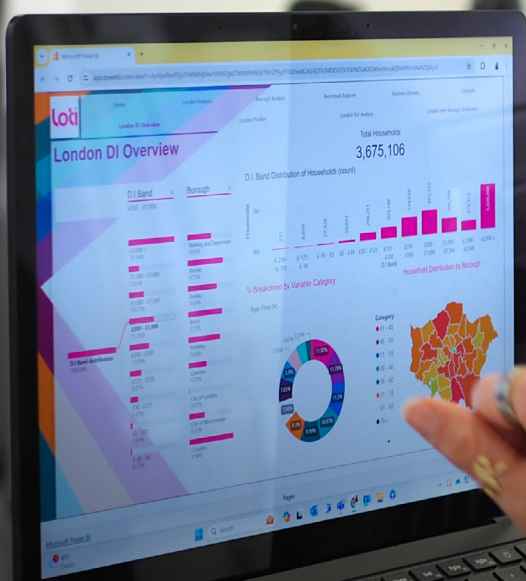# loti

Analytical Capability Framework

For analysts working
in local government

Why we need analytical skills in Local Government

London local government is committed to delivering outstanding public services and supporting our communities to thrive.

To achieve that, we need to use the best assets, tools and methods at our disposal. We recognise that data is one of our most valuable assets and the tools and methods associated with it can help us deliver better outcomes for Londoners.

We also know that many of our most pressing challenges - from adult social care to social inequalities, and from homelessness to climate change - are multifaceted.

To address these current and future challenges, local authorities need a workforce equipped with analytical skills so we can use data to:

Design and deliver better public services by transforming data into actionable insights that can be used to inform decisions, target resources and coordinate actions, and measure the effectiveness of public services

Improve policy-making by ensuring policies are based on evidence of what does and does not work

Enhance innovation by identifying new opportunities and challenges and utilising available data to develop innovative solutions, products and services

Increase knowledge and access by sharing data about London, its places, opportunities and people

Build public trust by demonstrating accountability and transparency in decision-making

About the Framework

This framework is designed for analysts, or other analytical roles, working in local government.

Recognising that there are many roles that undertake analytical work, but may not have "analyst" in their title, this framework applies to those who typically spend >50% of their role on analytical work.

Why have we developed this framework?

The framework has been developed in collaboration for LOTI boroughs and LOTI Data Leaders Network, adopted from a template created by Westminster City Council, in order to outline a core set of skills recognised as the foundations for an analytical role. Having a shared understanding across London local government is an important step towards building an accepted and respected analytical profession. It aims to support boroughs to facilitate employees' career progression in the analytical field, and bring in and retain analytical talent.

What can the framework be used for?

Recruitment and Selection:
To contribute to informing the job description and person specification for specific roles when recruiting. To assess applicants against competencies in the shortlisting process.

Performance Management:
To help define standards of performance and technical skills levels and training required for different roles.

Individual Training & Development Plans:
To help plan individual development and identify training opportunities.

Career Development:
To acquire the skills and knowledge needed to progress into your next role.

Organisational Development:
To develop a programme of training courses, either as part of Council-wide learning and development, or via external providers for specialist training.

This competency framework is not designed to be all-encompassing and the competencies outlined may need to be supplemented with other service-specific and/or specialist skills, knowledge and training. Generally it refrains from dictating specific software or tools, but may reference examples. Instead it focuses on the ability to do something, versus how it should be done.

However, it is intended to support development of wider workforce strategies, draw together work on skills and talent and align with values and commitments that support professional development as part of an organisation's culture.

> **It is intended to contribute to supporting a transparent culture, that offers clear opportunities for learning and development.**

Who should use this Framework?

✓ **Anyone** can use this framework to:

- learn more about analytical roles in local government, what they do and why they are important
- understand the typical skills required at each level
- understand what is required to move into the local government analytical profession

✓ **Individuals working in analytical** roles can use this framework to:

- assess their current skill levels
- identify skills that they can develop
- prepare for 1:1s, learning and development conversations, performance reviews/appraisals
- identify career pathway

✓ **Line managers** can use this framework to:

- take stock of existing skills in their teams and identify any gaps or opportunities for development
- inform development goals and conversations
- forecast workforce needs to make sure they have the right skill sets to achieve priorities
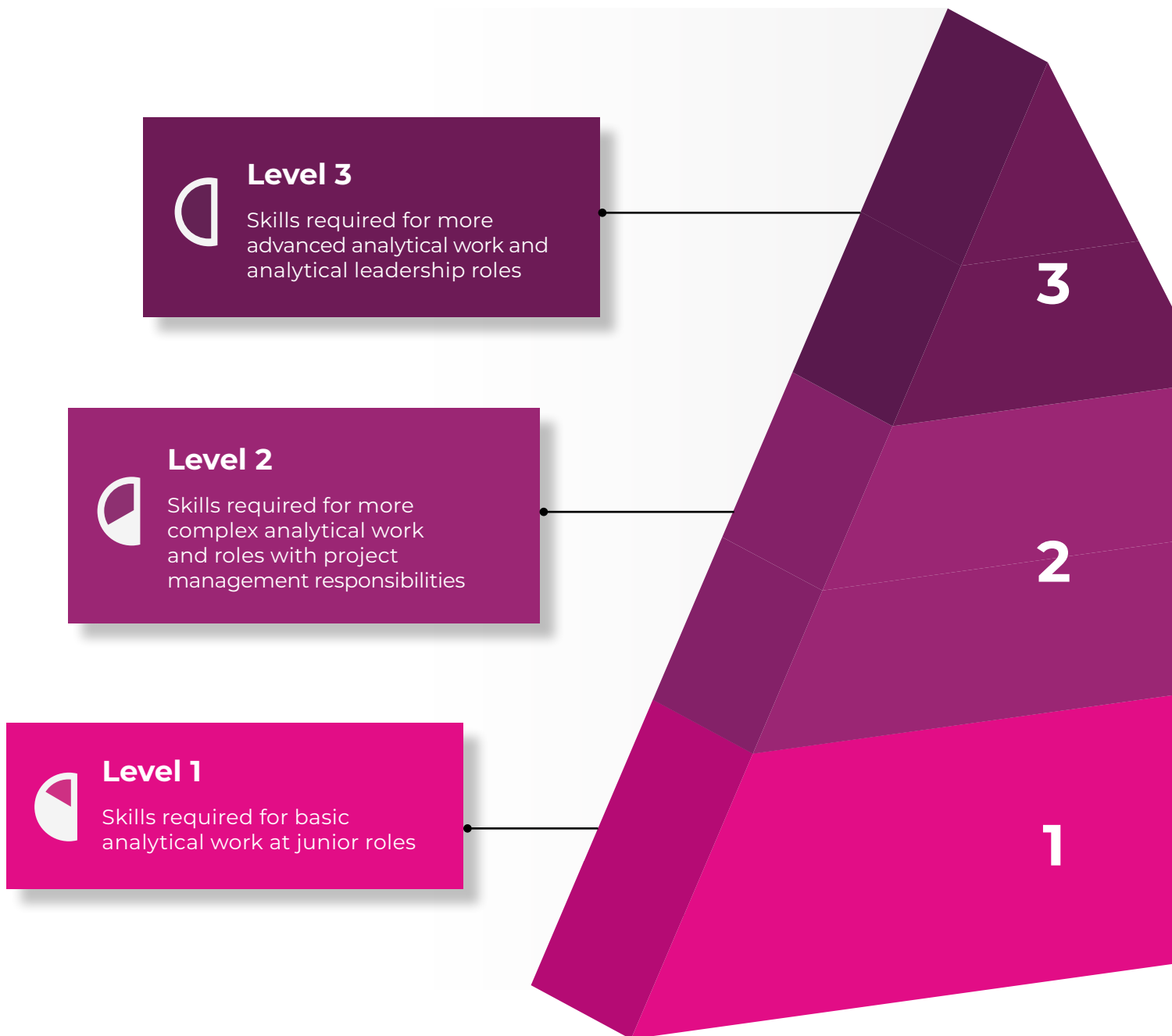
✓ **Hiring managers** in local government can use this framework to:

- create effective and consistent job descriptions, person specifications and adverts
- assess the suitability of a candidate during shortlisting and/or interview
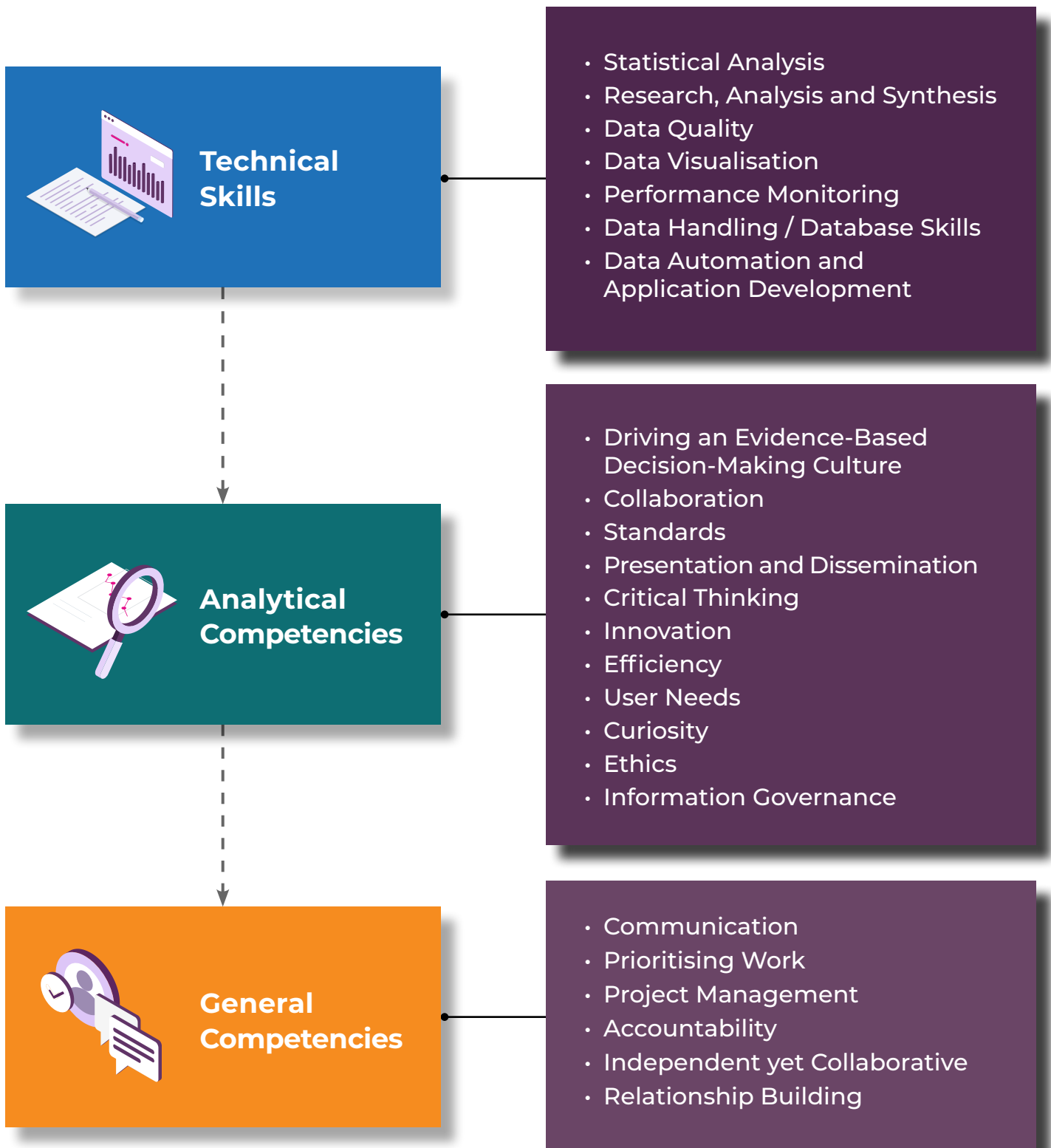
Competency Levels

The competencies described in this framework have been structured into different levels of responsibility (Levels 1, 2 & 3).

Level 3

Skills required for more advanced analytical work and analytical leadership roles

Level 2

Skills required for more complex analytical work and roles with project management responsibilities

Level 1

Skills required for basic analytical work at junior roles

3

2

1

Index

Overview of skills and competencies for analytical roles

Technical Skills

- Statistical Analysis
- Research, Analysis and Synthesis
- Data Quality
- Data Visualisation
- Performance Monitoring
- Data Handling / Database Skills
- Data Automation and Application Development

Analytical Competencies

- Driving an Evidence-Based Decision-Making Culture
- Collaboration
- Standards
- Presentation and Dissemination
- Critical Thinking
- Innovation
- Efficiency
- User Needs
- Curiosity
- Ethics
- Information Governance

General Competencies

- Communication
- Prioritising Work
- Project Management
- Accountability
- Independent yet Collaborative
- Relationship Building

Technical Skills

1.

Statistical Analysis

The process of collecting and analysing data to identify trends and develop valuable insights that can help guide evidence-based policy and inform service and business decisions.

Level 1

- Able to undertake simple calculations and modelling

- Able to interpret complex data and pick out the most pertinent summary statistics and key findings

Level 2

- Able to apply basic statistical techniques to understand correlations, significance and test hypotheses

- Able to develop basic forecasting and predictive models

- Able to create mathematical models using complex data to help solve real-life problems

- Able to interpret complex data and pick out key findings

Level 3

- Able to make sense of big data sets using programming languages (for example R or Python)

- Able to produce computer algorithms/predictive analytics using machine learning algorithms

- Able to use predictive modelling techniques - using appropriate tools e.g., ANOVA, decision trees, etc

Research, Analysis and Synthesis

Sourcing, interpreting/analysing and summarising data to help make informed decisions.

Level 1

- Knowledge and application of basic techniques for research, analysis and synthesis

- Able to define analysis/ research questions

- Able to summarise and interpret information accurately, making use of different sources and to conduct basic analyses of key data sets utilising a working knowledge of relevant data analysis packages

- Demonstrates attention to detail in checking information/ evidence for accuracy and validity

- Able to present clear findings that colleagues can understand and use

Level 2

- Understands and able to apply a range of methods to analyse research data and synthesise findings

- Able to effectively communicate findings to senior non-specialists, assisting them to take on key findings and implications

- Able to advise on choice and application of techniques to assure best practice

Level 3

- Applies knowledge to high profile and complex projects

- Can help the organisation to adopt a wide range of analysis and synthesis techniques, and to continually assure, improve and innovate their practices to generate clear and valuable findings

Data Quality

Ensuring that data is fit for purpose; accurate, complete, reliable, and consistent. Everyone has a role to play in ensuring data quality.

Level 1

- ✓ Understands basic data issues and can check that data and analysis look right
- ✓ Understands the concept of data being fit for purpose and the key dimensions of data quality
- ✓ Applies a curious and analytical mindset
- ✓ Able to prepare and cleanse data with some support

Level 2

- ✓ Identifies appropriate ways to collect, collate and prepare data
- ✓ Decides if data is accurate and fit for purpose and can apply data quality dimensions
- ✓ Able to prepare and cleanse data
- ✓ Able to communicate the limitations of data
- ✓ Supports colleagues to ensure data quality of their outputs

Level 3

- ✓ Demonstrates deep understanding of relevant data sources, tools and systems, including their limitations
- ✓ Uses appropriate approaches for verifying and validating data and analysis
- ✓ Able to influence others in data approaches

Data Visualisation

The graphical representation of information and data. Using visual elements like charts, graphs and maps, data visualisation tools to provide an accessible way to see and understand trends, outliers, and patterns in data. This is essential for making informed decisions.

Level 1

- Can work under direction to use the most appropriate medium to visualise data to tell a story

- Able to make simple graphs and charts from simple datasets (e.g. using Excel type products)

Level 2

- Uses the most appropriate medium to visualise data to tell compelling stories that are relevant to business goals and can be acted upon

- Able to make complex visuals from complex data sets (e.g. using Excel type products)

- Able to present, communicate and disseminate data appropriately and with influence

Level 3

- Demonstrates skill in a number of data visualisation tools and techniques

- Able to make complex visualisations from complex data sets (e.g. using Power BI, Click, Tableau, Business Objects or similar software)

- Applies best practices to present, communicate and disseminate data appropriately and with influence

- Advises and supports colleagues to improve quality of visualisations

Performance Monitoring

Performance monitoring is a continuous assessment process that involves collecting and analysing data to measure progress towards achieving specific objectives and targets (e.g. KPIs, Corporate Priorities). This process helps organisations to identify what is working well, what is not and how to improve performance of programmes, projects and services.

Level 1

- Able to identify KPIs and objectives to measure progress
- Able to collate data using appropriate methods

Level 2

- Able to assess, measure and track progress against KPIs
- Able to conduct basic cost-benefit analysis and evaluate key findings
- Able to quantify benefits in the short and medium term

Level 3

- Able to write monitoring and evaluation reports, identifying trends and patterns in data, and communicate this to a range of stakeholders
- Able to use randomised controlled trial methods

Data Handling and Database Skills

Data handling refers to the practice of ensuring data is accurate, consistent and any potential limitations in using data are clearly identified. Database skills are technical skills in design, construction and maintenance of databases.

Level 1

- Basic understanding of data types and formats
- Proficiency in basic data manipulation and analysis, can use pivot tables, and use basic formulas (averages, sums, text, percentages etc.) (e.g. Excel)
- Familiarity of basic data cleaning techniques (e.g. removing duplicates, handling missing data)
- Basic knowledge of database concepts such as tables, rows, and columns (e.g. SQL)
- Understanding of basic statistical concepts (e.g. mean, median, standard deviation)

Level 2

- Proficient in formulas such as IF functions, VLOOKUP's, filtering to improve data quality (e.g. Excel)
- Knowledge of concepts such as joins and subqueries (e.g. SQL)
- Proficient in data manipulation and analysis (e.g. SQL)
- Ability to design and implement database schema
- Experienced at data cleaning and preprocessing techniques such as removing duplicates, handling missing data, data normalisation
- Familiarity with data modelling tools (e.g. R, Python)
- Can implement statistical concepts to real world data

Level 3

- Mastery of data manipulation and analysis (e.g. SQL), including optimisation techniques
- High attention to detail. Can identify and resolve data modelling errors before starting the database construction stage, preventing bad code from affecting performance later
- Ability to design and implement complex database systems, including data warehousing
- Can communicate complex database functions at different levels
- High proficiency in programming languages

Data Automation and Application Development

Skills and expertise related to leveraging automation, application development and API integration to streamline manual processes, enhance data-related tasks, make work replicable, and improve overall data analysis capabilities.

Level 1

- Able to identify repetitive manual tasks and suggest opportunities for automation

- Familiarity with low-code platforms for basic app development

- Basic understanding of APIs and their applications in data retrieval and integration

- Capability to use pre-built APIs for simple data tasks

Level 2

- Proficiency in developing simple data-driven applications using low-code or rapid application development tools

- Capability to design and implement user-friendly interfaces for data input and retrieval

- Able to work with APIs to access, transform, and integrate data from various sources

- Experience in building custom scripts or applications for specific data-related tasks

Level 3

- Expertise in building complex, customised applications for data analysis and automation

- Capability to architect and develop end-to-end data solutions

- Proficiency in optimising API usage for efficiency and scalability

- Able to troubleshoot and resolve complex API-related issues

2. Analytical Competencies

Driving an Evidence-Based Decision-Making Culture

Making it easier for the organisation to access and digest intelligence, so that it can be used for decision making, strategy and policy development.

Level 1

- Ensures that relevant analytical and intelligence products are shared with stakeholders using established tools and networks

Level 2

- Thinks about how to make it easier for the organisation to access and digest intelligence so that it can be used for decision making, strategy and policy development

- Is active in developing and shaping the tools and networks used to share intelligence across the organisation

- Ensures that teams share intelligence across the organisation using established tools and networks

- Can make well informed decisions by considering various factors

Level 3

- Responsible for leading and improving the tools and networks that make it easy to share intelligence and insights – and demonstrates their value

- Is effective at promoting tools and networks used to share intelligence and insights

- Promotes a strategy around user feedback to ensure that intelligence is provided in the best way on the right subjects

- Proficient in making innovative, high impact decisions, often in uncertain or rapidly changing environments

Collaboration

Making it easier for analytical teams across the organisation to optimise their collective resources to be most effective. Working effectively with non-analytical peers including subject matter experts and frontline workers

Level 1

- ✓ Works effectively with analytical peers to support cross team project work

- ✓ Helps with facilitating

- ✓ Partakes in shadowing

- ✓ Able to communicate effectively and present ideas for feedback

- ✓ Understands the value of working with non-analytical peers including subject matter experts and frontline workers

Level 2

- ✓ Contributes to the development of analyst networks across the organisation

- ✓ Proactively ensures that analysis is organisationally effective (duplication is minimised, re-use maximised) by proactively identifying analytical work strands across team areas

- ✓ Liaises effectively with analytical leads to support cross-team working

- ✓ Contributes to knowledge sharing whilst engaging with other stakeholders and service managers

- ✓ Proactively seeks perspectives from non-analytical peers including subject matter experts and frontline workers to support projects

Level 3

- ✓ Promotes and leads analytical networks across the organisation

- ✓ Takes a strategic view of the optimal use and configuration of analyst and intelligence resources across the organisation

- ✓ Liaises effectively with senior managers and decision makers pan-organisation to ensure that intelligence is optimised

- ✓ Provides training to develop skills across the team

- ✓ Influences team to work with non-analytical peers including subject matter experts and frontline workers as standard during project work

Standards

Having standards common across analytical teams, ensuring best practice quality assurance standards are met.

Level 1

- Correctly applies documentation (incl. limitations, caveats etc.), accessibility, and knowledge management standards

- Supports the production of best practice guides

- Demonstrates a high level of statistical integrity when working with customers

Level 2

- Ensures adequate documentation (incl. limitations, caveats, etc.), accessibility and knowledge management are in place to improve speed of analysis/ production and minimise duplication and errors

- Manages the production of best practice guides

- Undertakes succession planning and develops business continuity strategies, supported by adequate documentation and knowledge management systems

Level 3

- Actively seeks out best practice for documentation (incl. limitations, caveats etc.), accessibility, and knowledge management standards from external sources

- Shapes and promotes documentation, accessibility, and knowledge management standards

- Shapes and promotes the use and development of best practice guides

Presentation and Dissemination

Ensuring that analysis has optimal impact.

Level 1

- Implements appropriate data visualisation methods for statistical products to boost user engagement

- Basic Presentation Skills: Can deliver simple presentations using basic slides or materials

- Clear Communication: Able to express ideas and information coherently, but may lack engagement techniques

- Data Collection: Can gather relevant information and data but may not know how to use it effectively in presentations

- Basic Storytelling: Can narrate a basic story but may struggle to make it engaging or relatable

- Use of Tools: Familiar with basic presentation tools (e.g. PowerPoint, Keynote, Google Slides) but not proficient in advanced features

- Able to present to a non-technical audience

Level 2

- Actively seeks out new and insightful ways to present and visualise statistical data

- Able to tell a story / write a report in a compelling and actionable way

- Effective Presentation Skills: Can create and deliver well-structured presentations with clear messaging and visuals

- Engaging Communication: Able to captivate audiences through varied speaking styles, body language, and interaction

- Data Analysis: Can analyse data and use it to support arguments and insights in presentations

- Effective Use of Tools: Makes an effort to use appropriate presentation software and understands how to use more advanced features beyond just the basics

Level 3

- Advanced Presentation Skills: Tailors presentations to audience needs and interests

- Advanced Communication: Able to engage diverse audiences

- Storytelling Mastery: Proficient in crafting and delivering compelling narratives that resonate with the audience

- Advanced Tools: Proficient in using presentation software and uses more advanced features and interactive tools where appropriate

- Demonstrates strong active listening skills

- Self-aware and able to monitor own reactions in various situations / adapt to audience reactions

Critical Thinking

Making effective decisions and quickly understanding a situation or problem using all available facts.

Level 1

- Aware of the business operating context and uses information from several sources to make decisions

- Capable of basic problem-solving: can identify problems with an understanding of the level of the problem and contribute to implementation of solutions

Level 2

- Proactively seeks to understand the changing business context and works with peers to solve business challenges

- Capable of intermediate problem-solving: can respond to problems as they occur, initiate and monitor actions, determine and assist implementation of solutions

Level 3

- Able to combine experience with insights from multiple stakeholders and sources to make business-wide decisions

- Strategically astute, ensuring your teams put the bigger picture first and resolve conflicting agendas

- Capable of complex problem-solving: ensures the most appropriate actions are taken to resolve problems as they occur, can coordinate team to resolve problems and implement solutions

Innovation

Looks for alternative ways of approaching analysis which will improve the efficiency, flexibility, accessibility, and reliability of outputs for decision making. Finding new ways of supporting decisions where there are complex, diverse, and absent data and intelligence.

Level 1

- ✓ Keeps abreast of new and evolving technologies, tools, and analytical techniques to deliver results effectively. Employs new methods or uses existing products in new and innovative ways

- ✓ Takes effort to use statistical data in innovative ways, rather than automatically and uncritically following past methodologies

Level 2

- ✓ Applies knowledge of new and evolving technologies, including open-source software, and has confidence in making decisions around which methods and techniques to apply

- ✓ Experiments with innovative methods to conduct analysis and shares lessons learned across the organisation

Level 3

- ✓ Promotes new ways of working and continuously seeks opportunities to improve processes and analysis using innovative methods, whilst showing awareness of the impact on the business

- ✓ Actively seeks out examples of innovative solutions from external sources

Efficiency

Looks for ways to speed up insight generation without compromising analytical integrity.

Level 1

- Looks for ways to bring efficiency to project-based analysis (e.g. automations, reusable models)

Level 2

- Experiments with innovate ways to make analysis more efficient

- Identifies opportunities to make analysis more efficient across a programme of work with a team

- Shares lessons on efficient analysis across the organisation

Level 3

- Actively looks for strategic opportunities to make analysis more efficient and promotes solutions across the organisation

- Actively seeks out efficient ways of delivering analysis from other organisations

User Needs

**Putting end-user value
at the heart of analysis.**

Level 1

✓ Uses relevant
technology to gather
contextual data from
different sources to
meet user needs

Level 2

✓ Identifies a means of
understanding and
delivering user needs
across a programme
of analytical work

✓ Encourages the
evaluation of
presentations and
disseminations
through user
engagement,
encouraging a
culture of meeting
user needs

Level 3

✓ Promotes strategic
opportunities
to improve user
experience across
the organisation

✓ Actively seeks out
ways of improving the
user experience from
other organisations

Curiosity

Proactively identifying issues, building rapport, and establishing trust. Introducing a fresh perspective as solutions are identified and implemented in novel ways.

Level 1

✓ Proactively seeks information to better understand their role and how teams around them operate

Level 2

✓ Proactive about how the wider business operates and seeks out diverse input to improve output

Level 3

✓ Proactively looks externally for ideas and inspiration. Internally, purposefully seeks diverse views, creating the space and the conditions to hear from others

Ethics

Ensuring that research and analysis is carried out within an ethical framework.

Level 1

- ✓ Understand the ethical issues involved when using data as part of a project

- ✓ Correctly applies ethical guidelines

Level 2

- ✓ Develops a team view of how to comply with ethical issues related to research and analysis

- ✓ Supports the development of ethical guidelines

Level 3

- ✓ Shapes the development of ethical guidelines for research and analysis across the organisation

- ✓ Promotes ethical guidance for research and analysis across the organisation

- ✓ Actively seeks out ways of improving ethical approaches by looking at other organisations

Information Governance

Ensuring that research and analysis is carried out within legislative frameworks.

Level 1

✓ Understands data protection and information management legislation involved with the use of data on a project

✓ Correctly applies data protection and information management legislation guidelines

Level 2

✓ Develops a team view of how to comply with data protection and information management legislation related to research and analysis

✓ Supports the development of data protection and information management legislation guidelines

Level 3

✓ Shapes the development of data protection and information management legislation guidelines for research and analysis across the organisation

✓ Promotes data protection and information management legislation guidance for research and analysis across the organisation

✓ Actively seeks out ways of improving data protection and information management legislation approaches from other organisations

3. General Competencies

Communication

Conveying information using the most effective medium and language for the audience

Level 1

- Aware of the need to translate technical concepts into non-technical language

- Understand what communication is required with internal and external stakeholders

Level 2

- Able to communicate effectively with technical and non-technical stakeholders, including tailoring communication to the audience

- Can support and host discussions within the team/ project team and can manage differing perspectives

- Able to listen and interpret needs of stakeholders

Level 3

- Able to communicate confidently with stakeholders at all levels, demonstrating flexibility and ability to adapt communication depending on the audience

- Can manage stakeholder expectations and discussions around high risk and complexity

- Can support or host difficult conversations with senior stakeholders

- Is an advocate for the team, internally and externally, and can speak on behalf of the team/project to large audiences

Prioritising Work

Managing workloads with multiple demands and projects effectively.

Level 1

- Uses available information to make decisions and to prioritise work in line with team or project goals

Level 2

- Aware of the business context, using information from several sources to make decisions

- Regularly reviews goals with line management to ensure focus on the right things

Level 3

- Makes complex and difficult decisions using data, judgement, external insight, and experience. Keeps the bigger picture in mind at all times, reviewing and adapting team goals to ensure business priorities are met

Project Management

Contributing to or leading the work of a team to achieve goals where a piece of work is sufficiently complex.

Level 1

- Understands the basic principles of project management and how they can be applied in the environment

- Can support projects effectively within team / analyst roles

Level 2

- Can deploy advanced project management skills and techniques to manage projects

- Adopts project management tools and techniques most appropriate for the environment

- Can effectively scope a project and refine a question with support where required

Level 3

- Can deploy advanced project management skills and techniques to manage or oversee multiple complex technical projects

- Can confidently and independently employ scoping and negotiating skills with multiple project stakeholders

- Able to work with multiple stakeholders to refine the question to be answered by the data project

- Shares knowledge of project management tools and techniques with others

Accountability

Taking responsibility for ensuring that project deadlines are met.

Level 1

- Fulfils workload commitments, escalating issues effectively where there are any barriers

Level 2

- Relied upon to deliver a wide range of tasks and take ownership for identifying and solving problems
- Communicates effectively with others whose work they rely on to get things done

Level 3

- Delivers high quality outputs that span business areas and holds others to account for doing the same
- Anticipates and resolves complex problems, removing the blockers for the team by working effectively across teams

Independent yet Collaborative

Being effective and empowered through independent working without compromising on the value of seeing the bigger picture, through collaboration and peer support.

Level 1

✓ Able to work independently but active in seeking support / advice as needed

Level 2

✓ Confident to ask questions, get information and collaborate with stakeholders

✓ Able to collaborate effectively with technical and non-technical peers

Level 3

✓ Works independently using own time and that of others effectively

✓ Proactive in being collaborative, avoiding duplication and spotting opportunities

✓ Confidently collaborates with technical and non-technical peers

Relationship Building

Enabling effective working relationships that support project delivery, optimise effort, and minimise duplication through good communication, being open, honest, and professional - establishing trust and rapport.

Level 1

- ✓ Seeks opportunities to connect with others and build productive and trusted relationships across teams, underpinned by delivering on commitments

Level 2

- ✓ Proactively builds relationships that enable effective cross-business collaboration

- ✓ Understands how teams can support each other to achieve their aims

Level 3

- ✓ Proactively builds strong relationships internally and externally based on trust, aligning goals to those of other leaders and what is best for the business

- ✓ Able to resolve any conflicts through honest conversations

Glossary of Key Technical Terms

- **Algorithm:** A set of commands that must be followed for a computer to perform calculations or other problem-solving operations.

- **Analytical Skills:** The ability to gather, process and interpret data to generate meaningful insights.

- **Application Programming Interface (API):** A piece of software that lets one program access or control another program.

- **Artificial Intelligence (AI):** The science of making machines do things that would require intelligence if done by humans.

- **Data:** Information about people, things and systems.

- **Data Analysis:** Examining, interpreting and analysing data to discover useful information, draw conclusions and help make informed decisions.

- **Data Automation:** The use of technology to automate repetitive data-related tasks, such as data entry, data cleaning, and report generation.

- **Data Ethics:** A branch of ethics that evaluates data practices with the potential to both create trustworthy and positive impacts, and also adversely impact on people and society – in all branches of data collection, sharing and use.

- **Data Handling:** The management and manipulation of data, including activities such as data collection, storage, retrieval, and analysis.

- **Data Manipulation:** The process of organising or arranging data in order to make it easier to interpret.

- **Data Modelling:** Producing visual representations of information systems to communicate the relationship between different data types.

- **Data Processing:** The carrying out of operations on data, especially by a computer, to retrieve, transform, or classify information.

- **Data Quality:** The degree to which data is fit for purpose, including the overall accuracy, completeness, uniqueness, consistency, timeliness and validity of the data.

- **Data Visualisation:** The graphical representation of data and information, using charts, graphs, maps, and other visual elements to communicate data and information to users and help them to understand and interpret it.

- **Evidence-Based Decision-Making:** The practice of using data, research, and analysis to inform and support decision-making.

- **Information Governance:** A framework for handling information in a secure, legal and ethical way.

- **Key Performance Indicators (KPIs):** Specific, measurable metrics used to track progress towards achieving organisational goals and objectives.

- **Machine Learning:** An application of artificial intelligence (AI) that allows systems to learn automatically and improve their performance from experience without being explicitly programmed.

- **Performance Monitoring:** A continuous process that involves regularly measuring and tracking performance against key performance indicators (KPIs) or other performance indicators.

- **Predictive Analytics:** Using the patterns of past behaviour to predict behaviour in the future.

- **Programming Languages:** Formal languages used to write computer programs and instructions.

- **Statistical Analysis:** The use of statistical methods and techniques to analyse data, identify patterns and relationships, and draw conclusions.

- **Synthesis:** The process of combining different pieces of information or data to create a new understanding or perspective.

- **User Needs:** The requirements, preferences, and expectations of the people who will use a product, service, or system.

Related Resources

Useful LOTI Resources

> **LOTI Digital, Tech and Data Job Description Library**

> **LOTI Communities of Practice**

> **LOTI Outcomes-Based Methodology for Data Projects**

> **Can data help me solve this problem?**

> **Data Ethics Principles**

> **Information Governance Considerations for System or Process Testing**

> **How to undertake an information governance review**

> **Pan-London Data Sharing Agreements**

Other Resources

> **Government Digital and Data Profession Capability Framework**

loti

Acknowledgements

in /(LOTI)   **loti.london**