Power BI + Fabric Deep Dive: From Model to Value

Solutions for Success Education Series



Solutions for **Success**

POINT ALLIANCE

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Power BI + Fabric

From Model to Value

Advanced modeling, performance tuning and executive-ready analytics that scale.

Direct Lake • Lakehouse • Semantic Models • Deployment

The path from model to value

A decision-led journey, not a feature tour



reusable data products + trusted metrics + responsive experiences + controlled change

Direct Lake and Lakehouse patterns

Choose patterns that keep transformation reusable and consumption fast



Lakehouse-first

Land and curate data once in open Delta format; reuse it across analytics workloads.

Direct Lake

Use semantic model tables over OneLake Delta data when fast interactive analysis and large scale matter.

Pattern choice

OneLake: composite modeling and consistent Direct Lake behavior. SQL endpoint: delegated SQL security and supported fallback scenarios.

Semantic models are the value layer

A governed contract between curated data and business decisions

Design for questions

Clear grain, conformed dimensions and intentional relationships.

Standardize meaning

Certified measures, formats, hierarchies and calculation conventions.

Secure once

Apply role design and object security at the semantic layer.

Enable reuse

One model can serve dashboards, self-service and embedded experiences.



Advanced modeling techniques

Build for predictable DAX, manageable security and explainable results

Model shape

- Star schema and explicit grain
- Shared dimensions over duplicated logic
- Avoid ambiguous filter paths

Business logic

- Measures over calculated columns
- Calculation groups for repeated patterns
- Consistent time and currency semantics

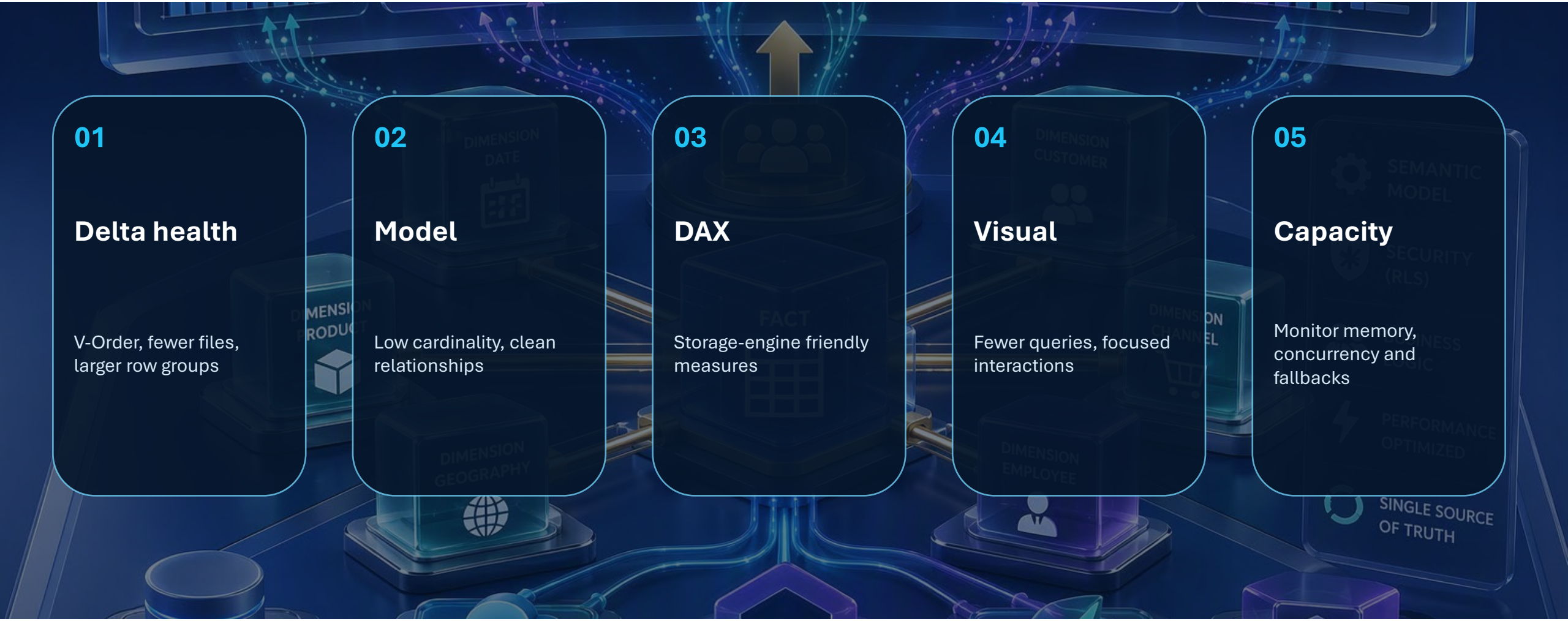
Enterprise controls

- RLS aligned to business ownership
- Certified KPIs and descriptions
- Thin reports over shared models

Model for the business question first; storage mode is an architectural consequence.

Performance is an end-to-end discipline

Measure, isolate, optimize, repeat



Executive-ready dashboards

Turn model quality into a decision experience

Lead with the decision

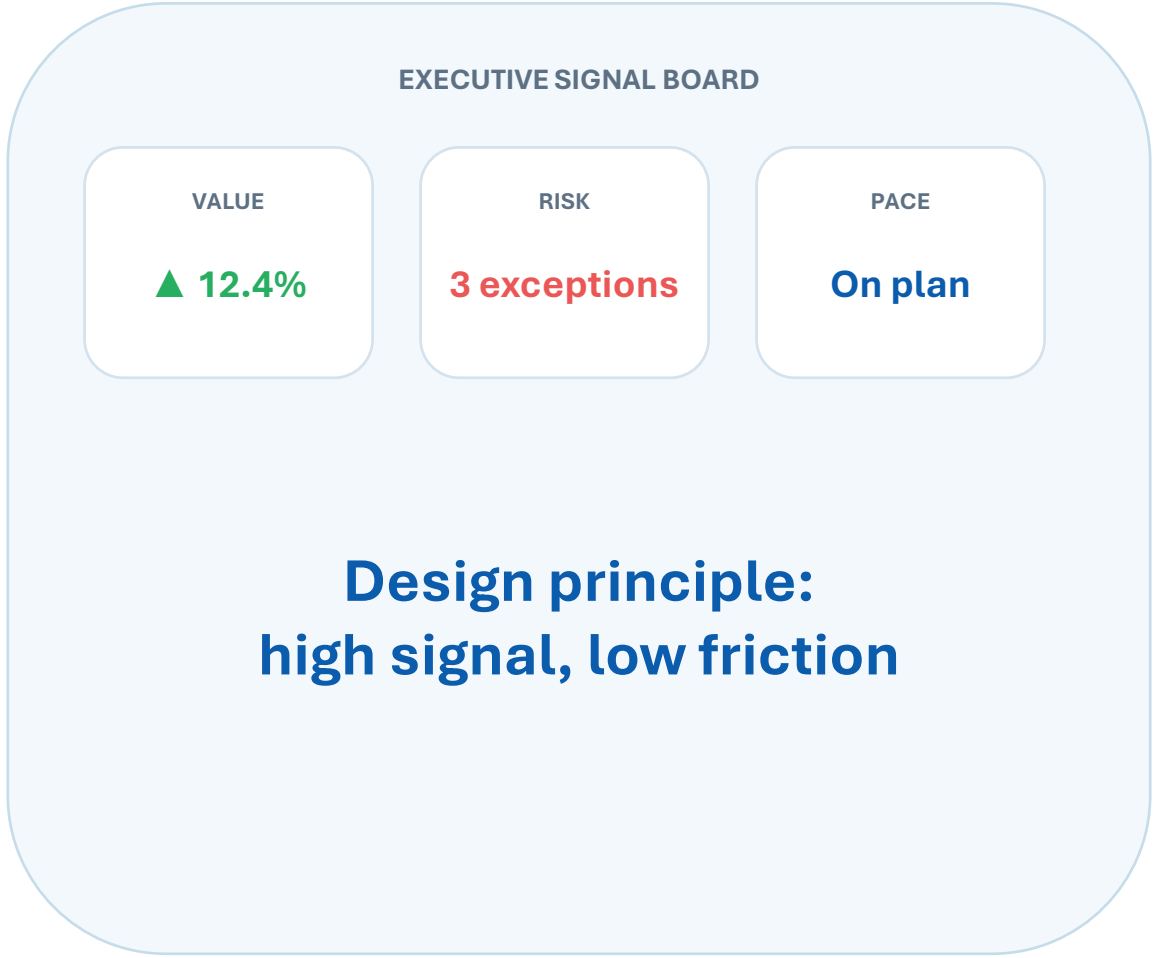
Put the business question in the title and the answer in the first viewport.

Create a visual hierarchy

Outcome KPIs → drivers → exceptions → detail.

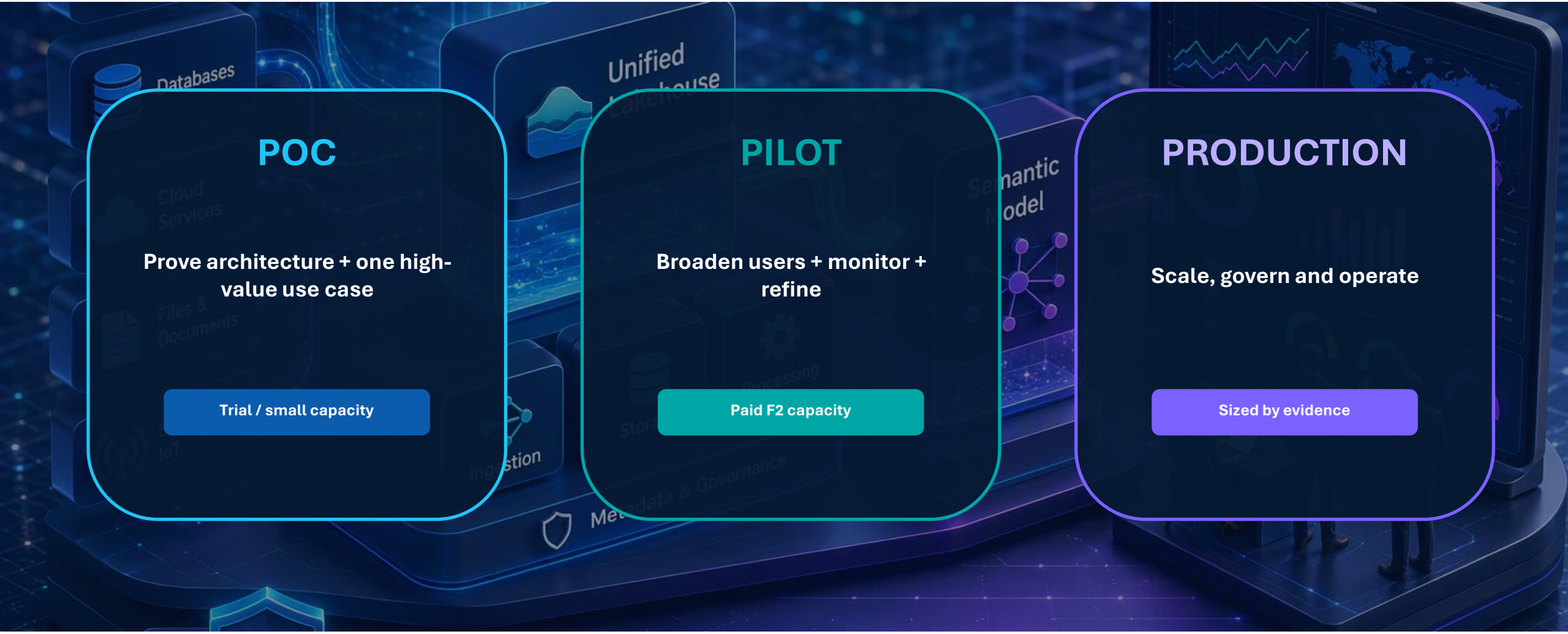
Design explainability

Show definitions, context, targets and freshness.



Real-world deployment: POC → pilot → scale

Evidence-driven progression reduces risk and accelerates adoption



Pattern selection canvas

Match business conditions to the simplest viable architecture

CONDITION	PREFERRED PATTERN	WATCH FOR
Data is curated in Delta + scale is high	**Direct Lake on OneLake**	Fast interactive analysis; composite options
Delegated SQL security is required	**Direct Lake on SQL endpoint**	Use SQL security; watch fallback
Heavy transformation is still needed	**Lakehouse / Warehouse first**	Push reusable preparation upstream
Operational source must stay remote	**DirectQuery**	Tune source, DAX and visual query count
Stable bounded data + maximum flexibility	**Import**	Fast model experience with refresh trade-off

From model to value

The operating playbook

1. **Curate once** — Lakehouse-first data products
2. **Model meaning** — Reusable certified semantics
3. **Prove performance** — Measure every layer
4. **Design decisions** — Executive signal over visual noise
5. **Scale deliberately** — POC, pilot, governed production

DISCUSSION

Where is your biggest constraint today?

Data readiness
Model consistency
Performance
Adoption
Governance

Case study: Dataverse DirectQuery + RLS

When correct business logic collides with source-query complexity

SYMPTOM

Single-value card succeeds; month-by-month chart can generate an oversized Dataverse query in the Power BI service. Limitation with PowerBI -> Dataverse direct connection and data volume.

Architecture

Large Claims table in Dataverse
DirectQuery semantic model
RLS by portal contact / account

Pressure points

Each visual queries the source
DAX becomes source queries
RLS adds filter complexity

Diagnostic result

Card measure worked. Grouped monthly evaluation triggered the query-length failure.

Design response

Keep RLS intact. Reduce visual/DAX complexity. Prefer simple aggregations and consider an analytical store for scale.



Case study: Dataverse DirectQuery + RLS

When correct business logic collides with source-query complexity and poor performance

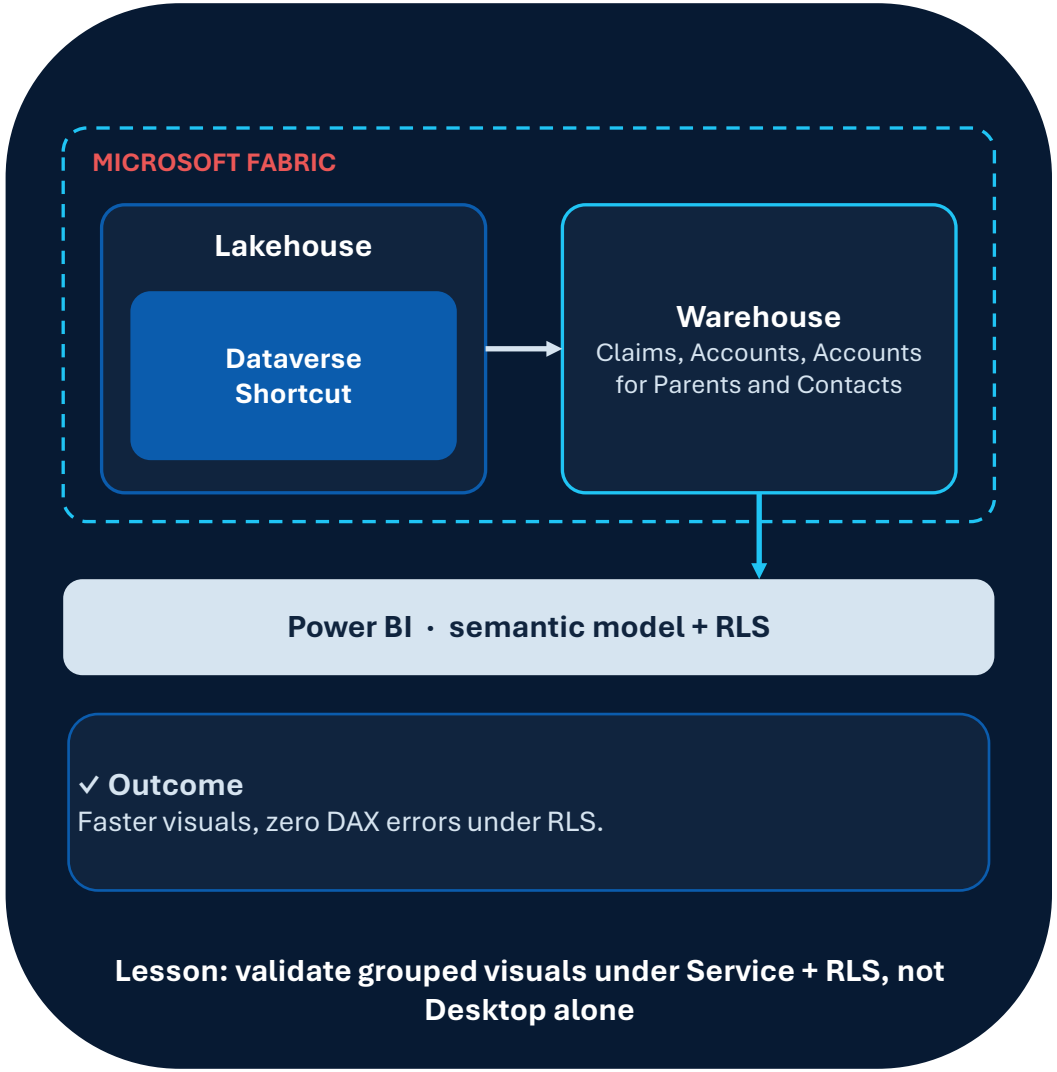
SOLUTION

Architecture

- Dataverse Shortcut in Fabric Lakehouse
- Pipelines transforming and denormalizing data to Fabric Warehouse (Claims, Accounts, Accounts for Parents and Contacts)

Diagnostic result

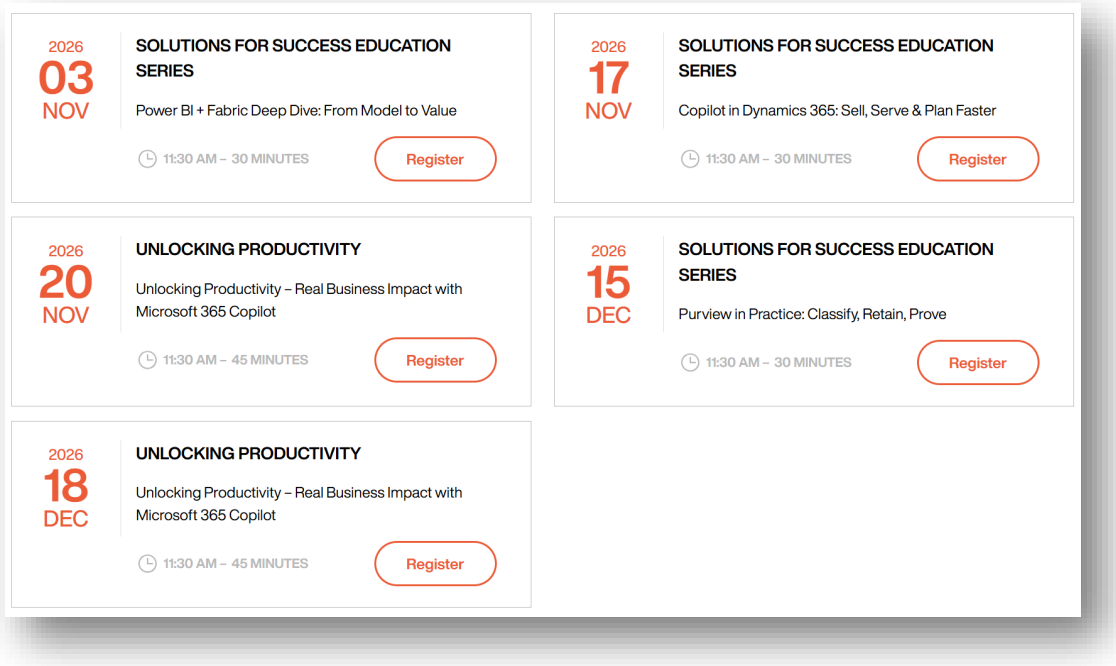
Significant performance improvements.
Removal of DAX errors.



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