

# Data Analytic Skills

SFIA skills that could be relevant for Data Analytics

## Analytics INAN

The application of mathematics, statistics, predictive modeling and machine-learning techniques to discover meaningful patterns and knowledge in recorded data. Analysis of data with high volumes, velocities and variety (numbers, symbols, text, sound and image). Development of forward-looking, predictive, real-time, model-based insights to create value and drive effective decision-making. The identification, validation and exploitation of internal and external data sets generated from a diverse range of processes.

### Level 3

Undertakes analytical activities and delivers analysis outputs, in accordance with customer needs and conforming to agreed standards..

## Data management DATM

The management of practices and processes to ensure the security, quality, integrity, safety and availability of all forms of data and data structures that make up the organisation's information. The management of data and information in all its forms and the analysis of information structure (including logical analysis of taxonomies, data and metadata). The development of innovative ways of managing the information assets of the organisation.

### Level 3

Applies ethical and robust techniques in the transformation of data from one format/medium to another, in line with organisational policies and procedures and being sensitive to risks around the use of information.

## Methods and tools METL

The definition, tailoring, implementation, assessment, measurement, automation and improvement of methods and tools to support planning, development, testing, operation, management and maintenance of systems. Ensuring methods and tools are adopted and used effectively throughout the organisation.

### Level 3

Provides support on the use of existing methods and tools. Configures methods and tools within a known context. Creates and updates the documentation of methods and tools.

## Database design DBDS

The specification, design and maintenance of mechanisms for storage of and access to data in support of business information needs. Design of the physical data layer, addressing enterprise data resource needs and local stored data structures. Definition of physical or virtual data warehouse structures required to support business intelligence and data analytics services.

### Level 3

Develops appropriate physical database or data warehouse design elements, within set policies, to meet business change or development project data requirements. Interprets installation standards to meet project needs and produces database or data warehouse component specifications.

## Database administration DBAD

The installation, configuration, upgrade, administration, monitoring and maintenance of databases. Providing support for operational databases in production use and for internal or interim purposes such as iterative developments and testing. Improving the performance of databases and the tools and processes for database administration (including automation).

### Level 3

Uses database management system software and tools to collect agreed performance statistics. Carries out agreed database maintenance and administration tasks.