EDM Webinar 🖭







Building an External Data Hub







A conversation with



Mark Hookey Founder & CEO Demyst



Jim Halcomb Head of Product Management EDM Council











Today's speakers





Jim Halcomb Head of Product Management EDM Council





Mark Hookey Founder & CEO Demyst



Demyst

Enterprises are building powerful **Data Hubs**, however harnessing external data at scale is **hard**

The complex and often fractured dynamics of accessing and utilising external data leave valuable gains unrealised

Demyst is here to address this pain, providing the trust and ease of use that progressive enterprises demand

External data is painful EQUIFAX acxiem infutor (D experian QuickBooks. pipl EKOTO myob Many sources & formats Many use cases & end users **Ops friction & constraints Technology limitations** Low trust Inhibitive costs

External Data, Done Right



Drive your business with trusted external data, at scale

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Streamline connectivity ease discovery, testing and procurement cycles

Generate trust in external data address complex certification & governance challenges

Centralise external data ops

Create visibility, implement controls and optimise

Drive efficient utilisation

address deployment challenges, and reduce TCO

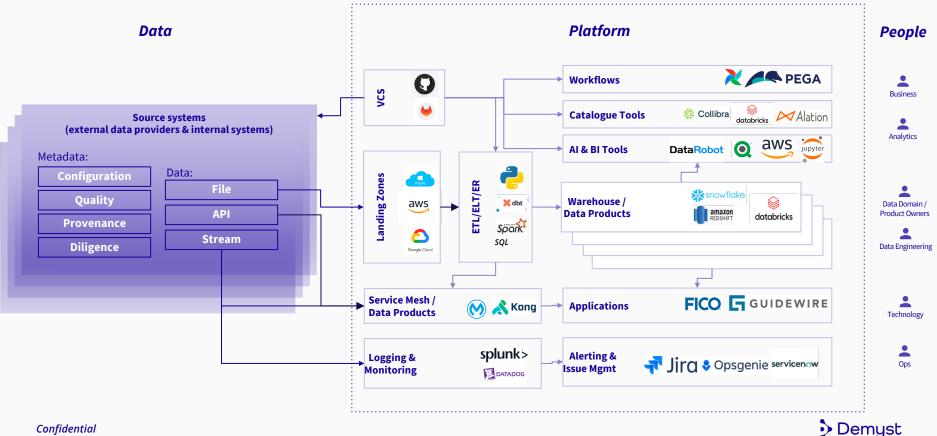
Dramatically improve ROI solve both operational and analytical use cases, at scale





- 1. Enterprise Data Hubs today
- 2. External Data Idiosyncrasies
- 3. How To
- 4. Q&A

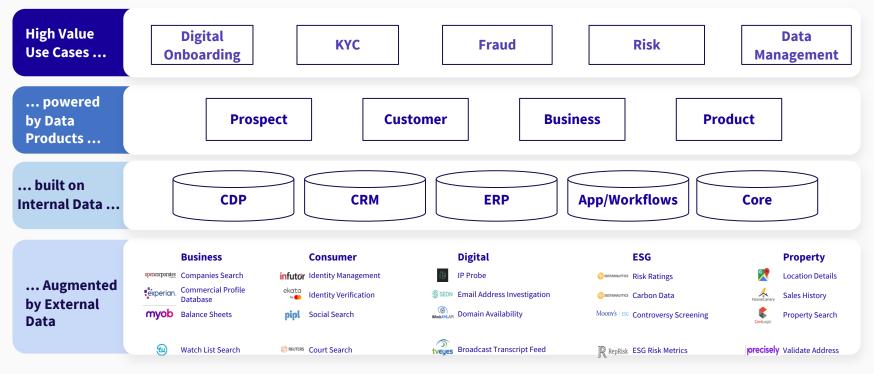
A typical target state enterprise data hub ...



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Financial services example





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> Enterprises are at varied stages in developing their Data Hubs

No hub

Frameworks

Core Data

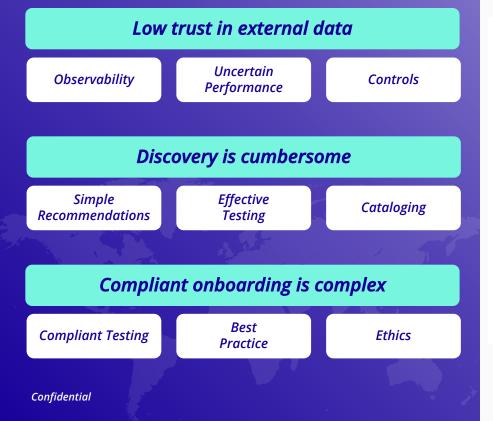
Expanding

Most data workflows are embedded within core applications and vendor solutions. Data governance, build, and decisions are largely federated A senior but constrained data team establishes, evangelizes, and enforces systems, standards, and frameworks for data governance; all actual build is largely federated Core tools such as warehouses/catalogues exist and are populated with the most important (mostly internal) data from core systems supporting analytics and reporting. Involvement of central team is mandatory New data is constantly being added and evangelized, and new capabilities to support all prod workflows are being added. Central teams are involved and accelerate use of high value trusted data across the enterprise. Risks are proactively managed without inhibiting value

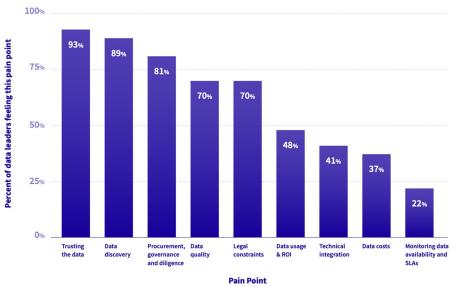
Poll: How mature is your Data Hub?



Key challenges with external data*



External Data Pain Points Distribution for Data Leaders



> Demyst 9

* Src : Demyst market research from over 100 data leaders

Low trust in external data



Data leaders must be able to answer the following questions to build trust

| Observability | Performance | Auditability and controls |
|-------------------------------|---------------------------------|---|
| ✓ What data are we buying? | ✓ What is this data's est. ROI? | Who is accessing each source? |
| What are our costs? | Is this source accurate? | Is access in line with policy & budget? |
| Is it being used effectively? | What happens if it goes down? | Have you implemented granular user access? |
| What is business critical? | How can we optimize it? | Was the data actually deleted? |

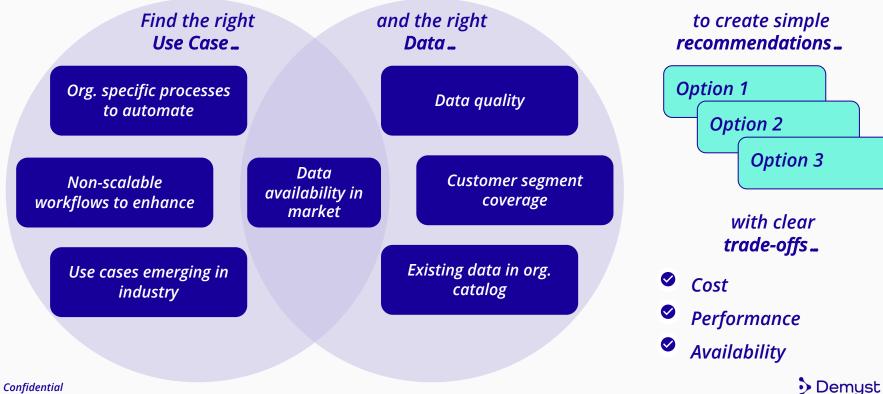
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Most Data Hubs don't support this capability



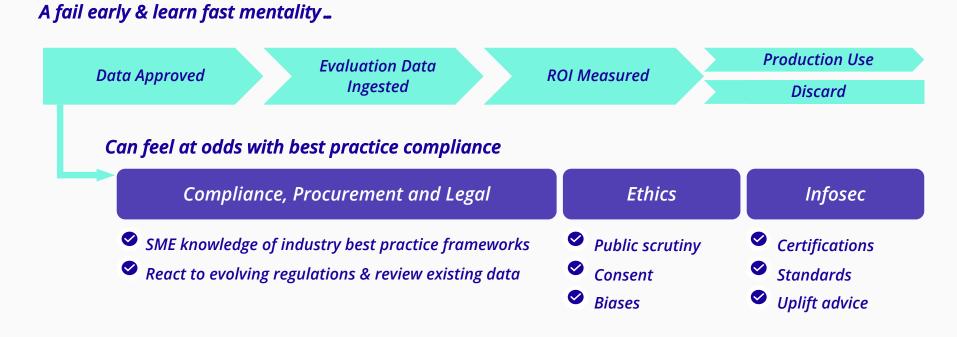
Discovery is cumbersome

89% of Data Leaders



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Catalogues are addressing this, but still not at scale



Compliant onboarding is complex

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Data Hub teams are heavily constrained in accelerating this process

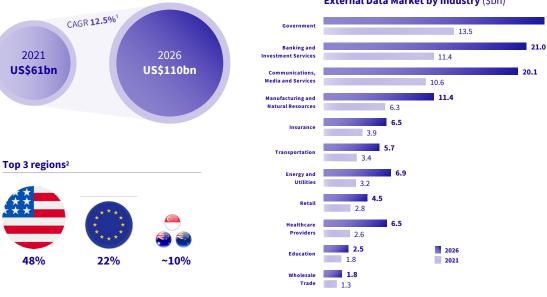
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81%

of Data Leaders

... in spite of this, the external data market will represent >\$110b in spend by 2026

Size and industry distribution of the market for External Data



External Data Market by Industry (\$bn)

Familiar industry themes

22.9

- Regulatory pressure and growing scrutiny on consumer privacy and data compliance is forcing adoption of new ways to manage data
- Data analytics & mobilization are driving and 11 accelerating business transformation and increasingly requiring new data sources
- Cloud adoption is accelerating due to scalability, cost efficiency and flexibility, increasing data consumption and connectivity options to new sources
- Dramatic growth in data volumes leading to ~ rapid growth in data providers, which in turn drives up buyer search costs for high value data
- Improved accessibility of data across **(...)** enterprises fuels appetite for External Data - e.g. CRMs, decision engines, BI platforms, data platforms and more
 - **Increased complexity** due to tightening regulations makes it uneconomical to build capabilities in-house / no competitive advantage to build in-house



Poll: What types of external data are centrally governed?



Oliscover

The explosion in data providers (thousands, with tens of thousands of products) requires a constant optimisation to stay competitive

| Bk Black Knight | | | | C | onsumer Cre | edit | Marketing | | | | Lx LexisNexis |
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| Wk Walkscore | BBB BBB | Co Companies House | Op OpenCNAM | | | Ft FactorTrust | | | | | |
| Ut UtilityScore | Du Duedil | GI Global Database | Муов | BI Bureau of Labor Stats | Census databases | Crime Statistics | Ns Neighborhood Statistics | Wc Weather and climate | In Infutor | Nm Nomino | Mb Microbilt |
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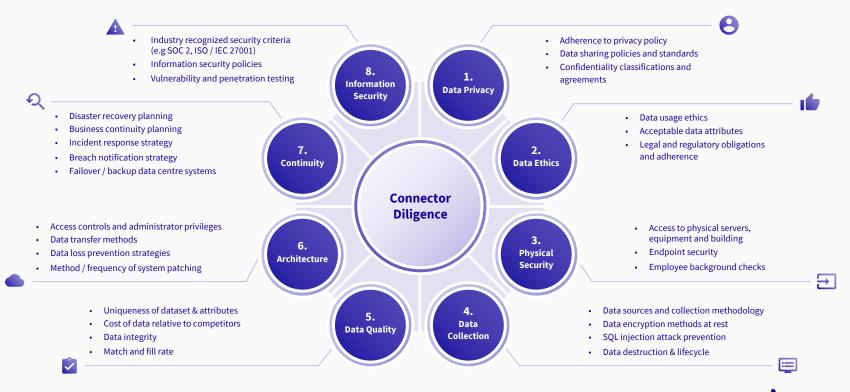


- Aligning external data scope requires ...
 - **1.** The right people :
 - 1. Data stewards / hunters owning data domains
 - 2. Tight partnership with "the business" and "use cases
 - 2. Clear priorities :
 - Education, awareness, brainstorming, and vendor / SME engagement
 - Internal awareness and alignment enabled by a robust catalogue
 - Clear top down strategic priorities
 - ... leading to a connector backlog



Govern

Enterprises need to agree clear standards tailored for external data that drive metadata requirements



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Ø Deploy

External data deployment requires careful consideration of provider fit, workflows and costs

| New connector onboarding (example) | Connector monitoring (examples) | | | | |
|---|--|--|--|--|--|
| 1. Find the right data from the broad and complex landscape | 13. Monitor and manage data provider performance | | | | |
| 2. Assess the data for compliance and governance | 14. Monitor and manage data quality and effectiveness | | | | |
| 3. Acquire sample data for evaluation purposes | | | | | |
| 4. Evaluate the data for fit and quality | 15. Monitor for problems, generate relevant alerts, and ensure | | | | |
| 5. Determine approach for useability in a Production solution | resolution of external data related issues | | | | |
| 6. Approve solution for Production usage | 16. Ongoing engineering support, maintenance, and uplift for | | | | |
| 7. Conduct compliance activities and procure the data | exterrnal data. | | | | |
| 8. Populate data catalogue with required metadata | 17. Monitor and manage ongoing legal and regulatory | | | | |
| 9. Engage data provider and conduct technical requirement gathering | compliance issues related to external data | | | | |
| 10. Construct pipelines (either API or Flat File) for repeatable ingestion to data hub landing zone | 18. Manage procurement, spend, and billing for all external data providers | | | | |
| 11. Transform and prepare data for consumption by target applications or to create a "data product" | 19. Ensure external data remains available and optimize usag of external data | | | | |
| 12. Connect the external data source to realtime microservices or directly into applications | 20. Scout for options to improve with new complementary connectors | | | | |





Across 100s of integrations, these are examples of common challenges of maintaining external data

Example upstream issues:

- Upstream data vendor changes
 - File / schema changes
 - New file(s) / new attribute(s)
 - Changes to file or attribute naming conventions
 - Changes to data formats e.g., DDMMYY to DDMMYYYY
 - Missing data, missing files, special characters
 - Changes to package mapping/ file nesting structure
 - Changes to transfer method e.g., IP address change for SFTP, or preference to use S3 rather than SFTP or Delta Sharing
 - SLA / uptime issues
 - Information security events
 - Data drift

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Example downstream issues:

- Downstream client system changes
 - New workflow creation (use cases (e.g. decision engine) or data systems (e.g. landing zones))
 - Expose datasets to multiple endpoints / formats
 - Changed client system requirements :
 - i. Frequency changes
 - ii. File schema changes
 - iii. New conversion requirements
 - iv. Encryption / masking / encoding requirements
 - v. New workflow creation (use cases (e.g. decision engine) or data systems (e.g. landing zones))

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• Updated POCs / analytics to continue to improve lift

How should I develop my external data hub (EDH)?

Discover

Which upstream connectors are used today? What's the roadmap? How are business analytics teams supported?



Govern

How are data governance objectives applied to external data? How are upstream connectors certified and maintained?

Deploy

What are the downstream deployment architectures supported? How does the team manage the deployment lifecycle?





Maintain

How are production data workflows maintained? Proactive optimization and reactive incident management?



> Follow-up research you will receive

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External Data Management - Applying the CDMC Framework

Decutive summary. This document is a response to the exceptional [CDICF transverse] and provides suggestions on ley apacts that are relevant to external data or cases. Broadly, the key takeways to that data lakets need to consider the risks, responsibilities and opportunities associated with harressing external data and, cross all apacts of the framework, how certaid data is necessarily a contrally managed function. Leading enterprises are, with the right investments and processes, establishing external data mail, and teams that finally as data doel data for the promise of value form external data.

By : Mark Hookey, CEO of Demyst

Data Management

What is "Data Management"? Most of my conversations are with data leaders in enterprises and in every conversation I learn about a different slant, it's a broad concept and can mean many things to different people.

Some talk about data management in the context of having clear ownership and accountability for data assets. Others speak tactically about the mechanics of how to get value from data. Others mention information security concerns and risk management. It is an emerging field and, in reality, data management mens all of the above and more.

The EDM Council produces an exceptional framework that covers the end to end of managing data.



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External Data Ops - Top 20 Best Practices

Many Demyst clients are embarking on a strategic program of change, involving many vedors and data products where the need for a central data op platform is clear. However, many clients are solving something much more tactical which involves deploying data from a single source. If they know the source already, if a not unusual that these clients will try to integrate directly, or use a general purpose API gateway for this integration. On the surface, it makes sense, why add an aggregator like Demyst in the middle? Why add an extra hop and potentially cost when the individual data vendor has a clean API?

It's byloaily not that simple. Many enterprises face unexpected delays integrating with and managing external data connectors, even if it's just one. Our mission utimately is to increase the compliant impactful use of external data in the ecosystem, whether on to via us. To that end, this document seeks to lay out the best practise of what enterprises need to manage for external data connectivity.

| Requirement | Reason | | | |
|---|---|--|--|--|
| 1. Define and confirm data suitability and quality | Confirm suitability for business use case Test integration approach and address teething issues | | | |
| 2. Defined types for input and output fields (automatic detection) | Accelerate integration Allow immediate detection and capture of data quality issues Allow for data errors to be handled in a consistent manner Support data governance requirements | | | |
| Optimized matching (entity resolution to maximize match rate and quality for entity lookup) | Maximize match rate Maximize quality Tackle fuzzy matching | | | |
| Allow for batch, streaming, and realtime operations within same interface | Rapid deployment and use Process batches for testing and reconciliation Take receipt of data for eventual copy and analytics within internal data lake Allow for retry / failover / replay Accelerated deployment between test / production for agile release schedules | | | |

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Extracting Business Value from

External Data in 2023

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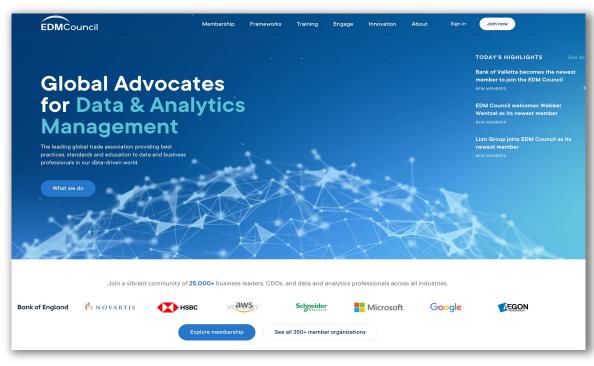
A global survey of 100+ Data, Technology and Business Leaders

Questions?

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Thank you!

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