

## Senior Manager, Data Engineering

**Role Description:**

The Senior Manager, Data Engineering is primarily accountable for providing technical leadership, consulting services and technical support on data management. The role contributes to shaping the design and delivery of modern, robust data products that will enable faster, better, data-informed decision-making within the business, working closely and collaboratively working with Carnival UK, Carnival global cross-brand teams, and suppliers and vendors as required.

The role acts as main technical lead for the Data Services team for assigned data elements of the Technology Change Portfolio actively participating in design, development, testing, deployment, and maintenance of stable, secure, and scalable data solutions and pipelines in support of data and analytics projects, including integrating new sources of data into data warehouses, developing data models, building custom apps and delivering automated process solutions.

The Manager, Data Engineering is responsible for building and managing teams of internal and 3<sup>rd</sup> party data developers, while contributing to the data strategy and delivering the vision for data engineering at Carnival UK, driving improvements, standardisation and efficiencies to our data architecture and development processes to achieve excellence in all areas.

<b>RUI:</b>	1036	<b>Grade:</b>	CUKo6	<b>Criminal Record check required:</b>	Basic <a href="#">Criminal Record Check Requirement Criteria &amp; Assessment</a>
<b>Directorate:</b>	Carnival UK Shared Services	<b>Reports to:</b>	Senior Manager, Data Services		
<b>Function:</b>	Carnival UK Technology	<b>Team:</b>	Technology Architecture & Engineering Department – Data Services		
<b>Direct reports:</b>	<b>Job Titles &amp; Level</b> <ul style="list-style-type: none"> <li>Senior Developer, Data Services [CUKo8 – level under review]</li> </ul>				

**Accountabilities**

- Lead the shaping of data solutions and ensuring strategic fit, in collaboration with Architecture, Security, Infrastructure & Operations teams and with business representatives and external stakeholders
- Set the bar for the quality of data solutions; adopt and define the standards and best practices in data engineering; establish and enforce code review procedures and code quality standards
- Lead, empower and challenge a team of Senior Data Developers to grow their impact as individual technical leaders by providing them with context and continuous feedback
- Develop a people-oriented culture with an emphasis on quality, inclusion, key skills development, and retention
- Participate in key technical and design discussions with technical leads in the team, ensuring adherence to data architecture standards and legal requirements, e.g. GDPR, PCI compliance and SOX
- Manage the technical implementation of agreed initiatives working with Scrum Masters and Product Managers to ensure successful delivery
- Ensure testing, security and data quality is part of every step on the route to live
- Collaborate closely within the Data Services team to function as one team, delivering cohesive solutions
- Work with teams across the organisation to embed appropriate data approaches within their work and enable system and knowledge management, including identifying training and communication needs to ensure consistency in data management into the future
- Actively communicate and promote the work of the Data Services team within and beyond the Technology function
- Identify opportunities and technologies regarding the access, processing, visual display, and analysis of data
- Develop a strong understanding of business functions and processes to support opportunities for enabling data-driven decision making across the organisation
- Proactively partner with multiple external vendors, ensuring they deliver both quality and value. Ensure contracts and statements of work are suitable, and technical delivery aligns to CUK standards
- Source and establish relationships with vendors / suppliers previously unknown to CUK

**Proven Behaviours:**

**Speaks up** - Speaks out about concerns, shares ideas and encourages team to do the same

**Respects & protects** - Builds relationships and inclusive teams. Safeguards the wellbeing and safety of others. Looks for more efficient and sustainable solutions that protect the environment

**Improves** - Promotes collaboration and compliance, drives for continuous improvement

**Communicates** - Talks openly about values and priorities and acts a role model for others

**Listens & Learns** - Is curious and learns from others opinions and feedback

**Empowers** - Coaches others and creates an environment where people do their best work

**Health, Environment, Safety, Security (HESS) Responsibilities:**

- Lead by example by 'respecting and protecting' the health and safety of yourself and others
- Ensure your team and colleagues speak up report all accidents, 'near miss' incidents and work related ill health conditions
- Help your team follow HESS rules and procedures by promoting the HESS Golden Rules
- Attend HESS training & conduct risk assessments where required
- Demonstrate HESS leadership in accordance with our Heroes of Safe & Well programme

**General Responsibilities**

- Adheres to Corporate Policies and Procedures, including Code of Conduct, Audit Procedures and any control related responsibility for financial data entered, stored, or reported via business systems within employee's control (list not exhaustive).
- Undertakes ad hoc duties as required.

**Scope:****Problem solving:**

- The Manager, Data Engineering needs to understand the respective internal and external delivery capabilities for the realisation of the solutions they design, and agree delivery processes that exploit these capabilities appropriately and respects their constraints (e.g. skills, capacity, commercial).
- Given the diversity that exists within our business and the potential solutions that the group, its partners and IT industry has to offer, the Manager, Data Engineering needs to navigate a complex array of solution options to identify one that can be delivered
- Scrutinise and challenge design proposals, ensuring great decisions are made regarding data strategy

**Impact:**

- The Manager, Data Engineering provides a single point of contact for Data Services on projects and programmes, being accountable for the development of a data solution and its alignment to data engineering and other standards
- Conducts quality assurance and data validation. Identify appropriate ways to collect, collate and prepare data and can check that the data and analysis is correct. Understand the concept of data being fit for purpose and undertake data cleansing, preparation and standardisation
- Responsible for designing, testing and implementing changes to services that may have impact to Brands, Revenue, Guests and Employee Experience.
- Provide expert-level guidance to architects, developers, business analysts and others concerning new and modified services. The input will have direct impact on the design of those services.

**Leadership:**

- Be a thought-leader, providing insights into industry best practice for data engineering to the wider Technology teams
- Lead through effectively engaging and communicating with key stakeholders. Able to translate technical concepts into non-technical language and understand what communication is required for internal and external stakeholders
- Lead by example, acting as a role model for direct reports, showing a clear commitment to the goals of Technology and to Carnival UK, demonstrating the Culture Essentials behaviours.

- Direct or indirect involvement in the development of policies, standards and guidelines that direct the selection, development, implementation and use of Technology within the company
- Be an advocate for the Data Services team and communicate what it does, to create trust and authenticity

**Knowledge, Experience and Qualifications required:**

**Qualifications – essential:**

- Minimum of A level education

**Knowledge/ Experience – essential:**

- Technical leadership in the fields of data engineering or automation engineering within a large diverse organisation
- Managing and developing a team
- Experience leading data driven discussions & designing scalable data solutions
- Strong technical skills in broad range of data processing technologies
- Strong stakeholder management experience
- Advanced SQL knowledge and experience working with large data sets in a range of databases
- Third party and supplier engagements
- Experience providing consultancy to the business and IT team members

**Qualifications – desirable:**

- Degree in a relevant discipline.
- Industry recognised data and integration qualifications (e.g. MCDBA, Oracle, UiPath Certified Advanced RPA Developer UiARD, SnowPro Advanced Data Engineer, Power Platform Developer Associate)

**Knowledge/ Experience – desirable:**

- Understanding of project delivery methods and change management frameworks
- Experience with SQL Server & Oracle databases
- Experience with Automation technologies (UiPath, Power Automate)
- Experience with modern data platforms (Snowflake) & cloud services (AWS, Azure)
- Familiarity with data modelling techniques such as Dimensional/Kimball, 3NF and Data Vault.
- Version control solutions such as GitHub, SVN
- Familiarity with UNIX and Windows
- Knowledge of IIS and Web Applications.
- Knowledge of such programming languages as Delphi, C#, .NET, Python
- Familiarity with agile working practices and tools such as CI/CD, DataOps, Jira
- Familiarity with streaming data ingestion
- Travel, hospitality, leisure or maritime industry background.

<b>Issue Date:</b>	March 2022	<b>Issued by:</b>	Josie Sykes, Senior Manager, Data Services	
<b>REWARD ONLY</b>	<b>Grade:</b> CUKo6	<b>RUI:</b> 1036	<b>Date Approved:</b> 14/04/2022	<b>Initials:</b> CM