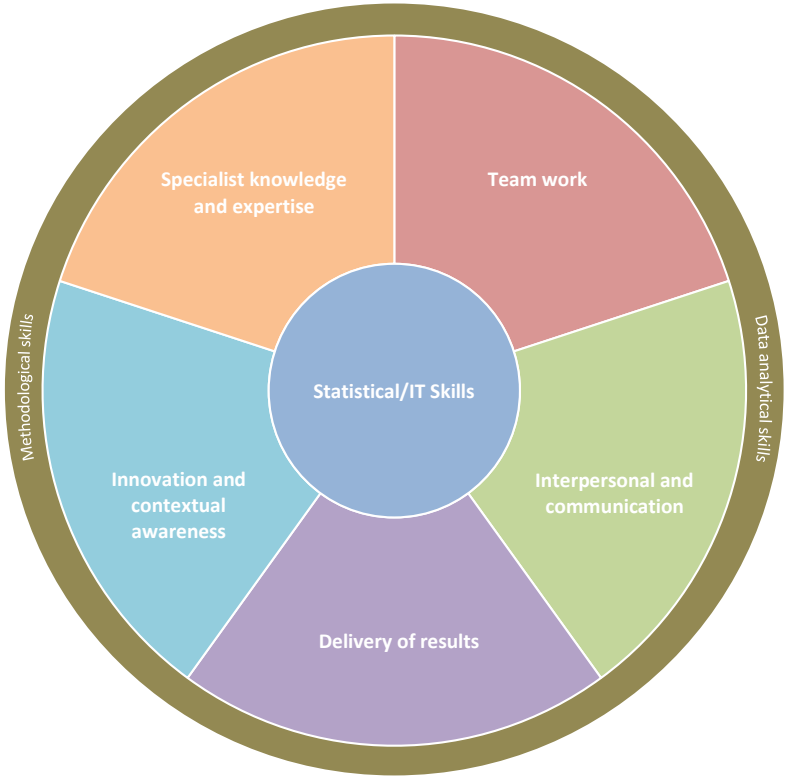
Big Data Team Level Competency



Team work	Ability to work collaboratively with others, developing and maintaining good working relationships and sharing information and knowledge
Interpersonal and communication	The ability to communicate with others in a fluent, logical, clear and convincing manner together with an ability to engage effectively with a wide range of stakeholders
Delivery of results	Ability to deliver outcomes on time and to a high standard and ensure that goals are achieved
Innovation and contextual awareness	Ability to observe environmental factors and exploit them for the work environment together with the ability to develop new ideas, concepts and solutions outside of established patterns
Specialist knowledge and expertise	Possess appropriate specialist knowledge and expertise to work effectively as part of the Big Data team
Statistical/IT skills	Possess detailed knowledge and understanding of statistical methodology and concepts, ability to extract key messages or underlying trends within data and possess the IT skills relevant to statistical production and analysis
Data Analytical/ Visualisation skills	Ability to work with structured and unstructured data and combine data processing techniques to achieve outcomes, possess knowledge and understanding of data visualization techniques relevant to big data

Big Data Team Level Competencies – *Performance indicators*

Team work	Shows respect for colleagues and co-workers
	Supports colleagues and takes views of others on board
	Is adaptive and works to achieve common goals
	Is able to work with a group of people in a constructive way and can motivate others
	Weighs information from all sources including team before making decisions
Interpersonal and communication	Presents information clearly, concisely and confidently when speaking and in writing
	Projects conviction, gaining buy in by outlining relevant information and selling the benefits
	Develops and maintains networks of contacts to facilitate problem solving or information sharing
	Treats others with diplomacy, tact courtesy and respect, even in challenging circumstances
	Takes into account different views/perspectives and forms opinion on the basis of information and discussions
Delivery of results	Maintains a strong focus on the ultimate goal and works to achieve this
	Sets measurable, achievable and clear objectives on own work
	Uses resources effectively, challenging processes to improve efficiencies
	Looks critically at issues to see how things could be done better
	Applies appropriate systems/controls to deliver efficient and high value results
Innovation and contextual awareness	Awareness of environmental factors that could affect current policy
	Has the skill to translate external developments into statistical indicators
	Integrates diverse strands of information, identifying inter-relationships and linkages
	Is resourceful and creative, generating original approaches when solving problems and making decisions
	Comes up with innovative ideas and thinks unconventionally about questions or problems
	Challenges the established wisdom and adopts an open minded approach coming up with new solutions
Specialist knowledge and expertise	Clearly understands the role, objectives and targets and how they fit into the work of the team
	Develops the expertise necessary to carry out the role to a high standard and shares this with others
	Has significant expertise in own field that is recognised and utilised by colleagues
	Is proactive in keeping up to date on issues and key developments that may impact on own area and office generally
	Ability to work with structured, unstructured and semi-structured data and ability to categorise data
	Ability to process data in batch and streaming modes
	Understanding of data base models associated with big data such as relational document, big value, NewSQL etc.
	Understanding of security and privacy issues associated with big data
Statistical/IT skills	Is able to use core statistical skills for data analysis such as: quantitative and qualitative analysis, weighting, inference, validity and modeling
	Can use programming/scripting languages associated with statistical computing environments such as R, SAS, SPSS or equivalent
	Can combine various data processing techniques to achieve given analytical task
	Good knowledge of data science and data science methods
	Shows evidence of keeping up to date with new trends in data techniques and technologies
	Ability to process and generate large data sets using an appropriate programming model such as MapReduce
	Ability to use stream process technologies such as Apache Storm, MapR etc.
	Ability to use batch process technologies such as Hadoop
	Ability to use open source cluster computing systems such as Spark
	Ability to use tools associated with machine learning algorithms such as regression, classification, cluster and dimensionality reduction
Data Analytical/ Visualisation skills	Strong ability to work with appropriate coding/scripting languages
	Ability to develop software for more advanced data processing tasks
	Can use high performance computing platforms in an efficient way
	Can operate on structured and unstructured data with a wide range of tools
	Ability to analyse complex data and identify what is relevant
	Can combine various data processing techniques to achieve a given analytical task
	Can assimilate information from a range of sources and organise complex information to make it accessible
	Understanding of machine learning algorithms such as supervised and unsupervised learning, semi-supervised classification and reinforced learning
	Ability to apply data mining techniques to unstructured data sets such as time-series data, streaming data, sequence data, graph data, spatial data and multimedia data
	Understanding of data visualisation techniques under the broad headings of spatial layout visualisation, abstract/summary visualisation and real time interactive visualisation