

# Data Analyst

## Job Summary

The Data Analyst analyzes business requirements to determine and document associated data sourcing, data modelling, and data transformation requirements.

**Job level:** Individual Contributor

## Competencies

### Data Literacy (Level 4)

Using data to gain insights, solve problems, and inform decisions.

#### Leverages complex data for impact.

- Interprets complex data, including advanced statistics, to identify trends and draw conclusions.
- Translates data-based evidence into actionable knowledge to inform decision making.
- Implements strategies to incorporate data analytics into decision making at different levels of the organization.
- Determines what research and data analytics are needed to address an issue.
- Evaluates data collection and analysis processes to identify potential biases.

### Analytical Thinking (Level 3)

Analyzing and synthesizing information to understand issues, identify options, and support sound decision making.

#### Analyzes complex situations

- Analyzes complex situations, breaking each into its constituent parts.
- Evaluates alternative causes or ways of interpreting complex information.
- Identifies connections between situations that are not obviously related.
- Identifies gaps in information and makes assumptions in order to continue the analysis and/or take action.

## **Collaborating with Others (Level 3)**

Working together with others in a cooperative and supportive manner to achieve shared goals.

### **Fosters collaboration**

- Gives credit and acknowledgement for contributions and efforts of others.
- Provides constructive feedback to others.
- Helps build consensus among members of groups.
- Provides opportunities for all group members to contribute to group discussions.

## **Quality Focus (Level 3)**

Follows up on procedures, ensures high quality output, takes action to solve quality problems or notify others of quality issues.

### **Reviews and coaches others on quality standards**

- Explains the organizational policies and procedures for quality assurance.
- Works at a level that exceeds quality standards set by the organization.
- Reviews the work of others to ensure that organizational quality standards are met.
- Advises management when quality issues and challenges are apparent.

## **Database Administration (Level 3)**

Applying methods, practices and policies to the design and management of databases.

**Applies the competency in the full range of typical situations, requiring guidance in only the most complex or new situations.**

- Makes recommendations on the transformation of data models into database schema / logical model.
- Translates complex requirements into releases of fully developed and tested database access modules.
- Automates diagnostic and monitoring tools to prevent problems, and enhance performance and availability.
- Develops strategies for backup and recovery, data population and migration.
- Performs simple changes to the databases based on maintenance and update releases.
- Conducts general impact analysis on database change management.
- Resolves data integrity issues and implements data integrity safeguards.

## **Infrastructure (Level 3)**

Supporting the enterprise computing infrastructure (e.g., enterprise servers, client server, storage devices and systems, hardware and software) in the provision, management, storage, operation, scheduling, support and maintenance of the infrastructure.

**Applies the competency in the full range of typical situations, requiring guidance in only the most complex or new situations.**

- Describes how a specific infrastructure component integrates with other enterprise elements.
- Uses performance data collection tools and techniques to mitigate down-time and improve performance.
- Manages a specific infrastructure component, including hardware/software/firmware installation, patching, and updating.
- Solves routine problems, documenting new problems and their solution for future reference.
- Uses appropriate diagnostic tools to solve complex problems.
- Executes standards without supervision, suggesting modifications to these standards.

## **Information Management (Level 3)**

Following procedures for the collection, organization, retrieval, maintenance and dissemination of information.

**Applies the competency in the full range of typical situations, requiring guidance in only the most complex or new situations.**

- Applies methods and practices to manage the full life cycle of information from creation or acquisition to disposal.
- Applies appropriate security procedures and legislative policies when managing information.
- Deploys content throughout the organization using a suite of information access tools.

## **Requirements Analysis (Level 3)**

Eliciting, documenting and managing requirements, to meet business and project objectives and facilitate the successful implementation of the product or service.

**Applies the competency in the full range of typical situations, requiring guidance in only the most complex or new situations.**

- Develops complex models with multiple dependencies or that require the input of multiple groups.
- Creates or revises processes according to improvement plans and objectives.
- Develops learning solutions to educate employees on new or revised processes.
- Manages interdependencies between processes to ensure effective operations.
- Evaluates processes after improvements and, on an ongoing basis, to determine need for further revisions.
- Provides recommendations including cost-benefit analysis for most viable option when multiple alternatives are presented.

# Responsibilities

## Data Science

- Access data warehouse to extract data relevant to analysis
- Collect data from different systems to centralize operational data
- Perform data cleansing, data filling, and benchmarking against independent data sources
- Participate in data migration by mapping a path from the old data system to the new system through the process of data extraction and data loading
- Conduct basic data reconciliations to ensure accuracy and data integrity
- Build logical and physical data models to meet data requirements
- Analyze business requirement to determine and document associated data sourcing, data model and data transformation requirements
- Validate data flow through implemented data models from source to target
- Document data quality issues and prioritize the correction in source systems or in the data warehouse
- Provide input to enterprise architects specializing in information and data on data management decisions, including development and maintenance of the enterprise data model

## Knowledge Areas

- Apache Hive (Intermediate)
- Microsoft Access (Intermediate)
- Microsoft Office Suite (Intermediate)
- My Structured Query Language (MySQL) (Intermediate)
- Oracle Products (Intermediate)
- Python (Intermediate)
- R (programming language) (Intermediate)
- Statistical Analysis System (SAS) (Intermediate)
- Statistical Package for the Social Sciences (SPSS) (Intermediate)
- Structured Query Language (SQL) (Intermediate)
- Microsoft SQL Server Integration Services (SSIS) (Intermediate)
- Tableau (Intermediate)
- Visual Basic for Applications (VBA) (Intermediate)