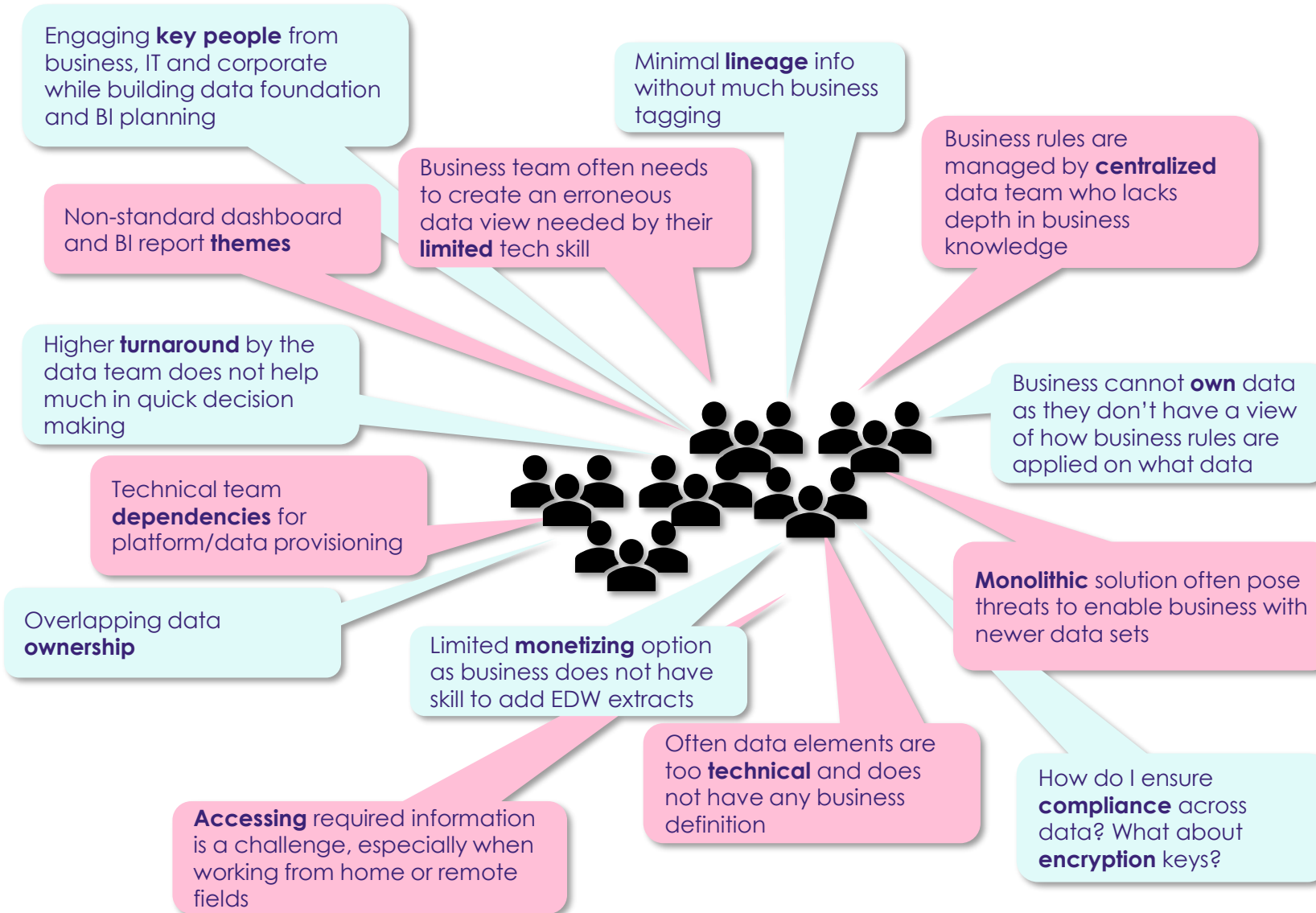


TCS Industry Data Mesh on Microsoft Cloud

TCS Microsoft Business Unit – Data Analytics & Insights



Voice of Customer | Driving Principles

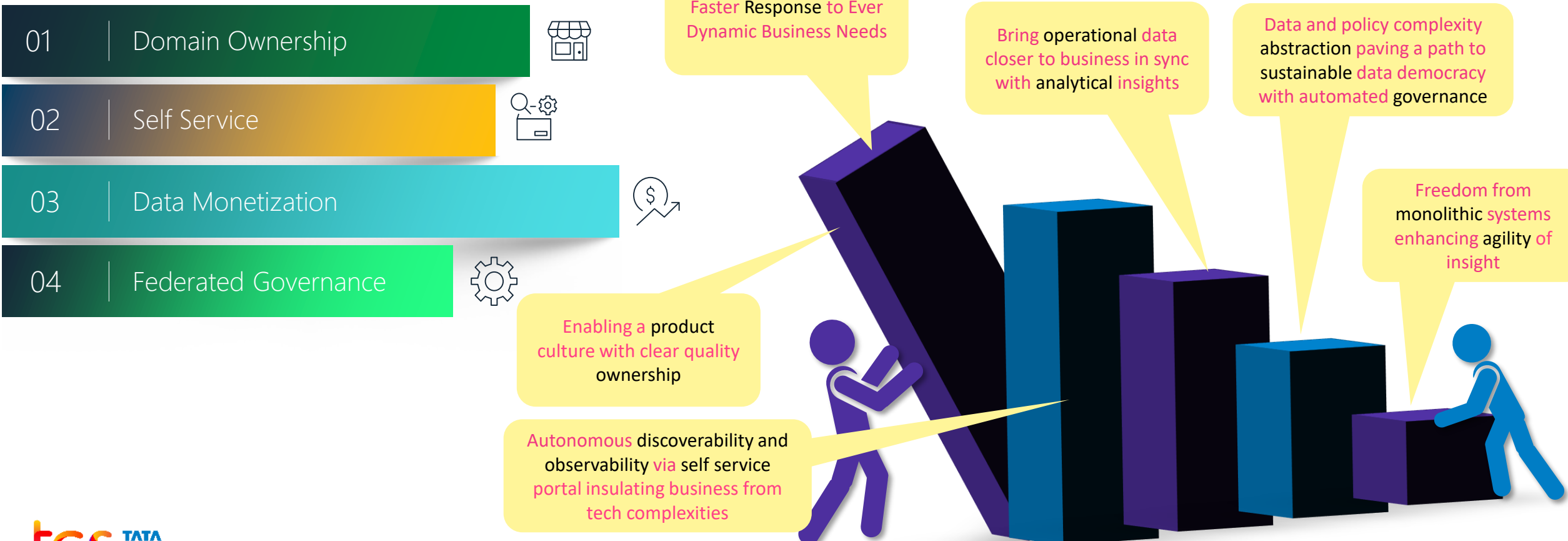


- Solution Tenets**
- **Right time & trustworthy** data needs to be **discoverable and accessible** to business in a **secured** way
 - **Accuracy** is the key for business to regain trust on data
 - **Industrialization** of consumption process and analytics platform maturity will promote adoption
 - A **collaborative** organization should be defined with defined ownership
 - **Data as commodity** culture along with **self service capability** with right **user experience** should be the key

Data Mesh Benefits | What's in it for Us?

“I believe people are smart and some people want to share more data than other people do. Ask them. Ask them every time. Make them tell you to stop asking them if they get tired of your asking them. Let them know precisely what you're going to do with their data.”

- **Steve Jobs**, All Things Digital Conference, 2010



TCS Industry Data Mesh | Enablers & Offerings

Industry Coverage

Retail and CPG

BFSI

TTH

Utility

Manufacturing

Telecom

Life Science

Indicative Industry Offerings

Insurance Underwriting

Predictive Asset Maintenance

Competitive Insight

Remote Operations

Sustainability (ESG) Solutions

Customer Knowledge Platform

Industry Cloud IDP

Customer Vision

Design for Business Changes

Sustained Agility

Greater Data ROI

Cloud Scale Modern Analytics

Automated Security & Compliance

Data Driven Milestones

Data Marketplace

Self Service Platform

Federated Governance

Microservice driven

Zero Trust Security

DataOps & MLOps

Infra as a Code

Data As a Product

Domain Ownership

Data Sharing at Scale

Data Quality & Observability

Data Interoperability

Data Monetization

Compliance as a code

MBU Data Analytics and Insights

Data Mesh Atomic Offerings

Assessment & Roadmap

Data Mesh Blueprinting

Domain Standardization

Security Automation

Domain P&L Dashboard

Data Mesh Cleaner

Estimation framework

Data Product via UI

Data Product Governance

Compliance Automation

ML Cockpit Dashboard

Usage Analytics

Engagement Planning

Self Service Data

Onboard User Persona

Data Contracts

1-click Consumption

Knowledge Graph

Data Mesh Roadmap

Data Marketplace

Domain Control UI

Automated Templates

Data Mesh for Industry

Data Quality Dials

TCS Enablers

Data Catalogue

CDM/IDW

Auto Deployment

Platform Provisioner

Ingestion & Validation

E2E ML Lifecycle

ML Cost Monitor

Classifications

Data Maps

DevOps Initializer

Framework Validator

Appliance & Hadoop

Data Drift Detection

Continuous Monitoring

TCS iDataGov – Microsoft Purview

TCS AutoOps – Provisioning & Management

TCS Migrace – Migration

MLOps Cockpit – Automated ML lifecycle



TCS Industry Data Mesh | Our Point of View

TCS Data Fabric

- Federated governance
- Domain driven data architecture
- Data as a Product
- Self-service Platform

Data Marketplace User Experience Services

Discover Data Products

- ✓ Azure Data Share
- ✓ Azure ML Models
- ✓ PowerBI Dashboards
- ✓ Data Service APIs
- ✓ Snowflake Share
- ✓ Databricks Delta-Share

Monetize Data

- ✓ Define Cost Model
- ✓ Approve Cost Model
- ✓ Attach Cost Model
- ✓ P&L Analytics
- ✓ Identify Draggers
- ✓ Revenue & Cost calculations by data products

Invite Consumers

- ✓ Send Invitations
- ✓ Validate Consumers
- ✓ Define Schedule
- ✓ Create Data Contracts
- ✓ Approve Data Contracts
- ✓ Govern Consumers

Org Alignment

- ✓ Define Roles
- ✓ Integrate RBAC
- ✓ Map Roles to Users
- ✓ Govern Roles
- ✓ Add User DLs
- ✓ Align Security Policies

Consume Data Products

- ✓ Once click consumption
- ✓ Data Product Q-Score
- ✓ Automated Access
- ✓ Data Share Agreement
- ✓ Data Definitions & Lineage

Domain Owner Functions

- ✓ Approval Automation
- ✓ Domain Compliance Dashboards
- ✓ Domain P&L by data producer, data product
- ✓ Approve New Data Product Use Case

Housekeeping

- ✓ Observability & usage
- ✓ Identify unused products
- ✓ Recommend or delete
- ✓ Identify low quality data products and recommend for clean ups

Quality & Automation

- ✓ Data Domain templates
- ✓ Data Product Governance plane creation
- ✓ Integration with MLOps
- ✓ Integration with ITSM tools
- ✓ Data Quality dashboards



Automated Services



Ingestion



Data & Platform Governance



Streaming



Storage



Serve & Consumption



TCS Industry Data Mesh | Solution View

Welcome Anshuman!

You currently have access to: Business | Domain 1 | Role X

Data Product Summary MeshValue

- Total no. of registered Data Products are: 33
- Total no. of registered Domains are: 14
- Total no. of DataShare are: 13
- Total no. of ML Models are: 7
- Total no. of APIs are: 5
- Total no. of Dashboards are: 8

Monthly Data Product Usage Trend

Top Used DataProducts

- Employee_Profile
- Operator_Slot_Timetable
- Station_Site_Info
- Rolling_Stock_Locations
- Record_Facility_Incident

Least Used DataProducts

- Change_Types
- Monitored_Trip
- Device_Locations
- Record_Incidents
- Maintenance

Top 3 Users

- Employee_Profile
- Operator_Slot_Timetable
- Station_Site_Info

Bottom 3 Users

- Employee_Profile
- Operator_Slot_Timetable
- Station_Site_Info

Application > Data Shares

Select Business and Domain: Postal | Parts_Revenue

Create New Data Share

- Stores-Data
- eCommerce_Data
- Ecommerce_offers

CustomerFeedbacks_and_Complaints

Created on: Nov 15, 2022 | Sensitivity-Levels: Public | Domain Re-Tagging: Domain

Financial_Data

Created on: Nov 15, 2022 | Sensitivity-Levels: Public | Domain Re-Tagging: Domain

Application > Databricks Notebooks

mbu_coe_dbx

/test/GDPR/Enforcing Column-Level Encryption

Sensitivity-Levels: Public

/test/GDPR/GDPR_implementation

Sensitivity-Levels: Public

Application > Automated Domain Creation

Select Subscription: Subscription A, Subscription B, Subscription C

Create a new Resource Group

Application > Admin

anshuman.banerjee

Display Name: Anshuman Banerjee

Choose a Role

- Domain Owner
- Data Producer
- Data Consumer

Assign



Thank you