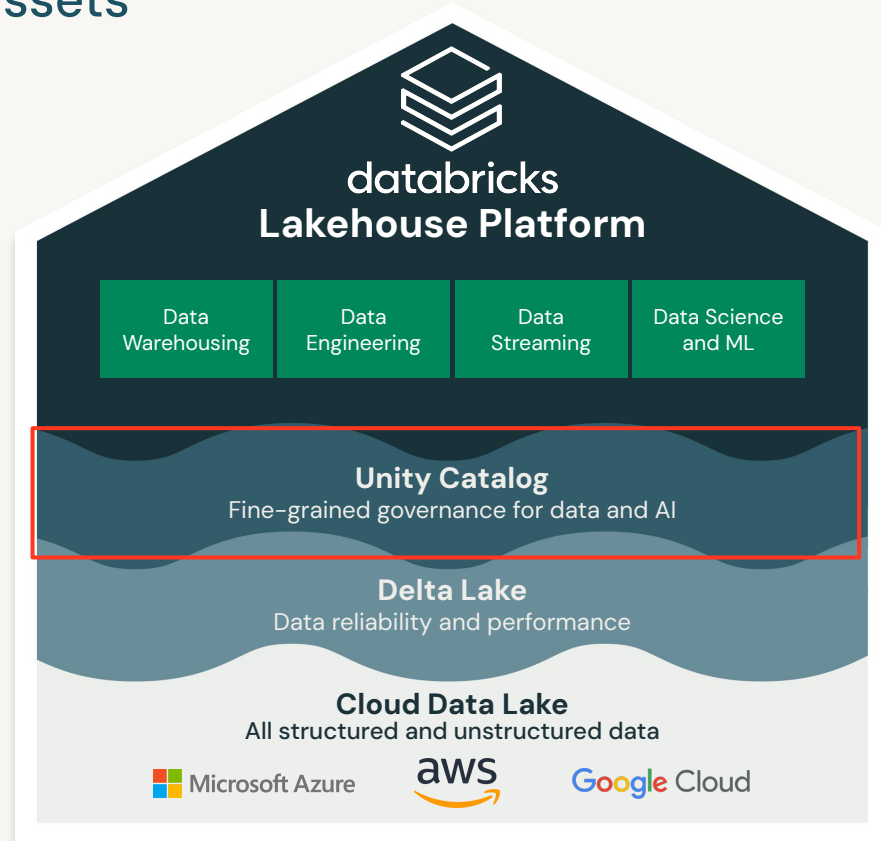databricks

Upgrading to Unity Catalog

Why Upgrade to Unity Catalog?
Unified governance for all data and AI assets

- Centralized governance for data and AI

- Built-in data search and discovery

- Performance and scale

- Automated lineage for all workloads

- Integrated with your existing tools

databricks
Lakehouse Platform

| Data Warehousing | Data Engineering | Data Streaming | Data Science and ML |

Unity Catalog
Fine-grained governance for data and AI

Delta Lake
Data reliability and performance

Cloud Data Lake
All structured and unstructured data

Microsoft Azure   aws   Google Cloud

Customers success with Unity Catalog

COMPASS

"Unity Catalog helped us simplify data management and access controls across the company. The Compass data team has securely onboarded 100+ data sources, migrated all workspaces to Unity Catalog, and created a gold layer for key stakeholders to tap into, to gain insights into areas like customer, product, usage, revenue, and more — creating a single source of truth, with complete access controls across the company."

— **Rajesh Nagpal, Senior Director of Data Engineering**

Milliman

"Unity Catalog has allowed Milliman to tie its expansive data assets directly to its users, simplifying access management and reducing storage complexity. Unity Catalog allows Milliman to meet stringent health care standards, provide collaborative data exploration, and reduce storage complexity. With Unity Catalog, we can quickly scale to meet our clients' needs."

— **Dan McCurley, Cloud Solutions Architect**

grammarly

"Unity Catalog significantly simplified our implementation of role-based access control, allowing us to secure data at a catalog, database, table, and column level. We seamlessly provision the appropriate level of access to all users and can confidently manage and secure data access to meet our strict compliance and privacy policies"

— **Chris Locklin, Engineering Manager, Data Platforms**
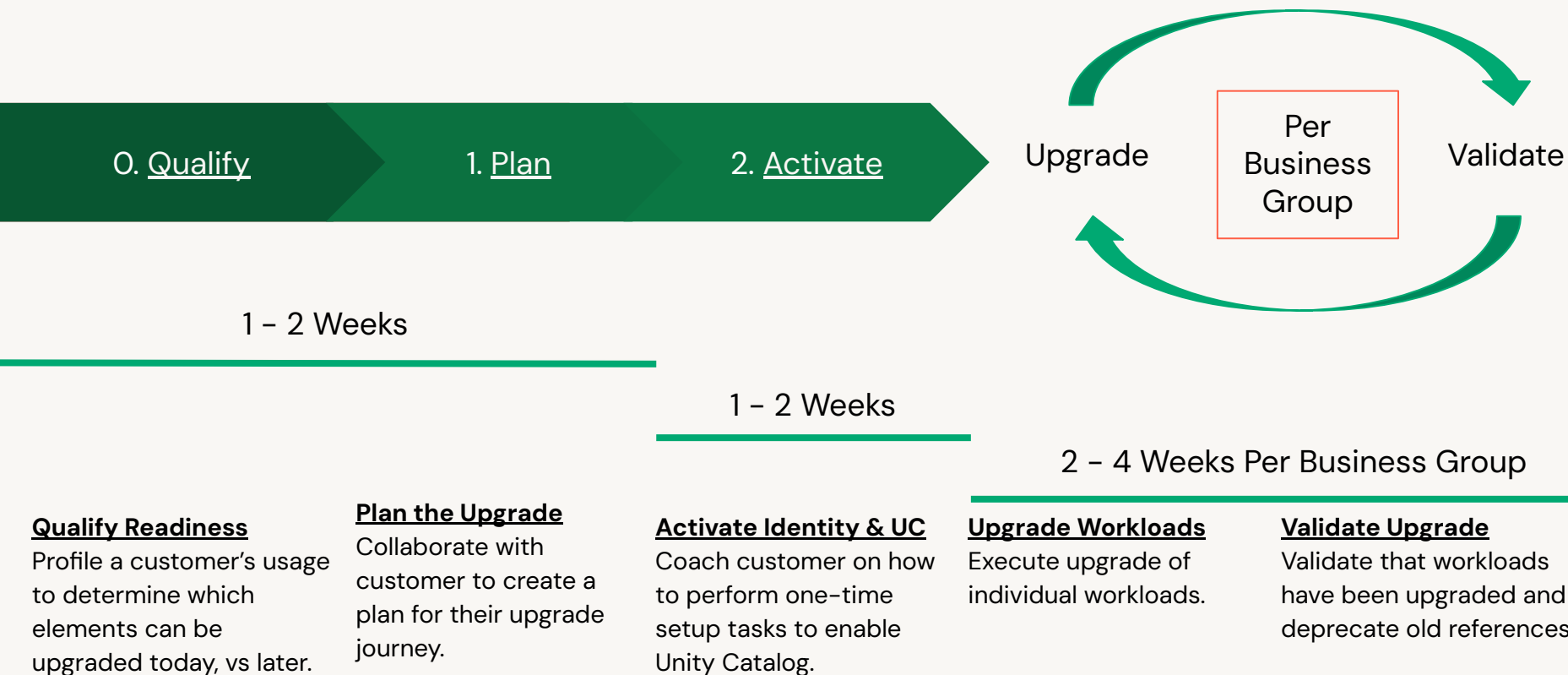
RIVIAN

"Unity Catalog is enabling us to build a next-generation platform that unlocks the full potential of software-defined vehicles that evolve and improve as they rack up miles – enhancing the driving experience for customers and maximizing the environmental benefits of electrified transportation. We now have a centralized data catalog and access management across various teams and workspaces, which has opened up unprecedented opportunities for collaboration and innovation."
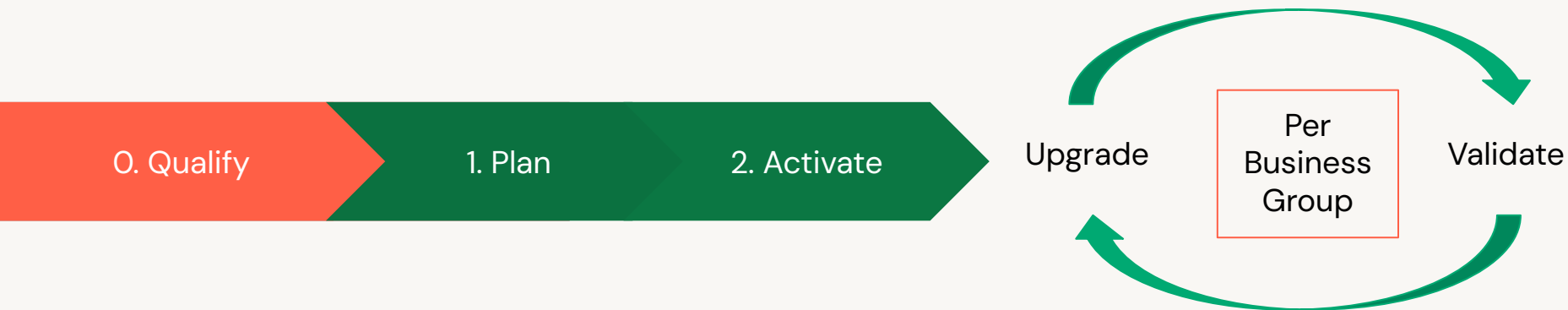
— **Venkatesh Sivasubramanian, Senior Director, Big Data**

Methodology for Upgrading to Unity Catalog

| 0. Qualify | 1. Plan | 2. Activate | Upgrade → Per Business Group → Validate |

1 – 2 Weeks

1 – 2 Weeks

2 – 4 Weeks Per Business Group

Qualify Readiness
Profile a customer's usage to determine which elements can be upgraded today, vs later.

Plan the Upgrade
Collaborate with customer to create a plan for their upgrade journey.

Activate Identity & UC
Coach customer on how to perform one-time setup tasks to enable Unity Catalog.

Upgrade Workloads
Execute upgrade of individual workloads.

Validate Upgrade
Validate that workloads have been upgraded and deprecate old references

Qualification Criteria – Common showstoppers

| Showstoppers	Possible technical solutions
Showstoppers	**Possible technical solutions**
Single tenant/Standard tier	Migrate to E2, upgrade to Premium/Enterprise
DBR < 11.3	Upgrade DBR to 11.3+ as part of Unity Catalog upgrade
Credential passthrough	Migrate existing cloud ACLs to UC grants using scripts
Lack of full integration with other catalogs (Purview, Collibra, etc.)	Progress with upgrade, and retrofit integration with other catalogs later
ML users requiring row/column ACL	
Check other Unity Catalog limitations	Involve product champions/product specialists to understand workarounds/timelines
etc.	

Planning Workshop – Goals

1-2 Hours

| 0. Qualify | 1. Plan | 2. Activate |

Upgrade → Per Business Group → Validate
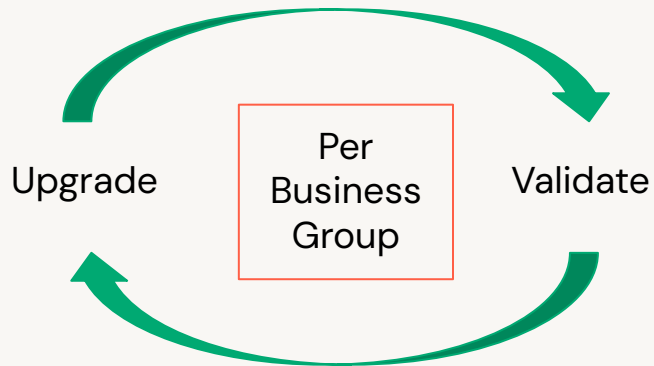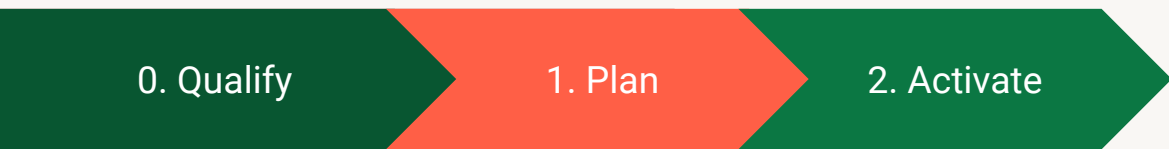
1. Alignment on Governance Model
2. Define Business Groups
3. Define CATALOG Hierarchy Strategy
4. Define first group of tables to upgrade
5. Align on timeline
6. Identify administrators

Identify key data personnel

Account Admin

- Can create & configure workspaces
- Can create & configure metastores
- Can create users, groups, & service principals
- Can create STORAGE CREDENTIAL
- Can grant users access to workspaces
- Can set billing budget threshold alerts

Metastore Admin

- Can create CATALOG, EXTERNAL LOCATION
- Can create SHARE, RECIPIENT
- Can change OWNER of any securable object,

Workspace Admin

- Can add users and groups to workspace
- Can create clusters & cluster policies
- Can change OWNER of clusters, workflows, notebooks, queries, dashboards
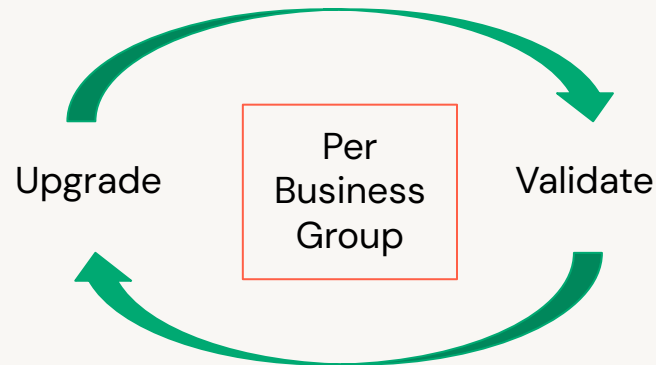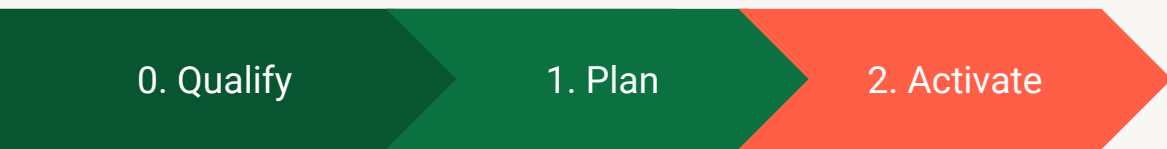
Data Owner

- Can change ownership of securable object (CATALOG, SCHEMA, TABLE, VIEW, etc.)
- Can grant any privilege to any principal

Activate Workshop

0. Qualify	1. Plan	2. Activate

Upgrade — Per Business Group — Validate

1. Setup account level identities
2. Setup and assign a metastore to a workspace
3. Create Unity Catalog enabled compute
4. Create a catalog/schema in Unity Catalog
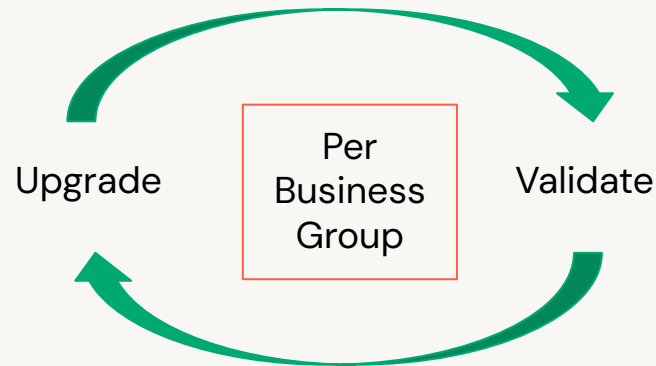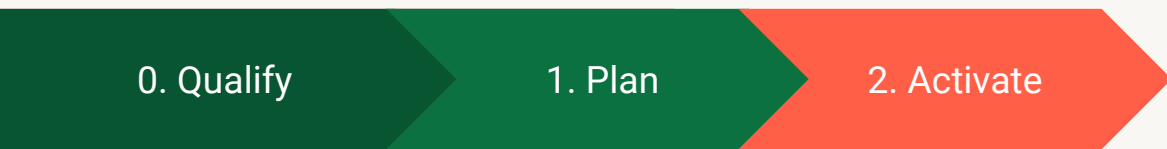5. Create a credential/external location
6. Setup the audit log

Activate Workshop

Two 1 hour sessions
- Activate Identity
- Activate UC Metastore(s)

0. Qualify	1. Plan	2. Activate

Upgrade Per Business Group Validate

1. Setup account level identities
2. Setup and assign a metastore to a workspace
3. Create Unity Catalog enabled compute
4. Create a catalog/schema in Unity Catalog
5. Create a credential/external location
6. Setup the audit log

Identify security and platform personnel

Activate Phase

Databricks Account Admin

- Has access to the Databricks Account Console
- Ability to create unity metastore and assign to workspace(s)

Identity Provider (IdP) Admin

- Access to setup SCIM connectors in your IdP
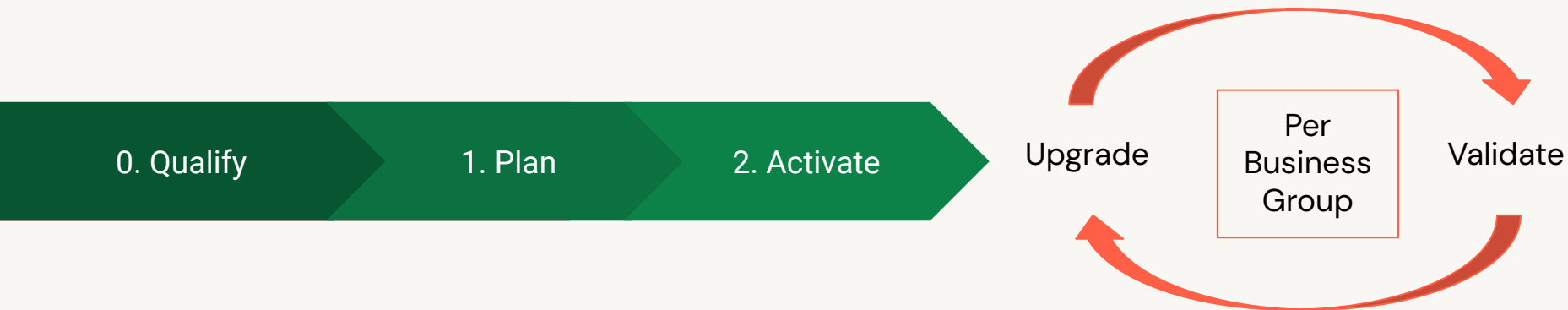 - Okta Admin?
  - Active Directory Admin?

Cloud Identity Admin

- Ability to create & modify IAM Roles (AWS)

Cloud Platform User

- Ability to create Databricks Access Connectors with Managed Identity (Azure)
- Ability to create Cloud Storage Containers (Azure), or S3 bucket (AWS)

Upgrade & Validate

| 0. Qualify | 1. Plan | 2. Activate |

Upgrade → Per Business Group → Validate

1. Schedule series of workshops (1 hour each)
2. Teach customer how to upgrade groups of assets
3. Validate that assets have been upgraded
4. Deprecate use of old HMS assets

3 Options to Upgrade to Unity Catalog

Do-it-yourself

Follow detailed documentation

[AWS] [Azure]

Zero $

Supported by Databricks

Project Managed by customer

Best practice workshops (4)

Up to 16 hours of assistance

Execution by customer

$4K value

Professional Services Package

Project Managed by Databricks

Predictable timeline

Built-in best practices

Training & Education

Execution with Databricks

$40K value

Next Steps

- Complete the UC Migrate Questionnaire

- Identify personnel for Planning Workshop

- Schedule the Planning Workshop