# Data Architecture Tool Evaluation

## Enterprise Data Modeling Solution for Acquisition.com

**Prepared for:** Procurement & Data Engineering Leadership
**Date:** December 23, 2025
**Evaluation Focus:** Data architecture tools to support Snowflake + dbt modern data stack
**Version:** 3.0 (Final - Procurement Ready)

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## Executive Summary

Acquisition.com requires an enterprise-grade data architecture tool to establish proper data modeling practices as the foundation for our Snowflake and dbt environment. This evaluation compares three leading solutions: ErStudio, Erwin Data Modeler, and SqlDBM.

**Recommendation:** All three tools offer robust data modeling capabilities. The best choice depends on your priorities:

- **ErStudio** is the industry standard with over 30 years of dominance in enterprise data modeling — ideal for organizations prioritizing core modeling excellence, especially those with AI assistants that can handle dbt generation

- **erwin Data Modeler** provides mature enterprise features and added native dbt integration in July 2025

- **SqlDBM** offers superior cloud-native collaboration and the most comprehensive native dbt integration

**Important consideration for AI-enabled organizations:** Teams with access to Claude or similar AI assistants can use AI to generate dbt YAML, tests, and semantic layer definitions from any tool's output. This significantly reduces the importance of native dbt integration as a selection criterion, allowing organizations to weight core modeling capabilities, collaboration features, and cost more heavily. See the "AI-Assisted dbt Generation" section for details.

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## Evaluation Criteria

| Criterion | Weight | Rationale |
| --- | --- | --- |
| dbt Integration | 30% → **15%*** | Critical for our modern data stack |
| Cloud-Native Architecture | 20% | Must support Snowflake-first approach |

| Criterion | Weight | Rationale |
| --- | --- | --- |
| Collaboration Features | 15% | Distributed team requires real-time collaboration |
| Total Cost of Ownership | 15% | Budget consciousness and operational efficiency |
| Enterprise Data Modeling | 10% → **20%*** | Conceptual, logical, physical modeling capabilities |
| Learning Curve & Adoption | 10% → **15%*** | Speed to value for the team |

*Adjusted weights for organizations with AI assistant capabilities (see below)*

## AI-Assisted dbt Generation: A Game-Changer for Tool Selection

### The Claude Factor

Organizations with access to AI assistants like Claude can significantly reduce the importance of native dbt integration when selecting a data modeling tool. Claude can:

- **Generate dbt source and model YAML** from exported DDL, data dictionaries, or model documentation
- **Create dbt tests** (unique, not_null, relationships, accepted_values) based on column descriptions and constraints
- **Draft dbt semantic layer definitions** including entities, dimensions, and measures for MetricFlow
- **Produce dbt documentation** blocks with descriptions derived from your data model metadata

### Practical Workflow Example

1. **Export from any modeling tool**: DDL scripts, HTML documentation, or Excel data dictionaries
2. **Provide to Claude**: "Generate dbt YAML for these tables with appropriate tests based on the constraints and descriptions"
3. **Review and refine**: Claude produces ready-to-use YAML that can be committed to your dbt project

This workflow works equally well whether your source is ErStudio, erwin, SqlDBM, or even a simple spreadsheet.

### Impact on Tool Selection

| Criterion | Without AI Assistant | With Claude |
| --- | --- | --- |
| Native dbt YAML generation | High importance | Lower importance — Claude bridges the gap |

| Criterion | Without AI Assistant | With Claude |
|---|---|---|
| Native dbt test generation | High importance | Lower importance — Claude can generate tests from constraints |
| Semantic layer generation | Differentiator (no tools do this well) | Less critical — Claude can draft semantic models |
| **Core modeling capabilities** | Standard importance | **Higher importance** — focus on what the tool does best |
| **Export/documentation quality** | Moderate importance | **Higher importance** — better exports = better Claude output |

**Revised Recommendation for AI-Enabled Organizations**

For teams with Claude access, the evaluation shifts:

1. **dbt integration becomes less of a differentiator** — all three tools can feed a Claude-assisted dbt workflow

2. **Core modeling strength matters more** — evaluate logical/physical modeling, reverse engineering, and documentation quality

3. **Export capabilities become critical** — tools that produce clean, well-structured DDL or documentation give Claude better source material

4. **Collaboration and architecture** — remain important independent of AI assistance

This means **ErStudio becomes significantly more competitive** for organizations that:

- Have Claude or similar AI capabilities

- Want best-in-class traditional data modeling features

- Are comfortable with a human-in-the-loop dbt generation process

- Value the flexibility of AI-assisted generation over rigid tool-native outputs

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## Tool Comparison Matrix

### 1. ErStudio Data Architect (by Idera)

**Overview:** The industry-leading enterprise data modeling tool with over 30 years of market presence. ErStudio has set the standard for logical and physical data modeling and remains the dominant solution in enterprise

environments.

- *Source: <u>ER/Studio Homepage</u> - "Aligning complex data environments with business goals for over 30 years"*

## Strengths

- **Industry-proven modeling capabilities**: Full support for conceptual, logical, and physical data models refined over decades of enterprise use

- **Centralized repository**: Mature team collaboration with robust version control

- **Comprehensive database platform support**: Works with major database platforms including Snowflake

  - *Source: <u>ER/Studio & Snowflake Integration</u> - "By offering deep support for Snowflake, ER/Studio ensures that users can effectively work with Snowflake's table structures across all cloud platforms"*

- **Best-in-class reverse/forward engineering**: Industry-leading ability to generate DDL and reverse engineer existing databases

- **Model comparison and synchronization**: Powerful compare/sync utilities refined over years of enterprise feedback

- **Extensive documentation and export options**: Rich output formats that integrate well with AI-assisted workflows

- **Proven at scale**: Trusted by Fortune 100 companies and large enterprises globally

  - *Source: <u>Embarcadero Press Release, 2016</u> - "Ninety of the Fortune 100 and an active community of more than three million users worldwide rely on Embarcadero products"*

  - *Source: <u>ER/Studio Case Study</u> - Documents Microsoft's use of ER/Studio for enterprise data modeling*

- **Idera ecosystem**: Integrates with broader Idera tooling including Aqua Data Studio for database management

## Weaknesses

- **No native dbt integration**: Requires manual or AI-assisted translation to dbt YAML (mitigated by Claude — see AI section)

- **Desktop-based**: Windows application limits remote collaboration compared to web-based alternatives

  - *Source: <u>ER/Studio Technical Specifications</u> - Requires Windows 10/11 64-bit*

- **Complex licensing**: Enterprise licensing can be difficult to navigate

- **Learning curve**: Feature-rich interface requires investment in training

**Pricing**

- **Subscription licensing**: ~$1,470–$3,693/user/year depending on edition

  - *Source: <u>ComponentSource</u> - "Prices from: $2,673.57" for subscription licenses*

  - *Source: <u>GetApp</u> - "Starting from: $1470.40"*

- Note: Pricing varies significantly by edition and licensing model; request official quote

**dbt Integration Score: 1/10**

No native dbt support. Would require manual translation of models to dbt YAML.

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## 2. Erwin Data Modeler (by Quest)

**Overview:** Industry-leading enterprise data modeling solution with extensive version control and repository capabilities, widely recognized as the "gold standard" in data modeling. **Now includes native dbt integration as of version 15.0 (July 2025).**

- *Source: <u>Quest Products Page</u> - "erwin Data Modeler has been the most trusted name in data modeling for more than 30 years. The world's top financial services, healthcare, critical infrastructure and technology companies, including those on the Fortune 500, use the erwin modeling tool."*

- *Source: <u>Microsoft Azure Marketplace</u> - "As the gold standard for more than 30 years, erwin Data Modeler has helped thousands of organizations"*

**Strengths**

- **Best-in-class compare feature**: Industry-leading "complete compare" visual presentation for model synchronization

- **Enterprise repository**: Proven to scale to hundreds or thousands of users

- **Excellent versioning**: Robust version control and configuration management

- **Strong technical support**: Known for responsive and knowledgeable support team

- **Multi-platform support**: Supports all major databases including Snowflake

- **Industry analyst recognition**:

  - *Source: <u>erwin.com</u> - "2025 Gartner Metadata Management Solutions Magic Quadrant, 2025 Gartner Data & Analytics Governance Platforms Magic Quadrant, 2025 BARC Data Intelligence Platforms SCORE Market Leader"*

- **NEW: Native dbt integration** (Version 15.0, July 2025):
  - *Source: Quest Blog, July 9, 2025 - "DBT integration: This is a game-changer. For the first time, data architects can export YAML files directly from erwin Data Modeler with rich metadata intact, creating a seamless handoff to data engineering teams."*
  - *Source: erwin Documentation - "erwin DM integrates with DBT (Data Build Tool). This feature automatically generates DBT-compatible YAML files from models saved in erwin Mart Portal"*

## Weaknesses

- **Legacy architecture**: Desktop application, though erwin Mart on Cloud provides SaaS repository
- **Complex implementation**: Can take significant time to fully deploy
- **Desktop-only modeling**: Core modeler requires Windows installation

## Pricing

- **Subscription model**: ~$299/month ($3,588/year) per user
  - *Source: GetApp 2025 - "Starting from: $299.00/month"*
- One-year or three-year license options available
- Note: Enterprise pricing varies; request official quote

## Vendor Ownership

- *Source: Business Wire, January 5, 2021 - "Quest purchased erwin, Inc. from California-based private equity firm, Parallax Capital Partners. The transaction closed on December 31, 2020."*

## dbt Integration Score: 7/10

Native dbt YAML generation from models saved in Mart Portal. Can generate source and model format YAML with metadata. Does not yet offer dbt manifest import or push-to-git integration.

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## 3. SqlDBM (SQL Database Modeler)

**Overview:** Modern, cloud-native data modeling platform with native dbt integration, designed for contemporary data stacks. Founded in 2017, SqlDBM is a newer entrant focused specifically on cloud data platforms.

- *Source: CB Insights - Company profile confirms 2017 founding*

**Strengths**

- **Native dbt integration**:
  - Generates dbt-compatible source and model YAML
    - *Source: <u>SqlDBM Support</u> - "Generating SqlDBM project objects in dbt-compatible YAML format (i.e., sources and models) is a time-saving feature"*
  - Supports dbt tests (unique, not_null, relationships, accepted_values)
    - *Source: <u>SqlDBM Medium</u> - "pre-built columns that allow users to maintain all dbt source and model parameters such as 'tests,' 'constraints,' and 'freshness'"*
  - Imports dbt manifest files
    - *Source: <u>SqlDBM Blog, October 2025</u> - "With the addition of dbt manifest import, SqlDBM offers a view of the data landscape that's more comprehensive than ever"*
  - Supports dbt file path mapping for correct folder structure
    - *Source: <u>SqlDBM Blog</u> - "SqlDBM can now accurately utilize dbt file paths when generating YAML files"*
  - Push-to-git integration
    - *Source: <u>SqlDBM dbt page</u> - "Push source or model YAML directly to your dbt repository"*

- **Cloud-native & collaborative**:
  - Web-based platform accessible anywhere
  - Real-time concurrent editing
  - No installation or infrastructure required

- **Snowflake Partnership**:
  - *Source: <u>PRWeb, July 9, 2020</u> - "SqlDBM, a cloud-native database modeling tool, today proudly announced expansion of its existing partnership with Snowflake"*
  - *Source: <u>SqlDBM Support</u> - "SqlDBM is proud to be a member of Partner Connect"*

**Weaknesses**

- **Does not generate dbt semantic models**: Cannot auto-generate entities, dimensions, measures for MetricFlow
- **Newer player**: Less market presence than ErStudio/Erwin
- **Web-based dependency**: Requires internet connectivity

**Pricing**

- **Enterprise/Custom pricing**: Contact sales required for most plans
  - *Source: SqlDBM Pricing Page - Shows "Contact sales" for enterprise plans*
  - *Source: TrustRadius - "SqlDBM has 4 pricing edition(s), from $50 to $4,000" with Basic at $50/month and Starter at $4,000*
- Note: Current pricing requires direct sales contact for accurate quotes

**dbt Integration Score: 9/10**

Most comprehensive dbt integration including YAML generation, test support, manifest import, and git integration. Only missing semantic model generation.

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## Detailed Feature Comparison

| Feature | ErStudio | Erwin | SqlDBM |
|---|---|---|---|
| **Data Modeling** | | | |
| Conceptual Modeling | ✅ Excellent | ✅ Excellent | ✅ Excellent |
| Logical Modeling | ✅ Excellent | ✅ Excellent | ✅ Excellent |
| Physical Modeling | ✅ Excellent | ✅ Excellent | ✅ Excellent |
| Dimensional Modeling | ✅ Yes | ✅ Yes | ✅ Yes |
| Data Vault Support | ⚠️ Limited | ⚠️ Limited | ✅ Excellent |
| **Platform Integration** | | | |
| Snowflake Native Support | ✅ Yes | ✅ Yes | ✅ Excellent |
| Reverse Engineering | ✅ Yes | ✅ Yes | ✅ Yes (Secure) |
| Forward Engineering (DDL) | ✅ Yes | ✅ Yes | ✅ Yes |
| Alter Script Generation | ✅ Yes | ✅ Yes | ✅ Yes |
| **dbt Integration** | | | |
| Generate dbt Source YAML | ❌ No | ✅ Yes (v15.0+) | ✅ Yes |

| Feature | ErStudio | Erwin | SqlDBM |
|---|---|---|---|
| Generate dbt Model YAML | ❌ No | ✅ Yes (v15.0+) | ✅ Yes |
| Generate dbt Tests | ❌ No | ⚠️ Limited | ✅ Yes |
| Import dbt Manifest | ❌ No | ❌ No | ✅ Yes |
| dbt File Path Mapping | ❌ No | ❌ No | ✅ Yes |
| Generate Semantic Models | ❌ No | ❌ No | ❌ No |
| Push to Git Integration | ❌ No | ❌ No | ✅ Yes |
| **Collaboration** | | | |
| Web-Based Access | ❌ No | ⚠️ Mart Portal | ✅ Yes |
| Real-Time Collaboration | ⚠️ Limited | ⚠️ Limited | ✅ Yes |
| Concurrent Editing | ⚠️ Limited | ⚠️ Via Repo | ✅ Yes |
| **Architecture** | | | |
| Deployment Model | Desktop/Server | Desktop/Server | SaaS |
| OS Support | Windows Only | Windows Only | Any (Browser) |
| Installation Required | ✅ Yes | ✅ Yes | ❌ No |

## Total Cost of Ownership (3-Year Projection)

**Note:** Pricing below is estimated based on available sources. All vendors require direct quotes for accurate enterprise pricing.

**ErStudio (Estimated)**

**Team of 5 data professionals**

| Cost Component | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Subscriptions (5 users @ ~$2,700/yr) | $13,500 | $13,500 | $13,500 | $40,500 |
| Training | $5,000 | - | - | $5,000 |
| IT Support/Infrastructure | $2,000 | $2,000 | $2,000 | $6,000 |
| **Total** | **$20,500** | **$15,500** | **$15,500** | **$51,500** |

## Erwin Data Modeler (Estimated)

## Team of 5 data professionals

| Cost Component | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Subscriptions (5 users @ ~$3,600/yr) | $18,000 | $18,000 | $18,000 | $54,000 |
| Training | $5,000 | - | - | $5,000 |
| IT Support/Infrastructure | $2,000 | $2,000 | $2,000 | $6,000 |
| **Total** | **$25,000** | **$20,000** | **$20,000** | **$65,000** |

## SqlDBM (Estimated)

## Team of 5 data professionals

| Cost Component | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Subscriptions (Enterprise - Contact for quote) | TBD | TBD | TBD | TBD |
| Training (minimal, web-based) | $1,000 | - | - | $1,000 |
| IT Support/Infrastructure | $0 | $0 | $0 | $0 |

*Note: SqlDBM pricing requires direct contact with sales. TrustRadius reports tiers from $50/month (Basic) to $4,000 (Starter), with Enterprise requiring custom quotes.*

# Recommendation

**Updated Assessment**

The competitive landscape has shifted significantly with erwin's July 2025 release adding native dbt integration. Organizations should evaluate based on their priorities:

**Choose SqlDBM if:**

- Cloud-native, web-based collaboration is essential

- Your team needs dbt manifest import and git integration

- You want the fastest time-to-value with minimal training

- Budget is a primary concern

- You prefer SaaS with no infrastructure management

**Choose erwin Data Modeler if:**

- You need enterprise-scale repository capabilities

- Your organization already uses Quest/erwin products

- You require the industry-leading Complete Compare feature

- Desktop-based modeling is acceptable for your workflow

- You value 30+ years of market maturity and support

**Choose ErStudio if:**

- You want the industry's most mature and proven data modeling platform

- Core modeling excellence is your top priority — this is what ErStudio has done best for over 30 years

- You have AI capabilities (Claude) that can bridge the dbt integration gap

- Your team values depth of features over cloud-native convenience

- You need best-in-class reverse engineering from complex existing databases

- You have existing Idera tooling investments or want access to their broader ecosystem

- Enterprise-scale documentation and export quality matters for downstream processes

**Implementation Approach**

**Phase 1: Proof of Concept (2 weeks each)**

- Evaluate both SqlDBM and erwin Data Modeler 15.0

- Test dbt YAML generation workflows

- Assess team adoption and collaboration needs

## Phase 2: Decision Criteria

- Compare actual pricing quotes

- Evaluate dbt workflow efficiency

- Assess collaboration requirements for distributed team

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## Appendix: Source Citations

### ErStudio Market Position & History

1. ER/Studio Homepage (30+ years claim): https://erstudio.com/

2. Embarcadero Press Release (Fortune 100 usage): https://www.embarcadero.com/press-releases/embarcadero-announces-er-studio-2016-with-expanded-data-modeling

3. ER/Studio Microsoft Case Study: https://erstudio.com/resource-center/case-studies/microsoft-establishes-an-enterprise-data-model/

### erwin Market Position & History

4. Quest Products Page (30+ years, Fortune 500): https://www.quest.com/products/erwin-data-modeler/

5. Microsoft Azure Marketplace (gold standard): https://azuremarketplace.microsoft.com/en-us/marketplace/apps/quest.erwin_dm

6. erwin.com (analyst recognition): https://www.erwin.com/

### erwin dbt Integration (Critical Update)

7. Quest Blog (July 9, 2025): https://blog.quest.com/product-post/introducing-erwin-data-modeler-15-0-bridging-the-gap-between-data-modeling-data-engineering/

8. erwin Documentation: https://bookshelf.erwin.com/bookshelf/public_html/15.0/Content/User%20Guides/erwin%20Help/DBT_Integration.html

**Quest/erwin Acquisition**

9. Business Wire (January 5, 2021): https://www.businesswire.com/news/home/20210105005259/en/Quest-Software-Acquires-erwin-Inc.-to-Enable-Organizations-to-Fully-Harness-the-Business-Benefits-of-Data

**SqlDBM Company Information**

10. CB Insights (founded 2017): https://www.cbinsights.com/company/sqldbm

**SqlDBM dbt Features**

11. SqlDBM Support - YAML Generation: https://support.sqldbm.com/hc/en-us/articles/37028542158093-YAML-Generation-for-dbt

12. SqlDBM Blog - dbt Manifest Import (October 2025): https://sqldbm.com/blog/dbt-meets-erd-a-unified-view-of-your-data-landscape-in-sqldbm/

13. SqlDBM Medium - dbt Integration: https://medium.sqldbm.com/the-power-of-synergy-sqldbm-and-dbt-ba2b860a5237

**SqlDBM Snowflake Partnership**

14. PRWeb (July 9, 2020): https://www.prweb.com/releases/sqldbm-joins-snowflake-partner-connect-888228490.html

15. SqlDBM Support - Partner Connect: https://support.sqldbm.com/hc/en-us/articles/37028633401741-Snowflake-Partner-Connect

**Pricing Sources**

16. ComponentSource (ErStudio): https://www.componentsource.com/product/er-studio

17. GetApp (ErStudio): https://www.getapp.com/it-management-software/a/er-studio-data-architect/

18. GetApp (erwin): https://www.getapp.com/business-intelligence-analytics-software/a/erwin-data-modeler/

19. TrustRadius (SqlDBM): https://www.trustradius.com/products/sqldbm/pricing

20. SqlDBM Pricing Page: https://sqldbm.com/pricing/

**Technical Specifications**

21. ER/Studio Technical Specifications: https://wiki.idera.com/spaces/TechSpecs/pages/1266066408/ER+Studio+Data+Architect+Technical+Specifications

**Document Version:** 3.0 (Final - Procurement Ready)

**Last Updated:** December 23, 2025

**Key Changes from v2.0:**

- Replaced failed Grokipedia citation with verified ER/Studio homepage source

- Replaced failed PitchBook citation with CB Insights for SqlDBM company info

- Corrected Microsoft case study URL (casestudies → case-studies)

- All 21 citations verified as active and supporting their respective claims **Next Review Date:** Post-POC completion