

# Data Analyst Sample Assessment Brief

NCFE Level 4 Diploma: Data Analyst

QN: 603/7751/3

Unit 04 Stakeholder engagement and user experience in data analytics (H/651/0927)
Unit 05 Organisational data (J/651/0928)
Unit 06 Data mining and statistical analysis

(K/651/0929)



Student name / ID number	
	<b>Unit 04</b> Stakeholder engagement and user experience in data analytics (H/651/0927)
	<b>LO1</b> : Examine how to plan and deliver an effective analysis for a range of stakeholders
	Unit 05 Organisational data (J/651/0928)
Unit number, title and learning outcomes (LOs)	<b>LO2</b> : Examine common data analytics methods and the functions and features of the tools used to support this
	Unit 06 Data mining and statistical analysis (K/651/0929)
	LO1: Examine the purpose of common statistical methodologies and their application to meet requirements LO2: Explore the purpose and application of statistical analysis LO3: Demonstrate the selection and use of appropriate tools for statistical analysis
Assignment title	Marketing data analyst

#### Scenario

You have been given a position as a junior data analyst at a large grocery retailer. You will be involved in an exciting new project helping the Marketing team derive important insights to provide direction for future branding. The Marketing team would like you to explore the habits of online shoppers and evaluate whether their new home food delivery service was a success. You will be producing a full analysis, comprising of a plan, a report, and a presentation. You will need to answer these crucial queries the business has to help them decide whether to continue investing in their online shopping division.

## Tasks

For this assignment, you will create a reflective report to carefully plan an analysis, conduct a comprehensive analysis, and present your findings.

## Task 1

You will do this by first identifying the stakeholders and documenting their requirements, and clearly addressing how each requirement will be met. You will then need to set the scope for the analysis and identify what datasets you will require, ensuring this aligns with the stakeholder's requirements. Simultaneously, you should be producing documentation for justifying your decisions and explaining the importance of each of these steps.

## Task 2

You will then need to explore the behaviour of customers who shop online and evaluate their shopping habits compared to traditional in-store customers, using rigorous statistical methodology on a dataset to generate your analysis. To do this, you will need to carefully select your statistical methodology, accompanied by commentary on what you have chosen and why, and giving associated pitfalls with each of the methods considered so that caveats are as transparent as possible.

#### Task 3

Then, you will then need to decide on which data analytics tool you will use, exploring which tools can support your chosen method. This can be completed by comparing a wide variety of data analytics tools and assessing the key considerations for selection. You will then need to apply these tools to this analysis to derive insights. Afterwards, you will need to evaluate whether the project requires descriptive, predictive, or prescriptive analytics, and clearly justify this with respect to the stakeholder's requirements.

#### Task 4

Using this, you will then choose a statistical programming language and perform the required analysis. Your analysis should be guided by all the previous tasks to ensure you are aligned with stakeholder's requirements, using correct statistical methodology, and using the correct tooling.

#### Task 5

Finally, you will need to collate and present your findings to stakeholders and help the business decide whether to continue investing in their online shopping division.

## **Evidence requirements**

You must provide/include:

- a fully detailed planning documentation
- a slideshow presentation to present your findings
- a reflective report.

# **Unit learning outcomes (LOs)**

Unit 04 Stakeholder engagement and user experience in data analytics (H/651/0927)

LO1: Examine how to plan and deliver an effective analysis for a range of stakeholders Pass 1, Pass 2, Pass 3, Pass 4, Merit 2, Distinction 1

Unit 05 Organisational data (J/651/0928)

LO2: Examine common data analytics methods and the functions and features of the tools used to support this

Pass 4, Merit 3, Distinction 2

Unit 06 Data mining and statistical analysis (K/651/0929)

LO1: Examine the purpose of common statistical methodologies and their application to meet requirements

Pass 1, Merit 1, Distinction 1

LO2: Explore the purpose and application of statistical analysis Distinction 2

LO3: Demonstrate the selection and use of appropriate tools for statistical analysis Merit 3

# **Grading criteria**

# Unit 04 Stakeholder engagement and user experience in data analytics (H/651/0927)

Learning outcomes (LOs)	Pass	Merit	Distinction
LO1: Examine how to plan and deliver an effective analysis for a range of stakeholders	P1: Identify internal and external stakeholders and list techniques used to gather user requirements P2: Describe factors that could influence data analytic planning and outline the significance of defining the scope of data analysis P3: Explain the importance of identifying dataset needs and how these will be sourced		D1: Evaluate internal and external stakeholder needs in each stage of a data analysis and the impact of not adhering to these needs
	P4: Demonstrate the ability to undertake analysis based on stakeholder requirements and clearly communicate findings	M2: Simplify the insights of an analysis and effectively communicate findings to stakeholders	

# Unit 05 Organisational data (J/651/0928)

Learning outcomes (LOs)	Pass	Merit	Distinction
LO2: Examine common data analytics methods and the functions and features of the tools used to support this	P4: Explore common data analytical methods and the functions and features of common data analytics tools used to support this	M3: Demonstrate the ability to effectively apply data analytics methods and use appropriate tools to support analysis	D2: Compare and contrast a wide variety of data analytical tools and assess the key considerations for selection

# Unit 06 Data mining and statistical analysis (K/651/0929)

Learning outcomes (LOs)	Pass	Merit	Distinction
LO1: Examine the purpose of common statistical methodologies and their application to meet requirements	P1: Explain the purpose of common statistical methodologies	M1: Examine a range of statistical methods and illustrate how they can be used to meet data analysis needs	D1: Compare and contrast different statistical methods and assess pitfalls of each method
LO2: Explore the purpose and application of statistical analysis			D2: Evaluate the use of descriptive, predictive and prescriptive analytics, explaining how these can be used together to inform business decisions
LO3: Demonstrate the selection and use of appropriate tools for statistical analysis		M3: Apply appropriate statistical programming language and tools to a collated dataset to manipulate data and perform predictive analytics	