

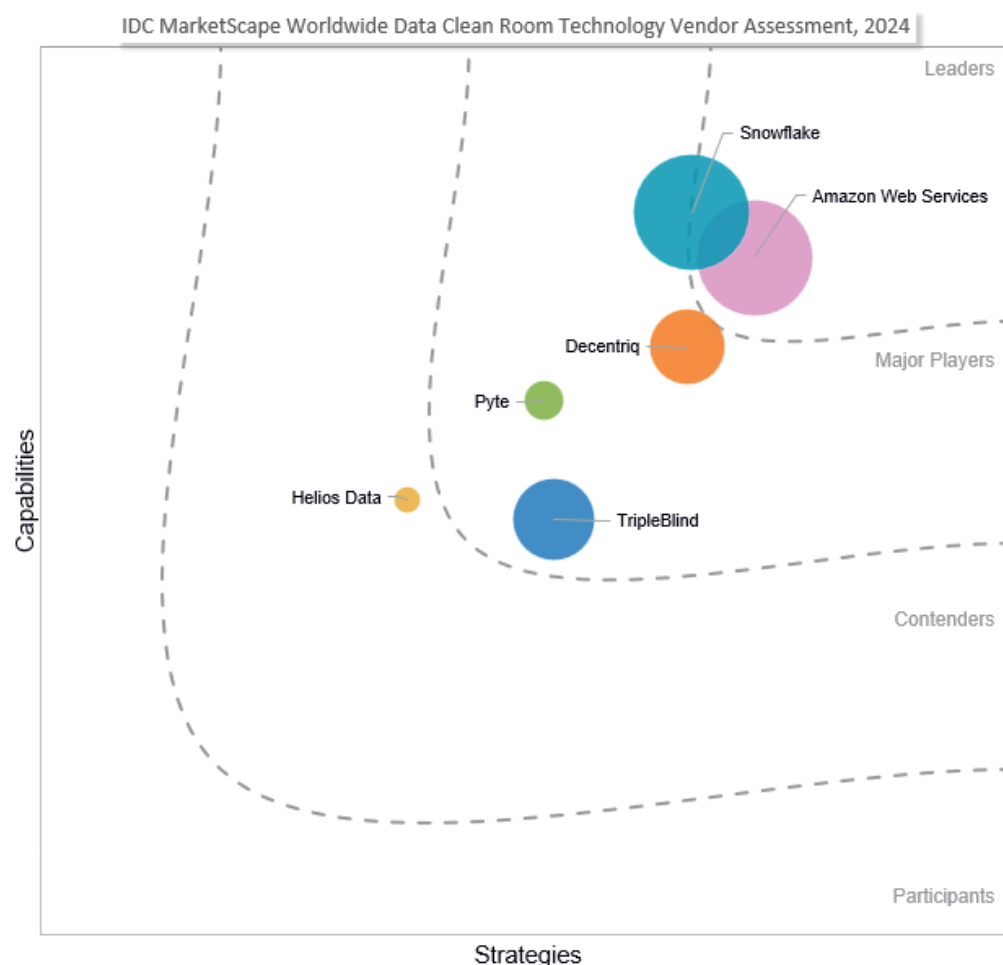
IDC MarketScape: Worldwide Data Clean Room Technology 2024 Vendor Assessment

Lynne Schneider

THIS IDC MARKETSCAPE EXCERPT FEATURES AMAZON
IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Data Clean Room Technology Vendor Assessment



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Data Clean Room Technology 2024 Vendor Assessment (Doc # US51607923e). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Information sharing is key to success in today's highly analytical environment. Data can lead to insight, but at the same time, enterprises need to be vigilant about who has access to their data and what they are able to do with that data. The use cases enabled by data sharing are quite broad. It can be difficult for enterprises to reach the proper balance between collaboration and conservative protection on data. The concept – that there should be a privacy-protected environment where multiple parties in a merger and acquisition deal, drug development, healthcare improvement, fraud investigation and prevention, advertising, marketing and more can come together to safely collaborate with their customer/patient and property-derived data – is not new. What is new is:

- The burning platform – prior ways of identifying web, app, phone, and physical traffic being replaced
- Replacement of trusted intermediary with trusted technology solution
- Utilizing technology to replace a trust-but-verify audit motion when it comes to the use of personally identifiable or sensitive data

Enterprises want to engage in data sharing but need special technologies to protect privacy and trade secrets and ensure trust between parties. Data clean rooms allow collaboration and matching of data while preserving privacy and ownership. They can de-risk the practice of data collaboration and exposure of customer information or trade secrets and permit insights not previously possible.

Industries and use cases are in varying stages of maturity. The most mature set of use cases for this relatively new technology addresses common consumer data transformation and analytics, including data enrichment, audience creation, activation, and measurement. Possibilities in healthcare and life sciences are in their early stages to maintain the privacy of each enterprise's knowledge assets – the solutions need to address the data collaboration life cycle from making the data accessible to the data clean room environment to quality checks and transformation through queries and analysis to ultimately purging of this data where it has been retained.

Data clean room technologies add to the technology portfolio without necessarily taking something away, so buyers are trying to minimize the amount of data duplication and movement that is necessary for data collaboration. The setup requires expertise in data privacy, security, and data analytics, so organizations without the necessary expertise may struggle on the technical side to get proper data governance in place to avoid confusion, data misuse, and/or disputes. These can be avoided with planning on the part of the buyer because once the guidance exists, the rules can be built into the collaboration agreements within the software.

The methods for maintaining privacy and security vary across the landscape today. There's currently variance in the need or ability to replicate data, where the data is housed, how queries are constructed and monitored, and what types of outputs can be distributed. However, all of these technologies allow collaboration with control.

Whether in a simple partnership between two entities or a wide-ranging industry ecosystem, a data clean room technology can be deployed to allow data to be used for shared – or unique – insights where each party involved has control over what data is accessed, who can access the data, and how that data can be used.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

To be considered a data clean room technology in this IDC MarketScape, the technology needs to facilitate the combining of multiple parties' private data and may include the option to add third-party external data. The solution needs to be a technology solution rather than services provided by an agency or other third party.

Vendors that qualify for inclusion in this IDC MarketScape must meet the following criteria:

- Has data clean room technology available to the public as of 4Q23 (not private preview)
- Allows data collaboration for two or more parties while preserving aspects of privacy of the data and/or algorithms contributed by the parties
- Does not require users to purchase specific hardware for privacy functions (may offer this as an option)
- Does not require users to encrypt data prior to making it accessible to the data clean room technology (may offer this as an option)
- Does not have a data clean room space, where one entity is offering data clean room function but only with its private data

Vendors included in this IDC MarketScape support use cases across multiple industries.

ADVICE FOR TECHNOLOGY BUYERS

Data clean room technologies are a relatively new component in many enterprises' data exchange, collaboration, and governance data analytics technology portfolios. They represent an opportunity to create better data-informed processes and a new frontier for collaboration that can unlock additional value more swiftly and securely than in the past.

Vendors included in this study range from start-ups to some that have been in business for decades. However, all of the data clean room technologies have existed in their current form for little more than five years. Each vendor and product have unique origins based on vendor legacy, regardless of the vendor being a market incumbent or a young company.

To ensure the best fit, prospective buyers should start by assessing both their specific business and technical operating environments and objectives. Regulatory as well as enterprise ethical guidance on the approach to privacy and confidentiality should also be assessed in this phase. Specific criteria might come from the detailed criteria in IDC's analysis shown in Tables 1 and 2 in the Strategies and Capabilities Criteria section of the Appendix.

Unique dynamics of the market today that should inform technology buyers include the following:

- **Data clean room technologies are in a period of rapid enhancement.** Most of the technologies covered in this study are releasing enhancements each month. It is important to evaluate the

technologies available at the time your enterprise is ready and not rely too much on prior evaluations.

- **Collaboration and partnership are central to success.** This is not just with the planned data collaborators; it extends to the technology vendor team as well. IDC asked current buyers of data clean room technology how well the vendor's vision fit with their own and how much of the technology road map is being built out by the vendor suggesting new functionality versus the technology buyer approaching the vendor with needs. Customers do not always need to be led, but they do need to be listened to.
- **Data scientists may use a clean room differently from other stakeholders.** Emergent use cases are well served by having robust data science tools available and are less likely to have prebuilt queries, dashboards, or visualizations out of the box. At this point, there are not many out-of-the-box analytics for use cases beyond advertising and marketing. It will be important to select a solution that matches your enterprise's target audiences and be prepared to provide guidance to less technical users.
- **Non-technological issues should not be underestimated.** Both vendors and end users told IDC that the factors that extended the time frame from selection to first proof-of-concept deployment centered around concerns from legal departments and business partners and getting agreement in place between the focus customer (orchestrator of the collaboration) and the other data contributors. All the technologies were relatively simple to get installed; the rules, agreements, and human change management took up the bulk of the timeline.
- **Technical and specific use-case needs are not a popularity contest.** While being listed in the Leaders category or gaining significant market traction might suggest superiority across the board, other considerations may rise to the top when considering collaboration. For example, if your planned data collaborators are already using a data clean room technology (or multiple technologies), it will be a higher threshold to get them to consider an additional data clean room technology.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

Amazon Web Services

Amazon Web Services is positioned as a Leader in this 2024 IDC MarketScape for worldwide data clean room technology.

AWS Clean Rooms is the data clean room technology of Amazon Web Services. This service was first announced in November of 2022 and became generally available in March 2023. The functionality is available from the AWS console, AWS APIs, or software development kit (SDK).

AWS Clean Rooms helps customers and their partners securely collaborate and analyze their collective data sets without sharing or copying the underlying data. To utilize AWS Clean Rooms, the collaborating parties need to have their data in the AWS cloud or replicate it there. Pseudonymization and hashing are available through Cryptographic Computing for Clean Rooms, AWS Glue, and Amazon Athena. AWS Clean Rooms ML and AWS Clean Rooms Differential Privacy are in preview as of the publication of this study (January 2024).

AWS Clean Rooms offers a variety of query tools, including low-code and no-code query building. Query libraries are available from third parties.

Amazon can provide case studies across a variety of industries, including the company's own experience utilizing AWS Clean Rooms for Amazon Ads. The company facilitates a broad range of communities, from end users to developers to partners.

Quick facts about Amazon include:

- **Financial structure:** A public company traded on the Nasdaq
- **Globalization of solution:** Partnerships globally (except China), available in most major global geographies, software support assistance in multiple languages
- **Top use cases/industries:** Advertising, publishing, healthcare, financial services, travel and hospitality, and other services
- **Pricing:** Pay-as-you-go consumption priced with a per-product, model, or segment usage (e.g., queries, trained models, and lookalike segments)

Strengths

- Foundational data clean room capabilities that can be used alone or in combination with other data clean room solutions
- A variety of privacy options
- A broad set of partners in terms of both third-party data and application development

Challenges

- Collaborators must have their data accessible to Amazon S3.
- AWS Clean Rooms functionality is increasing rapidly and may be difficult to assimilate as quickly as it evolves.

Consider Amazon Web Services When

Enterprises that already utilize AWS can benefit from data clean room technology that is accessible from their familiar console. The global coverage is extensive, as is the range of industries served. A proof-of-concept checklist and other tools are designed to get initial projects usable quickly. AWS Clean Rooms also offer the ability to white label a data clean room solution.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Enterprises want to engage in data sharing but need special technologies to protect privacy and trade secrets and ensure trust between parties. Data clean rooms allow collaboration and matching of data while preserving privacy and ownership. They can de-risk the practice of data collaboration and exposure of customer information or trade secrets and permit insights not previously possible.

To be considered a data clean room technology in IDC's study, the technology needs to facilitate the combining of multiple parties' private data and include the option to add third-party external data.

LEARN MORE

Related Research

- *IDC MarketScape: Worldwide Data Clean Room Technology for Advertising and Marketing Use Cases 2023-2024 Vendor Assessment* (IDC #US51047323, December 2023)
- *IDC FutureScape: Worldwide Future of Enterprise Intelligence 2024 Predictions* (IDC #US51293423, October 2023)
- *Shift Toward External Data: Collaboration Is the Name of the Game* (IDC #US5058322, April 2023)
- *Going Beyond 1:1 – The Case for Sharing Data in Industry Ecosystems* (IDC #US50504323, March 2023)
- *Data Clean Rooms: All Talk or Some Action?* (IDC #US49673722, September 2022)
- *IDC TechBrief: Data Clean Rooms for Shared Data and Insight* (IDC #US49486822, October 2022)

Synopsis

This IDC study evaluates data clean room technologies for any use case. Data clean room technologies help protect the privacy of data and the analyses that data collaborators utilize to gain insight. The promise is that enterprises can share and collaborate on data in a privacy-preserving way that can still provide valuable guidance. This software systematizes and subsumes prior services of data sharing from a practice that relies solely on trust and checking behavior against contracts and agreements to a solution that can facilitate simple and complex arrangements in a privacy-preserving manner technologically.

"Data clean rooms technologies provide important capabilities, not available with the simple exchange of data, that enterprises require to create shared data and insight across a broad set of use cases that previously had to be done either with less data or via a trusted neutral third party," said Lynne Schneider, research director of Data as a Service and Data Marketplaces at IDC. "In the face of increasing privacy regulation, technological changes, and advances in privacy-preserving computation, these solutions are moving from theory to something that is practical."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

Global Headquarters

140 Kendrick Street
Building B
Needham, MA 02494
USA
508.872.8200
Twitter: @IDC
blogs.idc.com
www.idc.com

Copyright and Trademark Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, and web conference and conference event proceedings. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/about/worldwideoffices. Please contact IDC report sales at +1.508.988.7988 or www.idc.com/?modal=contact_repsales for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or web rights.

Copyright 2024 IDC. Reproduction is forbidden unless authorized. All rights reserved.

