

Job Description

Job title	Data Manager	Grade	B
Department	IT		
Responsible to	IT Manager		
Revision Date	December 2025		

Organisation Context

The Institute of Physics (IOP) is the national society for the discipline of physics in the UK and Ireland. As well as being a learned society, we are also the professional body for members based in the UK, Ireland, and overseas.

We are a professional, modern, and ambitious organisation seeking to unlock the potential of physics and physicists nationally and internationally. Our purpose is to promote the advancement and dissemination of knowledge and learning in pure and applied physics for the benefit of all. We do this by building a thriving and diverse physics workforce, raising standards, supporting careers, and addressing barriers.

We demonstrate the importance, relevance, and impact of physics in everyday life and the role it plays in addressing society's major societal, economic, and environmental challenges. We influence change, actively engage in public and government dialogue, improving the quality of debate, informing policy, and influencing funding strategies. Above all, we are pioneering. We foster a sense of community amongst employees, members, volunteers, and people with an interest in physics, providing a platform and a voice for ideas to be heard and creating an environment which enables game-changing innovation.

Our organisational values are at the heart of IOP and provide the foundations to empower us all to lead cultural change, deliver high performance across the organisation, and enable us to promote advancements and learning in pure and applied physics for the benefit of all.

Our 2024–2029 strategy, titled "Physics for our Future," focuses on three key priorities: addressing the skills shortage and expanding opportunities in physics education and careers; strengthening physics across science, research, innovation, and technology; and exploring and communicating the social and economic benefits of physics to ensure they are widely understood. The strategy emphasises collaboration within the physics community, inclusivity, and diversity, aiming to make physics accessible and welcoming to all. It also highlights the central role of IOP Publishing in supporting the organisation's mission, with profits directed towards public benefit and scientific advancement.

Purpose of the Role and Accountabilities

Purpose of the Role

The Data Manager is a strategic role responsible for overseeing the IOP's entire data management function, managing the relationship with an outsourced team of data professionals, and aligning data strategy with business objectives and requirements. This position moves beyond day-to-day data handling tasks to focus on governance, delivery and strategy.

Data management, warehousing, data handling and centralised reporting are new concepts to the IOP, this is therefore a key role to take the IOP through our five year data strategy.

Accountabilities

Governance and Compliance: Establishing and enforcing robust data governance frameworks and procedures to ensure data security, accuracy and integrity. Working with the IOP Governance function to ensure compliance.

Implementation Oversight: Leading the complex implementation of the IOP Data Strategy, the design and implementation of an outsourced data warehouse, working with Project managers in managing timelines and cross-functional teams to deliver our data-driven solutions.

Contribution to Governance

While formal governance responsibilities rest with the Executive Team and Heads, effective governance is supported by contributions from colleagues at all levels of the organisation.

These contributions are essential to ensuring transparency, accountability, and the successful implementation of strategic objectives.

Colleagues may contribute to governance in the following ways:

Providing accurate and timely information

Colleagues play a key role in ensuring that decision-makers have access to relevant, up-to-date, and accurate information to support informed governance and oversight.

Implementing policies and procedures

By embedding organisational policies into daily operations, colleagues help ensure that strategic decisions are translated into consistent and compliant practice.

Supporting compliance and risk management

Colleagues contribute to the identification, reporting, and mitigation of risks, and help maintain compliance with legal and regulatory standards.

Participating in working groups or advisory panels

Colleagues may be invited to contribute their expertise and perspectives through participation in internal committees, project groups, or advisory forums that inform governance decisions.

These contributions reflect a shared commitment to good governance and help foster a culture of integrity, accountability, and continuous improvement across IOP.

Ways of Working

At IOP, we are committed to fostering a collaborative, inclusive and impact driven working environment.

All colleagues are expected to:

Work collaboratively across teams and functions to deliver shared goals and contribute to a culture of transparency and mutual support.

Demonstrate integrity by being a good corporate citizen, ensuring that work is evidence based, impartial and aligned with IOPs strategic priorities.

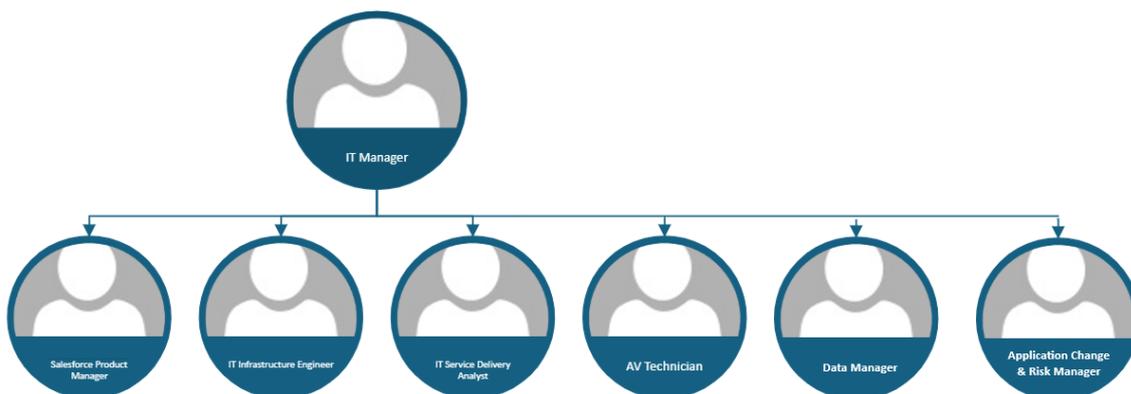
Champion diversity and inclusion, actively contributing to an environment where everyone feels respected, valued and able to thrive.

Engage constructively with stakeholders, to promote the value and impact of physics.

Embrace flexibility and innovation, adapting to change and seek continuous improvement in how we work and deliver services.

Take ownership and accountability for individual and team outcomes, upholding high standards or professionalism and conduct.

Organisational chart



The Institute of Physics is an open and inclusive organisation that welcomes and celebrates diversity.

Main responsibilities of the role

	Management: Overseeing the relationship with external Data warehouse host, management and development teams.
	Build and maintain relationships: Working with internal stakeholders across all five IOP Directorates to ensure that the controls and policies are in place to ensure that data is gathered and shared with the appropriate audiences
	Strategic Planning: Developing and implementing the organisation's data strategy to ensure data assets are used effectively to drive business performance and achieve goals.
	Governance and Compliance: Ensuring that all directorates are considering data as an asset to the IOP and not just to departments.
	Awareness: Ensuring that the IOP is aware of how data can inform and guide activity. Upskill staff and embed a data-driven culture through training and champions.
	Identify, assess and manage risks and threats to the IOP, its programmes and projects within their specialism.
	Encourage best practice in managing, following and promoting IOP EDI standards through their work, interaction with colleagues, stakeholders and members.

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Person Specification

We are looking for someone who...

Creativity and Thought Leadership

Demonstrates the ability to apply clear insight and creative thinking to complex challenges. Uses analytical skills and evidence-based reasoning to contribute innovative ideas and solutions. Offers intellectual input that supports the development of projects, programmes, and team initiatives.

Communication

Communicates effectively through clear, concise, and engaging written and verbal communication. Presents ideas with clarity and impact and actively listens to others to ensure mutual understanding. Engages constructively with colleagues and stakeholders to support collaborative working.

Priority Awareness

Effectively manages personal workload in alignment with team and organisational priorities. Demonstrates sound judgement in identifying what is most important and takes proactive steps to address potential barriers to progress.

Planning and Organisation

Plans and organises work efficiently, setting clear objectives and timelines. Anticipates potential challenges and adapts plans accordingly. Monitors progress and evaluate outcomes to support continuous improvement and delivery of high-quality results.

Collaboration and Delegation Support

Works collaboratively with colleagues, contributing to shared goals and supporting the delegation of tasks where appropriate. Demonstrates a strong sense of shared responsibility and is proactive in offering support to others

Responsibility and Accountability

Takes ownership of individual responsibilities and understands their contribution to wider organisational objectives. Demonstrates a commitment to accountability, transparency, and risk awareness in all aspects of work. Escalating where appropriate.

Work Quality and Impact

Delivers consistently high-quality work by setting clear goals, monitoring progress, and incorporating feedback. Strives for continuous improvement and contributes to the overall effectiveness of the team.

Team Contribution and Motivation

Fosters a positive and inclusive working environment. Recognises and values the contributions of others, encourages collaboration, and supports a culture of openness, respect, and shared success.

Experience this person should have is...

Must be cognisant and have demonstrable knowledge of the data warehouse landscape in general.
 Must have an understanding of Data engineering, analysis, reporting and data ingestion methods.

Must have demonstrable skills in managing vendors, specifically in the provision of a hosting, managed, data warehouse and services.

Skills this person requires are...

Technology Selection:

- **Snowflake** for the core data warehouse
- **Microsoft Azure** for hosting, **Fivetran** for ingestion, and **Power BI** for reporting.
- **Medallion architecture**
- **Kimball approach** for dimensional modelling.
- Implementation of CI/CD and Infrastructure as Code for deployment.
- **Security & Governance**
- Role-based access control within the warehouse.
- Establish governance frameworks, data catalogues, and quality metrics early
- Communication
- Problem-solving
- Project coordination
- Stakeholder engagement
- Digital literacy

Qualifications this person requires are...

- We are actively seeking candidates who can demonstrate that they have the experience and skills to fulfil this challenging role, we do not seek specific qualifications or years of experience, however a customer focus, curiosity, values and a fresh perspective will be considered.
- Certification in Data Governance (e.g DAMA) would demonstrate skills and knowledge applicable to this role.