

Role Description

Lead Data Analyst



Education

Cluster	Education
Division/Branch/Unit	Information Technology Directorate
Location	Australian Technology Park, Sydney
Classification/Grade/Band	Clerk Grade 9/10
Kind of Employment	Ongoing
Role Number	199045
ANZSCO Code	511112
PCAT Code	3226892
Date of Approval	11 June 2019
Agency website	www.dec.nsw.gov.au

Department of Education

The NSW Department of Education serves the community by leading the provision of world-class education. The department protects young children by regulating preschool and long day care providers. Once children move into school, we provide them with a world-class primary and secondary education. We also work to advance the wellbeing of Aboriginal people.

Primary purpose of the role

The Lead Data Analyst contributes to the design of the Operational Data Store to ensure information / data is appropriately transitioned, stored, deployed and aligned with the enterprise architectural plan. The role contributes to a high performance team environment and ensures continuous improvement of business processes.

Key accountabilities

- Collaborate to map and undertake a detailed analysis of the teaching and learning information / data management requirements across all systems, platforms and applications to guide the development of a data model and associated artefacts, which are consistent with business objectives and the enterprise architectural plan
- Develop, maintain and disseminate policies, standards and business processes to ensure consistency with relevant legislation; maintain an inventory of data / information assets to facilitate efficient and secure management of all data elements
- Design, develop and maintain a service catalogue.
- Design, develop and implement data reporting capabilities as required
- Design scalable and reliable solutions to process structured and unstructured information using data streaming and RESTful API's technologies; data efficiently across systems with the aim of retiring legacy systems, cutting overall costs, and reducing system complexity; work closely with data / information owners to achieve consensus regarding the appropriate approach

- Design, create, deploy and manage contemporary data management models / structures to meet current and future needs regarding data storage, retrieval, integration, analysis and utilisation, thus enabling the supply of data and information to end users
- Contribute to the development and implementation of data management tools and services that respond to the needs of end users; provide technical expertise to application developers to ensure current and future systems are consistent with end user requirements
- Contribute technical expertise to contemporary database design and NoSQL database evaluation to ensure alignment with the Operational Data Store data model; ensure appropriate definitions and database documentation is maintained
- Contribute technical expertise regarding advanced data techniques, including data modelling, data access, data integration, data lineage, master & reference data, data visualisation, data mining, data discovery, statistical methods and/or database design and implementation as required
- Draft and/or supervise the preparation of timely, succinct reports and briefings for the role supervisor as required; ensure accurate records are maintained, and that responses to correspondence are timely and consistent with Departmental protocols.

Key challenges

- Completing tasks within agreed timeframes and to agreed standards whilst managing concurrent projects at various stages of completion; maintaining a contemporary awareness of new systems and technologies
- Understanding end user requirements and designing information management solutions that are relevant, usable, scalable and accessible given the complexities of the Department's operating and ICT environments
- Making sense of data / information sets and identifying patterns, trends and probabilities

Key relationships

Who	Why
Internal	
Integration Services Manager	<ul style="list-style-type: none"> • Discuss priorities, current projects and issues arising; actively seek, reflect and act on feedback on own performance • Discuss Operational Data Store design principles and technical expertise regarding data / information solutions
Other ICC / ITD team members	<ul style="list-style-type: none"> • Build and maintain strong working relationships to deliver quality and continuous improvement across enterprise data systems, tools and services • Share information and provide information and/or technical expertise to resolve issues arising
Departmental managers and staff	<ul style="list-style-type: none"> • Provide information and/or technical expertise on Operational Data Store solution design • Contribute to working groups and project teams; support the delivery of new systems, tools and services as required
External	
Other agencies, learning networks and/or communities of practice	<ul style="list-style-type: none"> • Build and maintain networks to appropriately share information and gain insights regarding best practice for the Operational Data Store solution design
Role dimensions	

Decision making

The Lead Data Analyst:

- Develops and delivers Operational Data Store solutions in accordance with constraints agreed with the role supervisor and the Department's enterprise architecture
- Exercises judgement and initiative in prioritising and resolving day-to-day issues in accordance with Departmental and ITD Directorate policies, procedures and operational guidelines
- Shares accountability for the quality and accuracy of outputs, analysis and advice provided
- Escalates urgent, complex and/or significant issues to the role's supervisor, including those that may substantially impact budget or disrupt service delivery.

Reporting line

The Lead Data Analyst reports to the Integration Services Manager.

Direct reports

Nil

Budget/Expenditure

In accordance with Departmental delegations.

Essential requirements

- Tertiary qualifications in information technology and/or equivalent relevant experience in current and emerging data management technologies.
- Advanced data modelling skills, including proven experience delivering complex and/or sizable data transformation and warehousing projects.
- Demonstrated knowledge and understanding of contemporary industry standards and trends.
- Knowledge of and commitment to the Department's Aboriginal Education and Training policies and to ensure quality outcomes for Aboriginal people.
- Working with Children Check for paid employment.





Capabilities for the role


The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

This role also utilises an occupation specific capability set which contains information from the Skills Framework for the Information Age (SFIA). The capability set is available at www.psc.nsw.gov.au/capabilityframework/ICT

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework		
Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Adept
	Act with Integrity	Adept
	Manage Self	Adept
	Value Diversity	Intermediate
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Adept
	Work Collaboratively	Adept
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Adept
	Plan and Prioritise	Adept
	Think and Solve Problems	Advanced
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Intermediate
	Technology	Advanced
	Procurement and Contract Management	Intermediate
	Project Management	Adept

Capability Set	Category, Sub-category and Skill	Level and Code
	Strategy and Architecture – Information Strategy – Information Management	Level 4 - IRMG
	Strategy and Architecture – Technical Strategy and Planning – Enterprise and Business Architecture	Level 5 - STPL
	Strategy and Architecture – Technical Strategy and Planning – Data Management	Level 4 - DATM
	Development and Implementation – Systems Development – Data Analysis	Level 4 - DTAN

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Manage Self	Adept	<ul style="list-style-type: none"> Look for and take advantage of opportunities to learn new skills and develop strengths Show commitment to achieving challenging goals Examine and reflect on own performance Seek and respond positively to constructive feedback and guidance Demonstrate a high level of personal motivation
Relationships Communicate Effectively	Adept	<ul style="list-style-type: none"> Tailor communication to the audience Clearly explain complex concepts and arguments to individuals and groups Monitor own and others' non-verbal cues and adapt where necessary Create opportunities for others to be heard Actively listen to others and clarify own understanding Write fluently in a range of styles and formats
Results Deliver Results	Adept	<ul style="list-style-type: none"> Take responsibility for delivering on intended outcomes Make sure team/unit staff understand expected goals and acknowledge success Identify resource needs and ensure goals are achieved within budget and deadlines Identify changed priorities and ensure allocation of resources meets new business needs Ensure financial implications of changed priorities are explicit and budgeted for Use own expertise and seek others' expertise to achieve work outcomes
Results Think and Solve Problems	Advanced	<ul style="list-style-type: none"> Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues Work through issues, weigh up alternatives and identify the most effective solutions Take account of the wider business context when considering options to resolve issues Explore a range of possibilities and creative alternatives to contribute to systems, process and business improvements Implement systems and processes that underpin high quality research and analysis
Business Enablers Project Management	Adept	<ul style="list-style-type: none"> Prepare clear project proposals and define scope and goals in measurable terms Establish performance outcomes and measures for key project goals, and define monitoring, reporting and communication requirements Prepare accurate estimates of costs and resources required for more complex projects Communicate the project strategy and its expected benefits to others Monitor the completion of project milestones against goals and initiate amendments where necessary Evaluate progress and identify improvements to inform future projects

Occupation specific capability set (Skills Framework for the Information Age – SFIA)

Category, Sub-category	Level and Code	Skill and Level Description
Strategy and Architecture Information Strategy	Level 4 IRMG	INFORMATION MANAGEMENT (IRMG) – Drafts and maintains the policy, standards and procedures for compliance with relevant legislation. Understands the implications of information, both internal and external, that can be mined from business systems and elsewhere. Makes business decisions based on that information, including the need to make changes to systems. Reviews proposals for new digital initiatives and provides specialist advice on information management, including advice on and promotion of collaborative working and assessment and management of information-related risk. Creates and maintains an inventory of information assets, which are subject to relevant legislation. Prepares, reviews and submits periodic notification of registration details to the relevant regulatory authorities. Ensures that formal information access requests and complaints are dealt with according to approved procedures.
Strategy and Architecture Technical Strategy and Planning	Level 5 STPL	ENTERPRISE AND BUSINESS ARCHITECTURE (STPL) – Contributes to the creation and review of a systems capability strategy which meets the strategic requirements of the business. Develops models and plans to drive forward the strategy, taking advantage of opportunities to improve business performance. Takes responsibility for investigative work to determine requirements and specify effective business processes, through improvements in information systems, data management, practices, procedures, organisation and equipment.
Strategy and Architecture Technical Strategy and Planning	Level 4 DATM	DATA MANAGEMENT (DATM) – Takes responsibility for the accessibility, retrievability and security of specific subsets of data. Assesses the integrity of data from multiple sources (including, for example, from sensors measurement systems). Provides advice on the transformation of data/information from one format/medium to another, where appropriate. Maintains and implements information handling procedures. Enables the availability, integrity and searchability of information through the application of formal data structures and protection measures. Manipulates specific data from information services, to satisfy local or specific information needs.