TRAILBLAZER APPRENTICESHIP STANDARD

OCCUPATION: Data Analyst

Typical Job roles:	Data Analyst, Data Manager, Data Scientist, Data Modeller, Data Architect, Data Engineer
Duration:	24 months minimum
Level:	4

Job Profile

The primary role of a Data Analyst is to collect, organise and study data to provide business insight. Data analysts are typically involved with managing, cleansing, abstracting and aggregating data, and conducting a range of analytical studies on that data. They work across a variety of projects, providing technical data solutions to a range of stakeholders/customers issues. They document and report the results of data analysis activities making recommendations to improve business performance. They have a good understanding of data structures, database systems and procedures and the range of analytical tools used to undertake a range of different types of analyses.

Entry Requirements

Individual employers will set the selection criteria, but this is likely to include two A levels, although some employers will accept other relevant qualifications or experience, including a relevant Level 3 ICT Apprenticeship.

Technical Competencies

Be able to undertake the following in line with organisational procedures and under supervision:

- identify, collect and migrate data to/from a range of internal and external systems
- manipulate and link different data sets as required
- interpret and apply the organisations data and information security standards, policies and procedures to data management activities
- collect and compile data from different sources
- perform database queries across multiple tables to extract data for analysis
- collect, compile and analyse data from various data sources
- perform routine statistical analyses and ad-hoc queries
- use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data
- assist production of performance dashboards and reports
- assist with data quality checking and cleansing
- apply the tools and techniques for data analysis, data visualisation and presentation
- assist with the production of a range of ad-hoc and standard data analysis reports
- summarise and present the results of data analysis to a range of stakeholders making recommendations

Technical Knowledge

Know and understand:

- the different types of data, including open and public data, administrative data, and research data
- the data life cycle
- the differences between structured and unstructured data
- the importance of clearly defining customer requirements for data analysis
- the quality issues that can arise with data and how to avoid and/or resolve these
- the processes and tools used for data integration
- the steps involved in carrying out routine data analysis tasks
- how to use and apply industry standard tools and methods for data analysis
- the range of data protection and legal issues
- the fundamentals of data structures, database system design, implementation and maintenance
- the organisation's data architecture
- the importance of the domain context for data analytics

Professional, interpersonal and business skills	Attributes and behaviours
- Maintains a productive, professional and safe work environment - Communicates effectively - Works both independently and as part of a team - Develops and demonstrates good inter-team working - Records and reports information accurately to a wide range of internal and external stakeholders - Applies structured techniques to problem solving - Applies strong interpersonal skills when dealing with stakeholders	- Logical thinking - Creative approach to problem solving - Flexible attitude - Ability to perform under pressure - Ethical and professional behaviour - A commitment to quality - A thorough approach to work

Professional Recognition

This apprenticeship is recognised for entry onto the Register of IT Technicians confirming SFIA level 3 professional competence and those completing the apprenticeship are eligible to apply for registration.

Vendor and Professional Training and Certification

All apprentices will achieve an industry defined knowledge award, which may include two recognised vendor or professional qualification as required by the individual employer, in advance of taking the assessment for their overall apprenticeship certificate.

Review

This standard will be reviewed in September 2015