

**Data Technician**

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| Course Date: 14/07/25 |
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# Day 1: Task 1

Please complete the below boxes on commons laws and regulations that must be followed when working with customers data, use the below bulleted list to support your answers.

* What is it
* Why is it important
* Provide a real-world example of how you can follow it
* How does it impact working with data
* What could happen if you breached it

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| Data Protection Act | **What is it:** UK law regulating how personal data is used and protected.  **Why is it important:** Protects individuals’ privacy and ensures organisations handle data responsibly.  **Example:** A company encrypts customer data and limits access to authorized staff.  **Impact on data work:** Requires secure storage, lawful data processing, and access control.  **Breach consequence:** Legal penalties, fines, and reputational damage. |
| GDPR | **What is it:** EU regulation governing personal data handling and privacy.  **Why is it important:** Gives individuals control over their data and ensures data protection.  **Example:** An online retailer asks for consent before tracking user behaviour.  **Impact on data work:** Necessitates lawful basis for data use, user consent, and data minimization.  **Breach consequence:** Fines up to €20 million or 4% of annual turnover, plus loss of trust. |
| Freedom of Information Act | **What is it:** UK law giving public access to information held by public authorities.  **Why is it important:** Promotes transparency and accountability in public services.  **Example:** A journalist requests council spending records under FOIA.  **Impact on data work:** Requires proper documentation and readiness to disclose non-sensitive data.  **Breach consequence:** Public criticism, legal action, and loss of credibility. |
| Computer Misuse Act | **What is it:** UK law preventing unauthorized access to computer systems and data.  **Why is it important:** Protects systems from hacking, viruses, and cybercrime.  **Example:** An employee avoids accessing confidential files without permission.  **Impact on data work:** Ensures ethical access and use of digital resources.  **Breach consequence:** Criminal charges, fines, imprisonment. |

# Day 2: Task 1

Please research and complete the following tasks within the retail-sales\_dataset.xlsx document, paste a print screen into the provided boxes below:

1. In the sheet ‘retail\_sales\_dataset’ add all available data between columns A –J into a ‘table’
2. Using the ‘sort’ function, sort ‘Age’ to ‘largest to smallest’
3. Using the ‘SUM’ function, show me the commission total in cell ‘L10’
4. Using the ‘AVERAGE’ function, show me the average commission in cell ‘L11’

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| Print screen 1 |  |
| Print screen 2 |  |
| Print screen 3 |  |
| Print screen 4 |  |

# Day 2: Task 2

Please research and complete the following tasks within the retail-sales\_dataset.xlsx document, paste print screens into the provided box below:



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| Print screen 1 |  |

# Day 2: Task 3

Using the skills developed today, have some fun with the data set you have imported. Paste your work below and enjoy!

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| Print screen 1 |  |

# Day 3: Task 1

Please download the dataset ‘Day\_3\_Task\_1\_Bike\_Sales\_Pivot\_Lab.xlsx’ from [here](https://justit831-my.sharepoint.com/:x:/g/personal/danpe_justit_co_uk/Eb73L6LixCJHtafDJ4AOh-ABR9CVF0n9sdEgB4foSh261g?e=jh493A).

The lab instructions can be found [here](https://justit831-my.sharepoint.com/:b:/g/personal/danpe_justit_co_uk/EVySAtWQiEVDmrtCufrqTgwBuLVxX6mEKYqEAe0Mgl6b9Q?e=i05yOa). Do not worry if you do not complete the lab, just working with data and playing with the pivot table will be good experience.

Please paste your final pivot table below and complete the reflection questions:

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| Print screen 1 |  |
| In which markets does Germany have customers? | Adults |
| What country has sales in all markets? | Australia |
| What are the most profitable markets by country, age group, and gender? | Adults (35-64), United States, Female. |
| Any other findings? | <25 Males across most countries are not a profitable target audience. |

# Day 3: Task 2

The dataset below tracks the sales performance of different products in various counties in England. Please paste the dataset into a blank Excel workbook. Your task is to:

* **Create a Pivot Table** to summarise the data by county and product.
* **Use the SWITCH function** to categorise products based on their sales volume.

#### **Dataset:**

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| **County** | **Product** | **Sales Volume** |
| Yorkshire | Laptops | 500 |
| Yorkshire | Smartphones | 200 |
| Cornwall | Laptops | 700 |
| Cornwall | Printers | 400 |
| Lancashire | Smartphones | 150 |
| Lancashire | Laptops | 600 |
| Essex | Printers | 800 |
| Essex | Smartphones | 300 |
| Durham | Laptops | 250 |
| Durham | Printers | 300 |
| Greater Manchester | Smartphones | 600 |
| Greater Manchester | Laptops | 400 |

#### **Step 1: Create a Pivot Table**

* Select the dataset (columns A to C).
* Insert a Pivot Table to summarise the data by **County** in the rows and **Products** in the columns. Use **Sales Volume** as the value to be summarised.

#### **Step 2: Use the SWITCH Function**

In a new column next to your data, use the SWITCH function to categorise products based on **Sales Volume** as follows:

* + For sales greater than 600: **"High"**
  + For sales between 300 and 600: **"Medium"**
  + For sales less than 300: **"Low"**

**SWITCH Function Example**:

=SWITCH(TRUE, C2 > 600, "High", C2 >= 300, "Medium", "Low")

* Apply this formula to each row, and check if the products are categorised correctly.

#### **Submission:**

* A completed Pivot Table summarising sales by county and product.
* A new column in the dataset categorising products by sales volume using the SWITCH function.
  + Please paste your completed work below

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| Print screen 1 |  |

# Day 3: Task 3

Please download the dataset ‘Day\_3\_Task\_3\_Bike\_Sales\_Visualisations\_Lab.xlsx’ from [here](https://justit831-my.sharepoint.com/:x:/g/personal/danpe_justit_co_uk/ESeJLtyZhYxIpZXluVywvvkBxgx2EtpPUzmxLCzQBGTKNQ?e=naSu4B).

The lab instructions can be found [here.](https://justit831-my.sharepoint.com/:b:/g/personal/danpe_justit_co_uk/Ec1IWsNPl_ZMuaSbNcaLyVcByy3JcZaQgoG1FeFwO9neRQ?e=6lsJG1) Do not worry if you do not complete the lab, just working with data and playing with the charts will be good experience.

Please paste your results below:

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| Print screen 1 |  |

# Day 4: Task 1

You have been asked to deliver your analysis findings to the board of directors, with your analysis you have identified that customers are leaving your company at the 12-month point, this is typically when they receive their renewal price.

Conduct research and complete the below questions:

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| How would you prepare for the delivery? | * **Identify Stakeholders**: Recognise who your stakeholders are and their influence on the project or business process. * **Understand Expectations**: Align reporting and analysis based on what stakeholders expect to see. * **Engagement Strategies**: Develop tailored communication approaches for each stakeholder group. |
| What tools would you use for the delivery? | * PowerPoint * Excel * PivotTables, Charts, Visualisation, forecasts etc. |
| What is prospecting and why would you complete this before your delivery? | Prospecting is the process of identifying potential opportunities, risks, trends, or important decision-makers before a presentation.  We would do this to ensure we have the appropriate information to present, making sure it is relevant, precise, meaningful and actionable. |
| Tell me best practices for public speaking and providing updates to senior leaders | **Structure Your Message**:  Use Executive Summary → Problem → Analysis → Insights → Recommendations.  **Be Concise**: Avoid jargon. Use the “So What?” test—every slide must add value.  **Visuals First**: Use graphs, not raw tables.  **Anticipate Objections**: Be ready with data-backed rebuttals.  **Practice the 10-20-30 Rule**: Max 10 slides, 20 minutes, 30-point font.  **Body Language**: Maintain eye contact, confident posture, control your pace.  **Stay Outcome-Oriented**: Focus on impact, not process. |
| What will you show the board in your delivery? | **Churn Trends** – Especially at the 12-month mark.  **Cohort Analysis** – By customer type, plan, or acquisition channel.  **Customer Feedback** – Quotes or NPS data linked to pricing dissatisfaction.  **Benchmarking** – Industry renewal pricing vs. your offering.  **Revenue Impact** – Current and projected loss due to churn.  **Proposed Solutions** – Pricing model adjustments, loyalty incentives, early renewal options. |
| How will you articulate the changes that are needed? | **Use Data-Driven Storytelling**: “We found that 67% of churn occurs within 30 days of receiving renewal quotes.”  **Frame with Business Impact**: “This equates to £1.2M in lost recurring revenue annually.”  **Propose Clear Actions**:  Introduce flexible renewal options.  Test customer loyalty incentives.  Optimize communication around pricing.  **Use Scenario Forecasting**: “If we reduce churn by 20%, we could recover £250k annually.” |
| Provide a list of online resources and videos that will support your preparation for public speaking | **Courses:**   * [LinkedIn Learning – Public Speaking Foundations](https://www.linkedin.com/learning/public-speaking-foundations) * [Coursera – Successful Presentation](https://www.coursera.org/learn/successful-presentation) * [Toastmasters International](https://www.toastmasters.org/)   **Videos:**   * TED Talk: Chris Anderson – TED’s Secret to Great Public Speaking * TED Talk: Amy Cuddy – Your Body Language May Shape Who You Are * YouTube: [Harvard Business Review – Presenting to Senior Executives](https://www.youtube.com/watch?v=f8Ygu4H3C1A) |
| Evaluate tools that provide visualisation.  Tell me what they are.  Tell me what you would choose when delivering your presentation and why | | **Tool** | **Strengths** | **Use Case** | | --- | --- | --- | | **Tableau** | Interactive, handles large data sets | Dashboards for churn/drill-down | | **Power BI** | Microsoft integration, good forecasting | Churn by time, plan, demographic | | **Excel** | Quick, widely understood | Static charts, pivot tables | | **Canva** | Design-friendly, templates available | Infographics or summary visuals | | **Google Looker Studio** | Easy sharing, live data | Real-time monitoring |   **What would I choose and why?**   * **PowerPoint**: For structured storytelling with clear visuals. * **Excel PivotCharts**: For behind-the-scenes data work and quick visuals. * **Tableau/Power BI (Optional)**: If you need an **interactive demo**, e.g., filtering churn by region or customer type. * **Canva (Optional)**: For summarizing key slides in an infographic for post-meeting follow-up.   **Why These Tools?** They balance professionalism, data clarity, and accessibility. PowerPoint and Excel are familiar to stakeholders, while advanced tools like Tableau are great for optional interactive exploration. |

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| **Course Notes** |

It is recommended to take notes from the course, use the space below to do so, or use the revision guide shared with the class:

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| **Additional Information** |

We have included a range of additional links to further resources and information that you may find useful, these can be found within your revision guide.

**END OF WORKBOOK**

**Please check through your work thoroughly before submitting and update the table of contents if required.**

**Please send your completed work booklet to your trainer.**