021 ETI deal activity by market segment

MARKET SEGMENT	DEAL VALUE (\$M)*	DEAL COUNT*
Web3 & DeFi	\$2,350.7	26
Fintech	\$824.4	23
Health & wellness tech	\$793.4	21
Foodtech	\$652.3	5
Proptech	\$581.7	9
Mobility tech	\$535.7	3
Supply chain tech	\$500.2	9
Communication & collaboration	\$471.5	10
Enterprise SaaS	\$459.9	18
Infosec	\$455.1	11
Space tech	\$370.1	1
DevOps	\$351.9	15
Data tech	\$281.0	7
AI & ML	\$241.5	4
Biotech	\$237.9	3
Media & events	\$181.8	4

Source: PitchBook | Geography: Global | *As of December 31, 2021

MARKET SEGMENT	DEAL VALUE (\$M)*	DEAL COUNT*
Gaming	\$164.9	13
E-commerce	\$152.3	11
Services	\$135.0	1
Insurtech	\$110.8	4
IoT	\$101.6	1
Legaltech	\$68.6	4
Climate tech	\$60.4	3
Consumer	\$50.6	3
Industrial tech	\$33.0	3
Agtech	\$20.0	1
Adtech & martech	\$18.8	2
Edtech	\$16.6	1
Social	\$13.9	4
Stealth	\$3.5	1

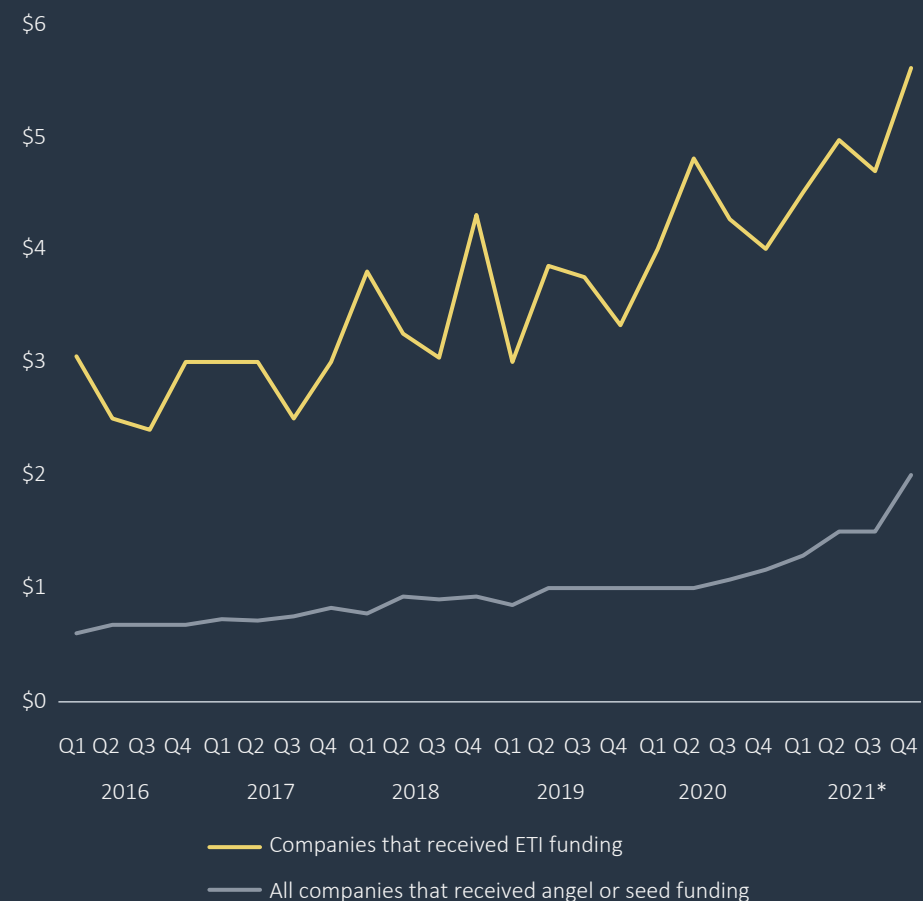
Source: PitchBook | Geography: Global | *As of December 31, 2021



Venture activity summary

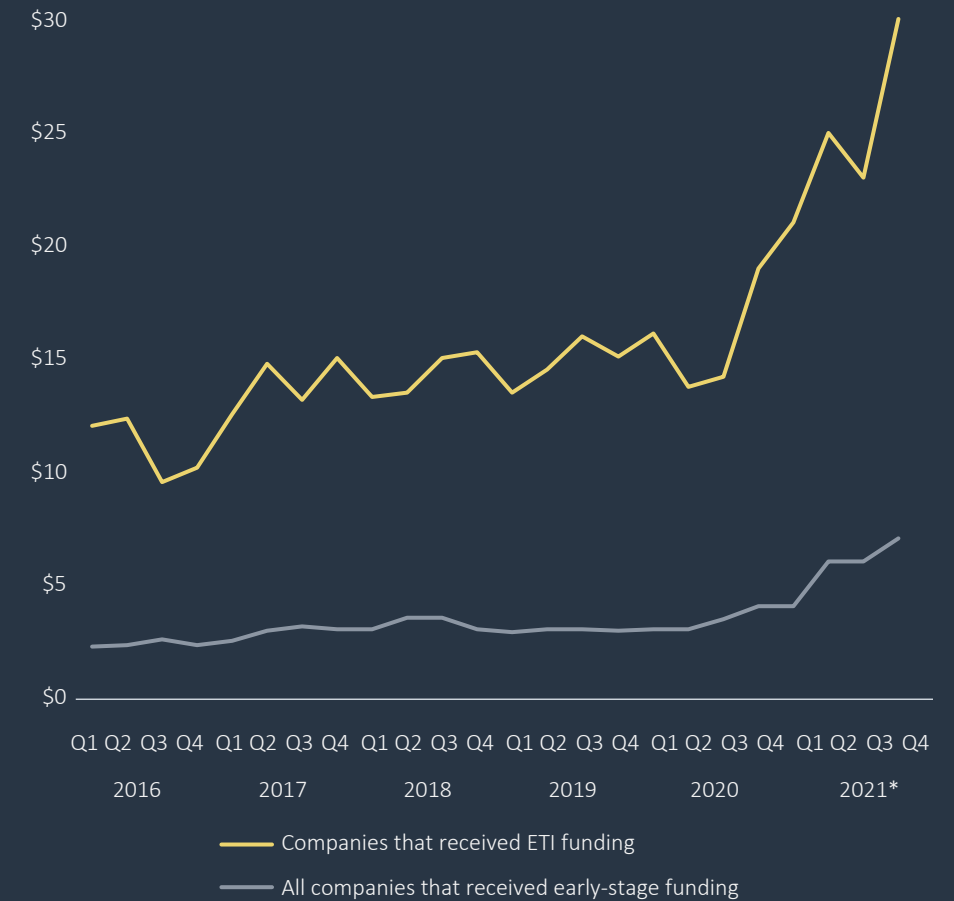
Median ETI deal sizes have steadily increased in recent years across both the angel & seed and early stages, a reflection of steady VC industry growth, rising valuations, and a generally founder-friendly environment. The median angel & seed deal size hit \$5.6 million in Q4 2021, up from Q3's \$4.7 million and the highest we have tracked, while the median early-stage deal hit \$30 million, up from Q3's \$23 million and notching another record. ETI deal sizes tend to run 3x to 5x larger than medians across the entire VC industry (with the gap expanding in recent years), which likely reflects several factors including the tendency for our ETI investor cohort to be

Figure 26. MEDIAN ANGEL & SEED ETI DEAL VALUE (\$M)



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 27. MEDIAN EARLY-STAGE ETI DEAL VALUE (\$M)



Source: PitchBook | Geography: Global | *As of December 31, 2021



VENTURE ACTIVITY SUMMARY

larger, multistage investors; their ability to obtain larger stakes in startups; and the higher likelihood of co-investment, which usually implies larger potential rounds. Early-stage startups are also seeking capital at more mature stages relative to several years ago, increasing their ability to raise larger rounds.

See the Q4 2021 Venture Monitor [here](#).



Figure 28. MEDIAN ANGEL & SEED ETI PRE-MONEY VALUATIONS (\$M)



Source: PitchBook | Geography: Global | *As of December 31, 2021

Figure 29. MEDIAN EARLY-STAGE ETI PRE-MONEY VALUATIONS (\$M)



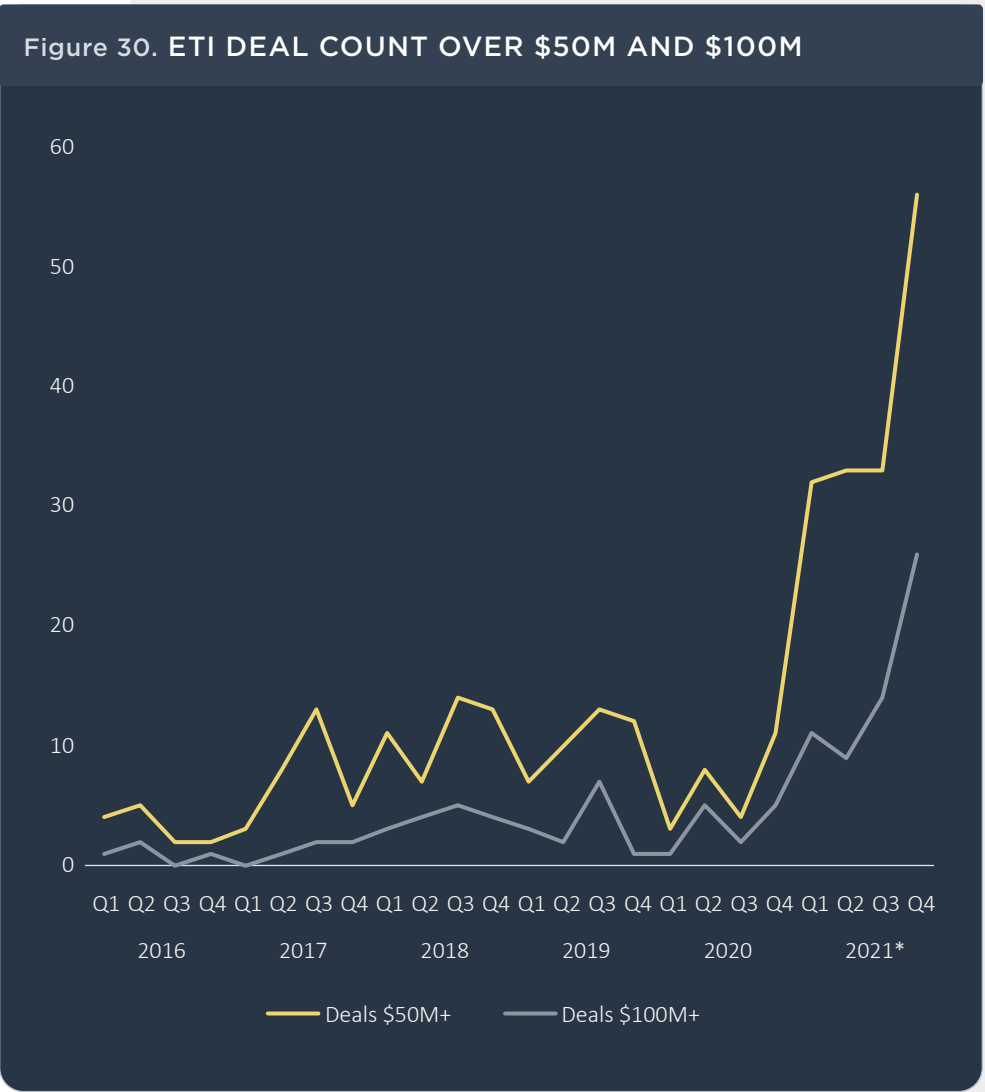
Source: PitchBook | Geography: Global | *As of December 31, 2021



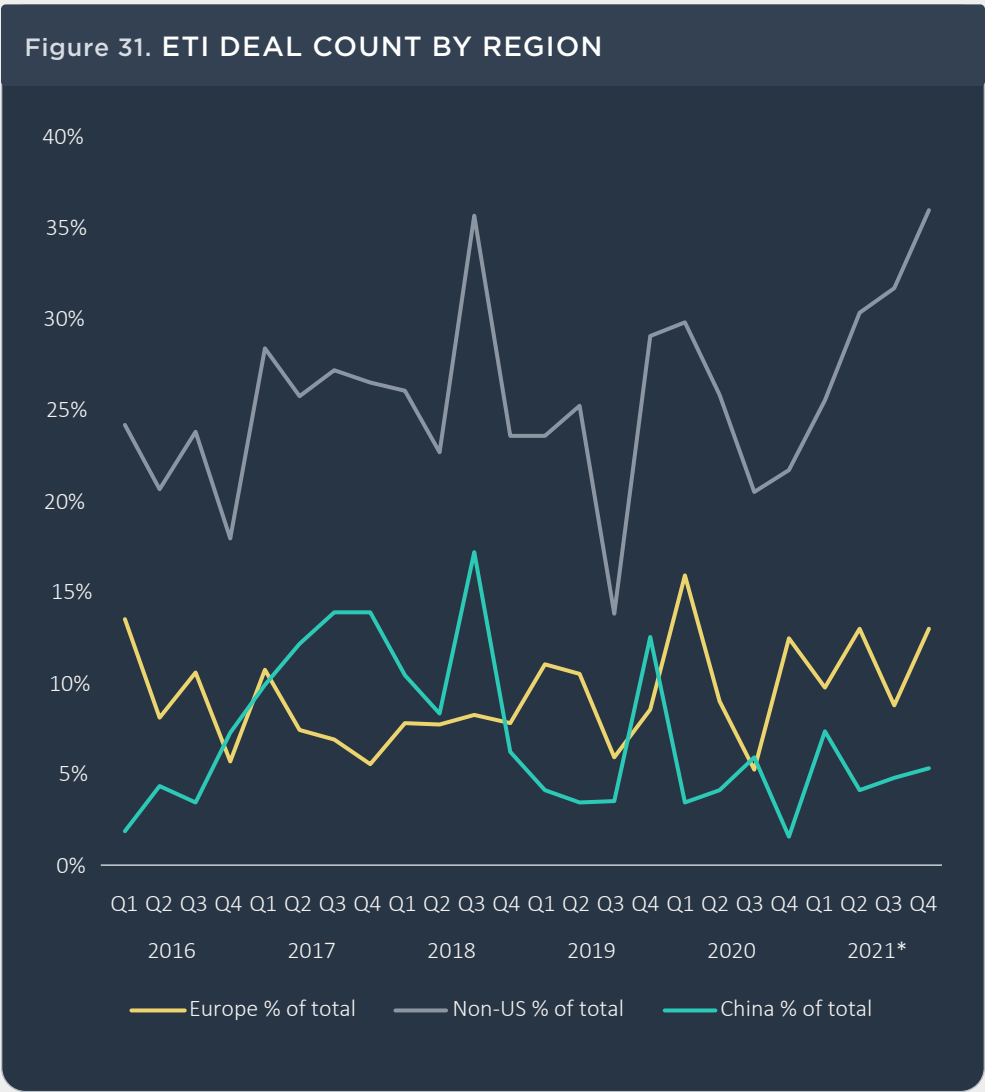
VENTURE ACTIVITY SUMMARY

Q4 saw 56 ETI deals over \$50 million (up from Q3's 33) and 26 over \$100 million (up from Q3's 14). Deal sizes remained well above historical averages and reflect generally rising pre-money valuations and deal sizes.

Non-US deals represented 36% of the total, well above the historical average of 25% and up from Q3's 32%. Europe represented 13% of total deals and China represented 5%, as VC activity in the latter remained stable despite government crackdowns on the tech industry.



Source: PitchBook | Geography: Global | *As of December 31, 2021



Source: PitchBook | Geography: Global | *As of December 31, 2021



Emerging tech indicator investor ranking

Purpose:

We seek to identify leading venture capital firms based on combining their performance on three factors related to their investment history. The ranking attempts to reward firms with a strong track record across the three factors, while still allowing for firms with a shorter history to be surfaced as well.

Factors:

Exit percentage

- Ratio of successful exits to the total number of exit opportunities.
- Investments must be at least five years old OR have an exit to qualify as an exit opportunity.
 - The five-year threshold is present to allow for investments to sufficiently move toward an exit event. For example, it would be unfair to include a deal done one month ago as a “failed” exit opportunity, when the company has had no reasonable time to reach an exit event.
- Investor must have at least 15 exit opportunities to be included.

Follow-on percentage

- Ratio of the count of companies which raise a subsequent round of funding after a round which the investor led, over the number of opportunities.
- Only investments which are at least two years old or have a follow-on are included as follow-on opportunities.
 - The two-year threshold is present to allow companies sufficient time to raise a subsequent round of funding.

- Companies which exit immediately after an investor-led round are not included in this metric (numerator or denominator).
- Investor must have at least 15 follow-on opportunities to be included.

Average CAGR of valuation change between rounds

- Average annualized valuation step-up (post-money to pre-money) between investor-led round, and the following round.
- Must be at least one year in between the rounds.
 - This avoids massive CAGRs that result from very short periods between funding rounds.
- Investor must have at least 15 follow-on opportunities, with the necessary valuation information, to be included.

Score weighting:

Each of the above factors is weighted by multiplying the value (that is, percentage of successful exits) by the cubed root of the count of values present for that factor. This allows for investors with a long track record of success to be rewarded, while dampening the effect of the sample size to the point where investors with a short track record can be surfaced.

After each factor is weighted, we apply a cumulative distribution function to each factor in isolation, where each investor’s score is ranked 0-1 relative to the weighted scores of the other qualifying investors.

The final composite score is then calculated by taking the geometric mean of the resultant ranking for each factor.



About PitchBook Emerging Tech Research

Independent, objective, and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors and companies driving the asset class.

Our Emerging Tech Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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