Position Title: Principal Data Engineer

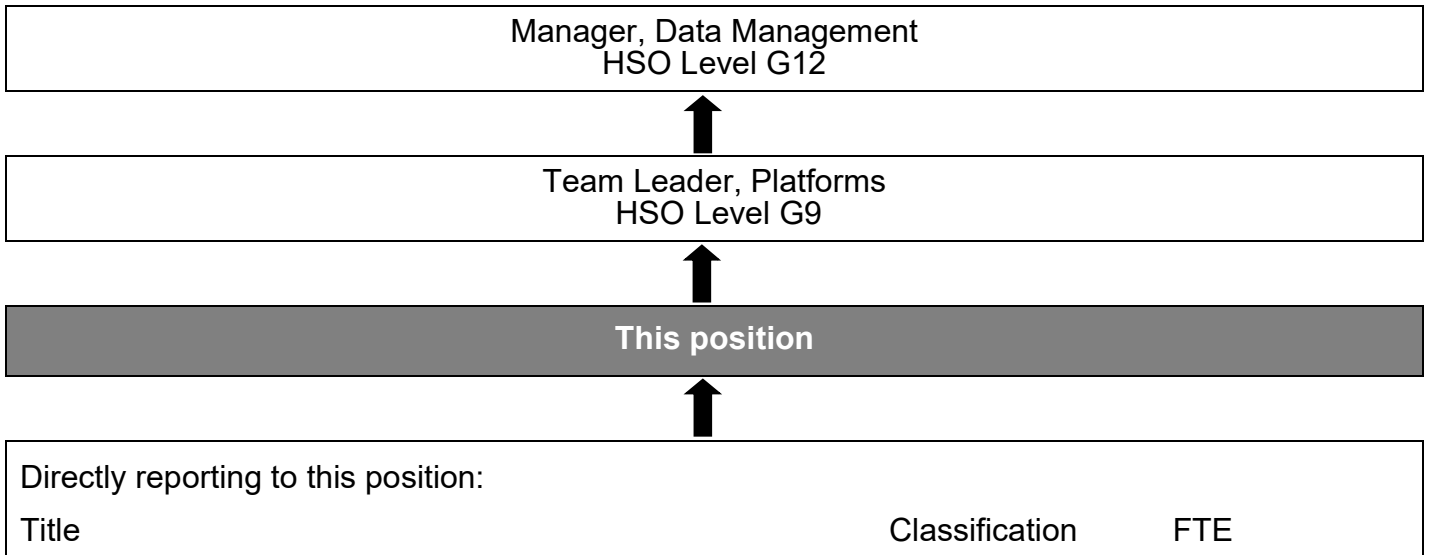|	
Classification	HSO Level G8
Employment Instrument	Health Salaried Officers Agreement
Organisation	Health Support Services
Business Unit	ICT
Function	Applications
Location	Perth Metropolitan Area

KEY ROLE STATEMENT

As part of the Health Support Services (HSS) ICT Business Unit, the Principal Data Engineer is responsible for:

- Creating, owning, and driving strategic plans around data architecture, governance, and design, as well as developing procedures, writing queries and optimising performance.

- Delivering robust and scalable data system and perform data management life cycle activities such as ingestion, curation, wrangling and presentation of data

- Provides technical expertise in process improvement, security, automation, and monitoring along with complex problem troubleshooting and resolution for data services.

- Setting up and operating data infrastructure, automatic job monitoring, data quality monitoring and improvement, data lineage, data dictionary etc. for the data lake and the data warehouse platform.

REPORTING RELATIONSHIPS:

Manager, Data Management
HSO Level G12

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Team Leader, Platforms
HSO Level G9

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This position

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Directly reporting to this position:

Title   Classification   FTE

No direct reports

ORGANISATIONAL CONTEXT:

Health Support Services (HSS) is the shared service centre for the WA public health system. We provide a suite of services to more than 55,000 employees across WA's public health services and hospitals. Our services include:

- Information, communication and technology services (ICT)
- Procurement and supply
- Workforce services, including payroll, recruitment and appointment, NurseWest and workforce data
- Financial services
- Delivery of customer-driven programs and projects

Our vision is to provide great services to our customers, be known as a valued partner, and support the health of all Western Australians. We seek to achieve this by delivering on our purpose of supporting our customers to provide excellent health care.

Whether you work in our corporate offices, at our customer sites, or out at our warehouses – collectively, our focus is on providing simple, reliable, responsive and sustainable services.

We are a workforce of over 1,400 innovative, dedicated and enthusiastic people. We embrace diversity and believe that our best services come from a workplace where varied perspectives and experiences are welcomed and encouraged.

We are undergoing a major business transformation to establish HSS as a modern shared services organisation and we're seeking the right people to grow our team.
It is an exciting time in the health sector and a defining period for HSS.

HSS VALUES

| We put our customers at the heart of what we do | We value and care for each other | We promise, we own, we do | We will find a way | We make a difference together |

Our values guide our behaviours and the way we interact with our customers and each other.

BUSINESS UNIT ROLE:

The ICT Business Unit provides solution development, implementation, transition and operations support for the WA health system's clinical and corporate business systems. This includes the strategic planning, architecture and ongoing management of the WA health system's ICT network, applications and infrastructure, provision of ICT support to WA health system customers and the management of ICT security and risk (including security of patient data).

POSITION RESPONSIBILITIES:

HSS Participation (Self):
- Maintains a culture of putting customers at the heart of everything we do and demonstrates a constant approach to the organisation, values and behaviours.
- Contributes effectively to business improvement and change management activities.
- Undertakes all duties in accordance with the WA health system's Code of Conduct, WA Public Sector Code of Ethics, Occupational Safety and Health and Equal Employment requirements, and other relevant legislation.
- Proactively contributes to maintaining the HSS Occupational Safety and Health Management (OHS) Framework.
- Takes personal accountability of own performance, and participates in all performance development activities.
- Collaboratively engages with team members, encouraging discussion whilst harnessing different viewpoints creating positive outcomes for key stakeholders.

Role Specific Responsibilities and Key Outcomes:

Data Management
- Leads and undertakes the design, analysis, development and implementation of target state data architecture to deliver a class 1 enterprise data warehousing platform to support effective use of data assets across WA Health.
- Designs and delivers data lifecycle management processes including data ingestion (near real time and batch processing), data curation and modelling, data usage, data archiving and data destruction.
- Develops and maintains the metadata-based ELT (Extract, Load, Transform) / ETL (Extract, Transform, Load) frameworks and processes.
- Provides expert advice on data engineering, data security, data warehousing and data governance technologies.
- Establishes, and ensures maintenance of, robust user access management processes and practices which adhere to WA Health data security standards.
- Develops, tests and maintains data architecture that ensures reliable and cost-effective use of technical components while maintaining high levels of security and governance practices.
- Contributes to the development, implementation and promotion of data management standards and frameworks.
- Ensures ongoing management, audit and compliance practices are implemented to ensure personally identifiable information (PII) and confidential data is managed throughout the data lifecycle.
- Develops and implements DevOps and DataOps methodologies to automate, monitor and improve the enterprise data platform processes.
- Ensures the delivery of 24 / 7 data availability, data currency and data integrity.
- Identifies ways to improve and optimises data availability, data security, data integrity, and data quality processes.
- Implements and contributes to the identification of process improvement initiatives, emerging technologies assessments, and opportunities for data management improvements.
- Provides mentorship and coaching to team members, guiding them on data engineering best practices and technology usage.

Stakeholder Engagement

- Works with internal and external stakeholders to develop and deliver data solutions to meet requirements.
- Conducts business engagement activities to develop an understanding of business drivers and requirements and build effective stakeholder relationships across WA Health.
- Chairs working groups, delivers data management presentations, and promotes the Community of Practice for data engineering across WA Health.

Project Management

- Scopes, delivers and manages data engineering and data management projects, ensuring business owners and other stakeholders are kept fully informed throughout the life of a project.
- Manages, and conducts the investigation and analysis of complex data and technology issues to identify root cause(s) and make recommendations for consideration and/or action.
- Manages projects to ensure that milestones are met within agreed time and budget, and investigates and negotiates change proposals with relevant stakeholders.

Governance and Support

- Assists with the configuration and administration of platforms, solutions and services used to deploy and govern the enterprise data platform.
- Ensures continuing compliance with all WA Health policies including information management, record keeping, security, and data custodian requirements.
- Develops or assists in the creation of data management documentation, including design artifacts, solution and data architecture diagrams, and technical, as built and supporting documentation.
- Other duties as required.

ESSENTIAL CRITERIA:

1. Extensive experience in delivering robust and scalable data ingestion pipelines, warehouse monitoring and data lifecycle management activities.
2. Extensive technical experience in cloud-based enterprise data warehousing and cloud infrastructure management.
3. Demonstrated experience in data modelling techniques and frameworks such as Data Mesh, Inmon and Kimball.
4. Demonstrated experience delivering data engineering projects within a large, complex ICT environment.
5. Demonstrated experience designing, developing and maintaining large-scale, cloud-based data lake and data warehouse processes using, for example, Snowflake, Microsoft Azure, AWS, Matillion.
6. Advanced technical experience in SQL, with working knowledge in one or more other programming language such as R or Python.

DESIRABLE CRITERIA:

1. Qualification in an Information Systems, Information Technology, Computer Science or related area.
2. Experience in a health care information technology environment.
3. Current knowledge of legislative obligations for Equal Opportunity, Disability Services and Occupational Safety & Health, and how these impact on employment and service delivery.

APPOINTMENT FACTORS

Appointment is subject to:

- Completion of 100 point identification check
- Successful Criminal Record Screening Clearance
- Successful Pre-Employment Integrity Check
- Pre-Employment Health Assessment

The details contained in this document are an accurate statement of the deliverables and other requirements of the job.

Version control	Description	CRC Approval Date	Registered Date
Vs 1.1	JDF Created	10/03/2023	28/11/2023