Role Description Senior Data Analyst



Cluster	Customer Service
Agency	Service NSW
Division/Branch/Unit	Various
Classification/Grade/Band	Clerk Grade 9/10 & SNSW Grade 9/10
ANZSCO Code	224711
PCAT Code	1339192
Date of Approval	February 2020

Agency overview

Service NSW is making it easier for people and businesses across NSW to access government services. Since launching in July 2013, we have successfully transformed and streamlined NSW Government service delivery with cutting edge digital solutions and an award-winning culture of passion and teamwork.

Our customer-centric solution offers simpler and faster access to government transactions through our digital channels, a 24/7 phone service and an expanding network of service centres. We currently partner with over 50 agencies to offer over 1,000 NSW Government transactions

Primary purpose of the role

Analyse complex data from multiple sources to identify revenue, process and business improvement opportunities; providing new information and insights to the business to inform planning, continuous improvement and performance.

Key accountabilities

- Identify, interpret and analyse complex data using linking and statistical techniques to answer multifaceted business problems including the identification of trends and/or patterns in complex data sets, and to create inference or insights
- Lead the development and implementation of templates, databases, data collection systems, data analytics and other strategies and solutions to optimise statistical efficiency and quality using best practice methodologies and industry recognised standards and processes
- Acquire data from primary or secondary data sources, create databases/data systems to expected standards and coach team members to maintain systems
- Oversee the filtering and "cleaning" of data to ensure the quality and accuracy of source data being built by team members
- Produce reports, visualisations and recommendations to answer complex business problems that are presented in the most appropriate format to ensure clarity for target audience
- Analyse and define new process improvement opportunities to support continuous improvement and business outcomes; providing advice to stakeholders, on ways to improve the efficiency and reliability of data products and services

- Develop and manage stakeholder relationships through strong and effective communications, managing expectations, mediation and issues management and negotiation to ensure delivery of services and the achievement of outcomes and benefits, engaging with stakeholders at all levels
- Build, lead and manage team of analysts setting the pace to successfully deliver all key milestones and outcomes within scope, on time and to expected standards; solving issues, unblocking problems, building capability, and guiding teams through the implementation of new processes.

Key challenges

- Applying expert quality assurance, validation and data linkage in the context of business need while identifying and embedding relevant and potentially new sources of data
- Responding to requests for information and advice while balancing competing demands to ensure objectives are achieved
- Providing, concise advice and determinations in a dynamic and complex working environment where users may not understand the context, assumptions and caveats associated with the data analysis products developed

Who	Why
Internal	
Manager and Director	 Provide high level advice and reporting Escalate issues, keep informed, advise, receive guidance and instructions
Direct reports	 Guide, support, coach, mentor and manage performance Review work and proposals to ensure integrity and accountability of decision making Provide own perspective and share information Work collaboratively with, inspire and motivate
Work Team	 Provide and receive information and advice Share information, collaborate, and provide input and guidance on issues, including meetings
Customer/Stakeholders	 Provide a client-focused approach to service delivery Articulate the needs and requirements of the service and collaborate with to negotiate solutions, provide expert advice and regular updates. Respond to needs and resolve issues
External	
Customers / Stakeholders	 Respond to requests and resolve issues in a timely and efficient manner Consultation, negotiation and partnership

Key relationships



Role dimensions

Decision making

This role has autonomy and makes decisions that are under their direct control as directed by their Manager. It refers to a Managers' decisions that require significant change to program outcomes or timeframes or are likely to escalate or require submission to a higher level of management. This role is fully accountable for the delivery of work assignments on time and to expectations in terms of quality, deliverables and outcomes. This role submits reports, business cases and other forms of written advice with minimal input from the manager.

Reporting line

Manager

Direct reports Various Data Analysts and Assistant Data Analysts Budget/Expenditure

As per the Customer Service delegations

Essential requirements

Tertiary qualifications in Statistics, Mathematics, Social Science, Actuary, Engineering, Computer Science, Econometrics or equivalent experience

Capabilities for the role

The <u>NSW public sector capability framework</u> describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into focus capabilities and complementary capabilities.

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.



FOCUS CAPABILITIES

Capability group/sets	Capability name	Behavioural indicators	Level
Personal Attributes	Manage Self Show drive and motivation, an ability to self-reflect and a commitment to learning	 Keep up to date with relevant contemporary knowledge and practices 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 and maintain a high level of personal motivation 	Adept
Relationships	Commit to Customer Service Provide customer-focused services in line with public sector and organisational objectives	 Take responsibility for delivering high-quality customer-focused services Design processes and policies based on the customer's point of view and needs Understand and measure what is important to customers Use data and information to monitor and improve customer service delivery Find opportunities to cooperate with internal and external stakeholders to improve outcomes for customers Maintain relationships with key customers in area of expertise Connect and collaborate with relevant customers within the community 	Adept
	Work Collaboratively Collaborate with others and value their contribution	 Encourage a culture that recognises the value of collaboration Build cooperation and overcome barriers to information sharing and communication across teams and units Share lessons learned across teams and units Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services 	Adept
Results	Think and Solve Problems Think, analyse and consider the broader context to develop practical solutions	 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 in collaboration with others Take account of the wider business context when considering options to resolve issues Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements Implement systems and processes that are underpinned by high quality research and analysis Look for opportunities to design innovative solutions to meet user needs and service demands 	Advanced



	•	Evaluate the performance and effectiveness of services, policies and programs against clear criteria	
Business Enablers	Technology Understand and use available technologies to maximise efficiencies and effectiveness	Champion the use of innovative technologies in the workplace Actively manage risk to ensure compliance with cyber security and acceptable use of technology policies Keep up to date with emerging technologies and technology trends to understand how their application can support business outcomes Seek advice from appropriate subject-matter experts on using technologies to achieve business strategies and outcomes Actively manage risk of breaches to appropriate records, information and knowledge management systems, protocols and policies	Advanced
People Management	Optimise Business Outcomes Manage people and resources effectively to achieve public value	Initiate and develop longer-term goals and plans to guide the work of the team in line with organisational objectives Allocate resources to ensure the achievement of business outcomes and contribute to wider workforce planning When planning resources, implement processes that encourage the attraction and retention of people of diverse cultures, backgrounds and experiences Ensure that team members base their decisions on a sound understanding of business and risk management principles, applied in a public sector context Monitor performance against standards and take timely corrective actions Keep others informed about progress and performance outcomes	Adept
Occupation	specific capability set		
IIIII SFIA	Strategy and Architecture, Information Strategy, Analytics The application of mathematics, statistics, predictive modelling 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	Evaluates the need for analytics, assesses the problems to be solved and what internal or external data sources to use or acquire. Specifies and applies appropriate mathematical, statistical, predictive modelling or machine- learning techniques to analyse data, generate insights, create value and support decision- making. Manages reviews of the benefits and value of analytics techniques and tools and recommends improvements. Contributes to the development of analytics policy, standards and guidelines	Level 5, INAN



exploitation of internal and external data sets generated from a diverse range of processes

Strategy and Architecture, Business Strategy and Planning, Research

The systematic creation of new knowledge by data gathering, innovation, experimentation, evaluation and dissemination. The determination of research goals and the method by which the research will be conducted. The active participation in a community of researchers; communicating formally and informally through digital media, conferences, journals, books and seminars

Development and Implementation, Systems Development, Data Modelling and Design

The development of models to represent and communicate data requirements and to enable organisations to understand their data assets and the relationships between real-world entities. The investigation, analysis and scoping of data requirements to support the development of software systems, data integration and data retrieval activities. The iteration, review and maintenance of data requirements and data models

Builds on and refines appropriate outline ideas for Level 4, RSCH • the evaluation, development, demonstration and implementation of research. Contributes to research goals and funding proposals. Collects and analyses qualitative and quantitative data as required. Creates research reports to communicate research methodology, findings and conclusions. Presents papers at conferences, contribute significant sections of material of publication quality, and presents reports to clients. Contributes to research plans and identifies ٠ appropriate opportunities for publication and dissemination of research findings. Makes an active contribution to research • communities • Investigates corporate data requirements, and Level 4, DTAN applies data analysis, design, modelling, and quality assurance techniques, to establish, modify or maintain data structures and their associated components (entity descriptions, relationship descriptions, attribute definitions). Provides advice and guidance to database . designers and others using the data structures and associated components



Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

apability roup/sets	Capability name	Description	Level
Personal Attributes	Display Resilience and Courage	views, and willing to accept and commit to change	Adept
	Act with Integrity	Be ethical and professional, and uphold and promote the public sector values	Intermediate
	Value Diversity	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Intermediate
Relationships	Communicate Effectively	Communicate clearly, actively listen to others, and respond with understanding and respect	Adept
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Adept
Results	Deliver Results	Achieve results through the efficient use of resources and a commitment to quality outcomes	Adept
	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Intermediate
Kesuits	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Intermediate
Business Enablers	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Intermediate
	Project Management	Understand and apply effective planning, coordination and control methods	Intermediate
People Management	Manage and Develop People	Engage and motivate staff, and develop capability and potential in others	Intermediate
	Inspire Direction and Purpose	Communicate goals, priorities and vision, and recognise achievements	Intermediate
	Manage Reform and Change	Support, promote and champion change, and assist others to engage with change	Intermediate

