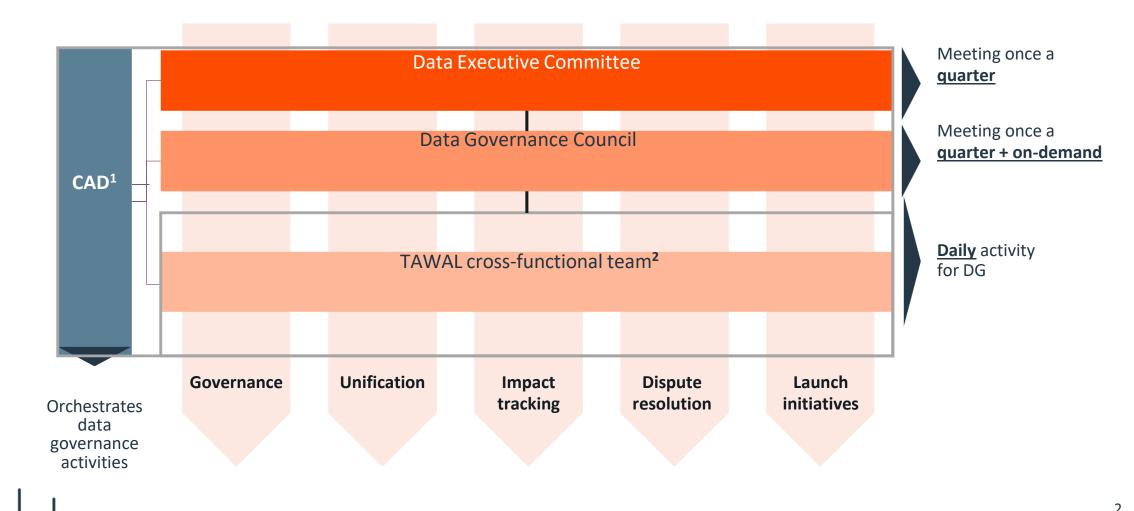
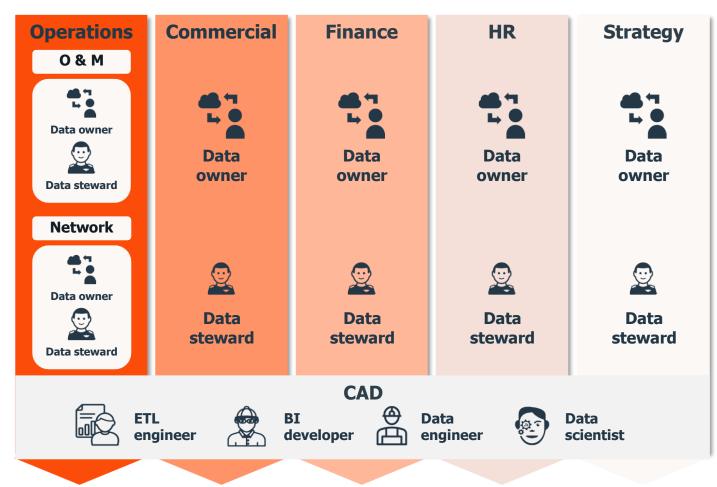


DATA GOVERNANCE WILL HAVE TWO SUPERVISORY COMMITTEES

DATA GOVERNANCE, IN LINE WITH DATA LIFECYCLE POLICY (#OP-TI-PY-05), DATED 20 FEB 2020



THE T&I / CAD WILL HAVE COUNTERPARTS IN EACH DEPARTMENT FOR DATA RELEVANT ACTIVITIES



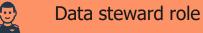
Data owner role

Steers analytics activities

Accountable for domain data quality

Approves access & modifications to data

Approves data classification



Develop & tracks execution of analytics activities

Defines & maintains data elements documentation

Tracks & maintains domain data quality

Manages communications for all data access requests

Data owners and stewards are not full time jobs; in some instances can be the same person

DATA GOVERNANCE WILL HAVE TWO SUPERVISORY COMMITTEES

DG Executive Committee	DGexcom@tawal.com.sa	
Mohammed Alhakbani	CEO, Chairman Tawal CS Executive Committee	
Saeed M Alshehri	COO, Vice Chairman	
Richard Ltaif	CSGO, Member	
Khalid Al Saeed	GM (Governance, QA, RA) , Member	
Mohammed Al Kussayer	GM (T&I) , Member	
Teruyuki Ito	Lead Data Analytics Specialist	
DG Council	DGc@tawal.com.sa	
Mohammed Al Kussayer	GM (T&I), Chairman	
Tabish Ali	GM (SP&M), Vice Chairman	
Khalid Alshaya	GM (Procurement, SL&A), Member	
Umar Uorahman	GM (Finance), Member	
Omar AlRasheed	GM(Commercial), Member	
Mohammed Muqbil	GM(NW), Member	
Naif Al Enazy	GM(O&M), Member	
Saud Altami	GM(HR), Member	
Saud Alsharif	Facilities & Administration, Member	
Abdullah AlFallaj	Legal, Member	

DATA GOVERNANCE WILL HAVE DATA STEWARDS TEAM FOR DAY-TO-DAY GOVERNANCE

Data Stewards	DGst@.com.sa
Ahmed AlJouae	Finance
Nagaraju Vusikemuri	S&G
Osama Ammar	NW
Abdulelah Al Saleh	O&M
Saeed M. Alghayeb	Procurement
Mamdouh Dan	SA/SL
Hathal H. AlEnazi	Facilities & Admin
Abdullah Al Damnan	T&I
Abdulmuhsen Alsulaiman	HR
Abdulaziz AL Abdullatif	Commercial
Moath M. Alkhodhairi	Billing
Ali Elsakka	Legal



DATA GOVERNANCE WILL HAVE DATA CUSTODIANS TEAM FOR DAY-TO-DAY SYSTEM GOVERNANCE

Data Custodians	DGdc@.com.sa
Wafa A. Alqahtani	BSS
Mohammed Obaid	ERP
Abdullah Alshamrani	Knowbe4
Tarun Kumar	TMS
Mohamed Sliem	BI
Mohammed Shameer	Microsoft 365
Abeer Aloraifij	Access Control

THE DATA GOVERNANCE POLICY HAS 14 COMPONENTS

Purpose

The policy ensures that **reaps** the **benefit** value from data by assigning ownership and responsibility towards all employees.

Data sharing

Defines the standards for sharing all data processed and/or controlled by to ensure optimal data protection.

Data collection

Governs the collection and sourcing of all data processed and/or controlled by the Company.

Data governance compliance

Ensure compliance of Data Governance policies and processes adopted at the Company and efficiently on boarding resources through knowledge sharing

Data access and usage

Ensure that proper secure data access is granted to protect all data processed and/or controlled by the Company from unauthorized access

Data classification

Ensures that all data processed and/or controlled by are classified in accordance with the Company "T&I Information security policy"

Data analytics modelling

Ensures that consistent Analytics Data Modelling practices is followed across the Company

Metadata management

Governs the management and documentation of metadata and business definitions of all data processed and/or controlled by the Company.

Reference and master data management

Establish golden records, define hierarchies, manage changes to reference and master data and achieve a unified 360-degree view of foundational data

Data demand

Govern the demand for data, reports and dashboards processed and/or controlled by the Company, for all analytical purposes.

Data quality

Define the acceptable standards of data quality for all data processed and/or controlled by the Company and provide an effective framework for data quality management and assurance.

Critical data element

Govern the identification and documentation of Critical Data Elements that are vital to the success of the Company operations.

Data lifecvcle

the Company is compliant with the standard lifecycle of data and respective regulations.

Data archiving and retention

Provides guidelines for retrieval, storage and retention of data processed and/or controlled by the Company, and to enable identification and destruction of data.

Data protection

Ensure that data receives an appropriate level to the Company.



Ensure that data processed and/or controlled by



of protection in accordance with its importance

Policy publication date

15th June 2020



Data Governance Council Tasks



- 1. Data Governance Council and Stewardship Leads shall conduct reviews to measure compliance across all policies, processes and procedures
- 2. In the event of non-compliance, an analysis shall be conducted by Stewardship Leads under the guidance and direction of the Data Governance Council
- 3. The data governance council is responsible for setting the SLA for the communication between the Stewardship Leads and the stakeholder
- 4. Data Governance Council (DGC) is responsible to escalate any unsolved issue within SLA to the Data Governance Executive Committee (DG Steerco)
- 5. Data Governance Council must approve all data analytics activities that are conducted on non-curated data
- 6. Approvals from Data Owner and the head of the Data Governance Council are prerequisites to submitting the approval requests to the Data Governance Council
- 7. Data Governance council must review, approve and prioritize the change data request if the request affects multiple data domains across different BUs/FUs

8. Data Governance Council must approve all new data collection mechanisms

Data Owners Responsibilities



- 1. Appointing Data Steward within respective Data Domain.
- 2. Accountable for approving / rejecting any data access and usage request for confidential or restricted data
- 3. Data Owner reviews and approves the Data Classification and Sensitivity levels applied to respective data domain
- 4. Steers on a high level the analytics models use cases
- 5. Prioritizes business needs from data analytics
- 6. Accountable for approving the business name and definition of all business terms for their Data Domain
- 7. Accountable to have up to date business glossary with business terms used across
- 8. Data Owners approve or reject data quality related requests for his data domain, prioritize and take actions on data quality improvements
- 9. Accountable to make sure that their data is properly identified as Critical Data Elements
- 10. Accountable for Data Governance compliance to ensure high puality data throughout its lifecycle

- 11. Accountable to approve or reject change data requests whenever the request affects for their Data Domain
- 12. Data Owner are accountable for enforcing the retention, archiving and destruction of data, and communicating these periods
- 13. Accountable to identify potential risk to the organization across all four data classification levels related to the Data Sharing section
- 14. Data Owner is accountable for having Data Governance controls in place for external data sourcing to avoid any legal actions against
- 15. Data Owner is accountable to approve or reject data sourcing and collection requests related to their respective data domain



Data Stewards Responsibilities



- 1. Data Stewards ensure that data access process is followed for granting data access requests
- 2. Responsible to ensure data is classified as per Data Classification prior to approving data access to requestor
- 3. Responsible for managing notification and communications for all data access requests
- 4. Responsible to assign the Data Classification and Sensitivity levels to the data for respective data domain
- 5. Ensures analytics models are serving business goals
- 6. Responsible for providing the correct business definition and formula for data elements belonging to their domains
- 7. Responsible for keeping the business glossary up to date. Data Stewards are also responsible for linking technical metadata with business metadata and for integrating business and architectural relationships between objects
- 8. Responsible to identify, define and manage Reference and Master Data in full co-ordination with Data Custodians and Stewardship Leads
- 9. Responsible to provide additional details for data demand BRSD
- 10. Responsible to support in finalizing Functional Design Document (FDD)
- 11. Responsible to provide feedback and validating data demand request completion
- 12. Data Stewards conduct the business RCA, design business solutions, and mprove business data quality

- 13. Responsible for ensuring high quality within their data domains and are responsible for the data quality monitoring of Critical Data Elements (CDE)
- 14. Responsible for implementing Data Quality business fixes and/or business recommendation based on the RCA or DQA
- 15. Responsible to identify, define and document the CDEs based on the CDE criteria. Data Stewards must categorize each CDE according to its criticality to the organization, per the approved CDE categories
- 16. Responsible to manage & control change data request that include fast track escalation, impact assessment, formulate business recommendations and perform cost / benefit analysis
- 17. Data Steward defines the archiving periods, data retention type and rules for data that belong to their respective data domain
- 18. Responsible to assist Data Owners with identification of potential risks across the datasets
- 19. Responsible to raise the issues of non-compliance to Data Owners and report to Stewardship Leads for monitoring the compliance of Data Sharing
- 20. Responsible to ensure that the data collection and sourcing exercise is in compliance with data governance policies and processes. This includes metadata management (business definitions), data quality assessment and CDE identification
- 21. Responsible for clarifying the business definitions for the requested Data Source



Data Custodian Responsibilities



- 1. Responsible for execution and implementation of access request after the required approvals has been granted.
- 2. Data Custodians assist the Data Stewards in applying the Data Classification and Sensitivity levels to the applicable system.
- 3. Responsible for documenting the technical metadata for the data in the respective systems.
- 4. Responsible for identifying the required data elements for a specific Data Domain at the request of the Data Steward.
- 5. Data Custodians must ensure that the recipient of a data extract receives a copy of the business/technical metadata that corresponds to the extracted data.
- 6. With the support of the designated Data Stewards, Data Custodians must create a data journey by mapping technical data objects to business definitions.
- 7. Data Custodians populate the central metadata repository to include all metadata information for data objects and information assets.
- 8. Data Custodian ensures that the Data Demand request is properly executed, deployed within and across systems.
- 9. Data Custodians execute the technical RCA and provide data samples when requested to do so by Data Stewards.
- 10. Responsible for implementing Data Quality system fixes and/or technical recommendations based on the RCA or DQA

- 11. Responsible for technical assessment, recommendation and implementation of change data request based on inputs from Data Steward.
- 12. Data Custodian ensures that the Data Archiving is properly executed within and across systems.
- 13. Responsible for enforcing the retention periods confirmed by Data Owner or by regulatory compliance.
- 14. Data Custodian maintains and enforce a detailed list of approved destruction methods appropriate for each type of data archived.
- 15. Responsible for ongoing identification of potential risk with data within a dataset that being shared to the requestor
- 16. Data Custodians formulate technical recommendations for Data Sourcing and how/where to source the data from.
- 17. Responsible to adhere to the data governance policies and processes. This includes technical metadata management, data quality assessment and CDE identification.

