Data Estate Modernization

**Assess**
- **Data & Analytics Business Roadmap**
  - **Analyze** Capabilities, Data/App Landscape
  - **Rationalize** Sources, App Lifecycle, Tools
  - **Prioritize** Enterprise Architecture, Initiatives
  - **Advises** on Projects, Resources & Budgets

**Implement**
- **Business Scenarios & Platform Deployment**
  - **Develop** Cloud App and Data Infrastructure
  - **Deploy** Sandboxes for quick win Use Cases
  - **Implement** Adjusted Workflows and Train
  - **Iterate** as new Insights Influence the Roadmap

**Migrate**
- **Elevate Services**
  - **Rehost** Workloads and Apps in the Cloud
  - **Rearchitect** Services for Leaner Operation
  - **Deprecate** defunct tools and processes
  - **Validate** performance gains and test features

**Insights**
- **Business Intelligence & Visualizations**
  - **Leverage** data models built with analytics and data science in mind
  - **Enhance** existing reporting capabilities
  - **Manage** enterprise grade analytics with the support of experts
  - **Accelerate** time to value with our leading analytics solutions
  - **Automate** existing data flows with cognitive services and AI
  - **Differentiate** from the competition

**Innovate**
- **Data Science and AI**

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**Enterprise Project Management Organization**

**Digital Transformation Management Consulting**

**Security and Data Governance Compliance**
Developing A Data Platform Roadmap

Assess

Activities
- Application & Data Inventory
  - Assessment
  - Strategy
- Application portfolio analysis and cloud assessment
- Rationalization of priorities
- Leveled per app / data source assessment
- Workshop with key stakeholders
- Application portfolio
- Data landscape inventory

Deliverables

Implement

Activities
- PLAN
- INVESTIGATE
- DESIGN
- PRESENT

- Analyze
  - Portfolio Prioritization
  - Financial Justification
  - Benchmarking & Testing
- Prioritize
  - Remediation
  - Upgrade
  - Enhancement
- Rationalize
  - Risk Identification
  - Operational Process Mapping
  - Technology & Architecture
- Advise
  - Vendor Consolidation
  - Mergers & Acquisition
  - Outsourcing
  - Licensing

- Upgrade
- Migrate
- Enhance
- Consolidate
- Remediate
- Re-Architect
- Operationalize
- Decommission
- Final roadmap & reference architecture
- Business case justification & ROI for Deployments

Business Case

IaaS
PaaS
SaaS
On Prem.
### Developing A Data Platform Roadmap

#### PLAN
- **Application & Data Inventory**
  - Assessment
    - Strategy
  - Activities:
    - Workshop with key stakeholders
    - Application portfolio analysis and cloud assessment
    - Rationalization of priorities
    - Leveled per app / data source assessment
- Deliverables:
  - Application portfolio analysis and app inventory
  - Data landscape inventory

#### INVESTIGATE
- **Assess**
  - Activities:
    - Application portfolio analysis and cloud assessment
    - Rationalization of priorities
    - Leveled per app / data source assessment
- Deliverables:
  - Workshop with key stakeholders
  - Application portfolio analysis and cloud assessment
  - Rationalization of priorities
  - Leveled per app / data source assessment

#### DESIGN
- **Implement**
  - Activities:
    - Upgrade
    - Migrate
    - Enhance
    - Consolidate
    - Remediate
    - Re-Architect
    - Operationalize
    - Decommission
- Deliverables:
  - Architectural Recommendations
  - Application & Data Service Roadmap V1
  - Master Data Management, Data Governance, and Security Analysis

#### PRESENT
- **Migrate**
  - Activities:
    - Final roadmap & reference architecture
    - Business case justification & ROI for Deployments
- Deliverables:
  - Final roadmap & reference architecture
  - Business case justification & ROI for Deployments

#### Insights
- **Innovate**
  - Activities:
    - Vendor Consolidation
    - Mergers & Acquisition
    - Outsourcing
    - Licensing
  - Deliverables:
    - Clearly defined data strategy supporting business objectives
    - Architecture and migration plan for priority workloads
    - Portfolio analysis and app inventory

### Building an Informed Roadmap

#### Key Customer Challenges
- Existing data strategy is dated or missing
- Cloud ROI is not clear or easily attained
- AI is desired but the data won’t support it
- Leadership and IT can’t agree on a vision

#### Outcomes
- Clearly defined data strategy supporting business objectives
- Architecture and migration plan for priority workloads
- Portfolio analysis and app inventory
Cloud/Hybrid Cloud Deployment Methodology

Assess
- Prioritize
- Investigate
- Construct

Craft
- Analyze
- Prioritize
- Investigate
- Construct

Architect
- Architecture
- Resourcing
- Scope of Work

Develop
- Upgrade
- Lift & Shift
- Enhance
- Consolidate
- Remediate
- Re-Architect
- Operationalize
- Decommission

Governance Workstream
- Strategies
- Runbooks
- Compliance
- Security

Data Workstream
- Processing & Integration
- Clean & Cleanse
- Visualisation

Architecture Workstream
- IAAS
- SAAS
- PAAS

Application Workstream
- Portfolio
- Platform
- Enhancements
- Containers

Migrate
- Upgrade
- Lift & Shift
- Enhance
- Consolidate
- Remediate
- Re-Architect
- Operationalize
- Decommission

Test
- Upgrade
- Lift & Shift
- Enhance
- Consolidate
- Remediate
- Re-Architect
- Operationalize
- Decommission

Deploy
- Upgrade
- Lift & Shift
- Enhance
- Consolidate
- Remediate
- Re-Architect
- Operationalize
- Decommission

Manage & Run
- Knowledge & Process Management
- Enterprise Data Management
- Enterprise Application Management

Innovate
### Cloud/Hybrid Cloud Deployment Methodology

#### Assess
- Craft
  - Analyze
    - Urgency
    - Financial
    - Improvement
  - Prioritize
    - Retirement
    - Resilience
    - Growth
  - Investigate
    - Compatibility
    - Functionality
    - Providers
  - Construct
    - Architecture
    - Resourcing
    - Scope of Work

#### Implement
- Architect
  - Upgrade
  - Lift & Shift
  - Enhance
  - Consolidate
  - Remediate
  - Re-Architect
  - Operationalize
  - Decommission
- Develop
  - Governance Workstream
    - Strategies
    - Runbook
    - Compliance
    - Security
  - Data Workstream
    - Processing & Integration
    - Clean & Cleanse
    - Visualization
  - Architecture Workstream
    - SAAS
    - IaaS
    - PAAS
  - Application Workstream
    - Portfolio
    - Platform
    - Enhancements
    - Containers

#### Migrate
- Manage & Run
  - Knowledge & Process Management
  - Enterprise Data Management
  - Enterprise Application Management

#### Insights
- Innovate
- Implement
- Insights
- Innovate

### Implementing a Modern Digital Platform

#### Key Customer Challenges
- Roadmap to the cloud is convoluted
- Multi-cloud deployments are complex
- Priorities for migration are unclear
- Existing platforms are underperforming

#### Outcomes
- Robust architecture for future use cases
- Infrastructure deployed on Azure
- Knowledge transfer for cloud IT roles
- Cost effective hosting of Data & Apps
- Migration roadmap for priority workloads
Migrating Data and Apps to the Microsoft Cloud

Assess

Implement

Migrate

Insights

Innovate

Evaluate Business Case

Migration of Data and App Environments

Cloud Data Stewardship

Evaluate Business Case

- On-Premises Costs
  - Network
  - Labor
  - Capacity
  - Space
  - Power
  - Licenses
- Prioritized Workloads
  - Apps
  - BI
  - Services
  - Security
  - Business Logic

Migration of Data and App Environments

- Cloud Infrastructure Deployment
  - Data Lake
  - Data Warehouse
  - Cloud Service
  - Logic Apps
  - VM Scale Sets
  - Express Route
- Leverage Tooling for Movement and Processing of Data
  - Data Factory
  - Data Lake Analytics
  - Azure Functions
  - Data Migration Service
- Enact Appropriate Migration Strategies
  - Rehost
  - Rebuild
  - Refactor
  - Replace
  - Consolidate
  - Revise

Cloud Data Stewardship

- Security Monitoring
- Keys & Identity Management
- CICD/DevOps
- Disaster Recovery
- Cloud Resource Consumption
- Auditing & Logging

Security and Data Governance Compliance
Migrating Data and Apps to the Microsoft Cloud

Moving to a Cloud/Hybrid Digital Platform

- **Key Customer Challenges**
  - Legacy infrastructure is slow and costly
  - Current platform has limited capabilities
  - Hardware management is time consuming
  - Data models are fragmented and isolated

- **Outcomes**
  - Lower total cost of ownership for IT
  - Advanced capability sets from cloud tools
  - Data consolidated into a lake/warehouse
  - Improved DevOps and Stewardship
  - Easily scalable infrastructure for the future
Developing Enterprise BI & Visualization Capabilities

Assess

Evaluate Data Maturity

Prioritize Use Cases

Architect BI Pipelines

Implement

Build Data Pipelines and Semantic Data Models

Pilot Priority Reporting Scenarios

Scope Report Requirements
Build KPIs
Publish Report

Resolve Data Quality Issues
Design Report Wireframe
Gather Feedback

Assess Report Support Need
Add Data
Adjust Layout

Migrate

Semantic Data Model

Build Access Layer

Insights

Reporting & Visualization Tools

Publish Report

Run Analytics Organization

Analytic Maturity

Performance is Cost Efficient

Data & Reports Are Secure

Innovate

Analysts Can Self-Serve BI Needs

Analytics Center of Excellence Development
Developing Enterprise BI & Visualization Capabilities

Assess

Evaluate Data Maturity

Prioritize Use Cases

Architect BI Pipelines

Implement

Build Data Pipelines and Semantic Data Models

Run Analytics Organization

Migrate

Pilot Priority Reporting Scenarios

Insights

Developing Enterprise BI Competency

• **Key Customer Challenges**
  - Report Overload!
  - Limited insights into use patterns
  - IT managing data requests
  - Data and report governance

• **Outcomes**
  - Unified reporting structures
  - Dashboards replace hundreds of reports
  - Self-service curated BI data depots
  - Novel analysis and visualization capabilities
Driving Innovation With Artificial Intelligence

Envision Analytics Scenarios
- Marketing
- Sales
- Operations
- Finance
- R & D
- IT

Build Data Science Infrastructure
- Internal Data Platforms
- Curated Model Feature Repository
- Machine Learning Model Framework
- Analytics Publisher & Results Catalog

Deliver Business Outcomes
- Promotion Optimization
- Demand Forecasting
- Sales Driver Analysis
- IoT Component Monitoring

Develop Data-Driven Practices
- IoT Component Monitoring
- Predictive Maintenance
- Route Optimization
- Demand Forecasting
- Sales Driver Analysis
- Dynamic Pricing

Enterprise Project Management Organization

Assess

Implement

Migrate

Insights

Innovate
Driving Innovation With Artificial Intelligence

Assess

Envision Analytics Scenarios
- Marketing
- Sales
- Operations
- Finance
- R&D
- IT

Build Data Science Infrastructure
- Internal Data Platforms
- Curated Model Feature Repository
- Machine Learning Model Framework
- Analytics Publisher & Results Catalog

Develop Data-Driven Practices
- Neal Analytics Thought Leaders
- Client Data & Analytics Teams
- Artificial Intelligence Center of Excellence

Migrate

Deliver Business Outcomes
- Promotions Optimization
- Demand Forecasting
- Sales Driver Analysis
- IoT Component Monitoring
- Route Optimization
- Predictive Maintenance

Insights

Building an internal AI Competency

- Key Customer Challenges
  - Team Capabilities & Inexperience
  - Data/Application Maturity
  - Frequently Changing Directives
  - Ad-hoc Data Procurement

- Outcomes
  - Business Value from AI Scenarios
  - AI Center of Excellence
  - Data Science Certified Analytics Platform
  - Machine Learning Results Integrated with Reporting and Business Services