

**Data Technician**

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| Name: |
| Course Date: |
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# Day 1: Task 1

Please research and complete the below boxes on common 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 | The Data Protection Act is a UK law that governs how personal data is collected, stored, and used by organizations. It is important because it ensures individuals' privacy is respected and that their data is handled lawfully, fairly, and securely. A real-world example of following it is a school securely storing student records and only sharing them with authorized staff. When working with data, it ensures strict protocols are followed for data access and retention. Breaching the Act could lead to legal penalties, loss of public trust, and potential harm to individuals if their personal data is misused |
| GDPR | GDPR is a data protection regulation for individuals within the EU, giving them more control over their personal data. It is crucial as it protects personal privacy in the digital age and applies to any organization handling EU citizens’ data, regardless of location. E.g., an online retailer asking for consent before collecting customer emails follows GDPR. It impacts data handling by requiring transparency, accountability, and clear consent mechanisms. Breaching GDPR can result in severe fines, reputational damage, and loss of customer trust. |
| Freedom of Information Act | The Freedom of Information Act allows the public to access information held by public authorities in the UK, promoting transparency and accountability. It is important because it empowers citizens to understand and scrutinize government decisions and public spending. A practical example is a journalist requesting crime statistics from a police department. In data work, it means public bodies must maintain accurate records and be prepared to disclose them unless exempt. If breached, such as by unjustly withholding information, it can lead to investigations and criticism from oversight bodies. |
| Computer Misuse Act | The Computer Misuse Act is UK legislation designed to prevent unauthorized access to computer systems and protect against cybercrime. It is important because it criminalizes hacking, spreading malware, and unauthorized data access. An example of compliance is a company implementing strong access controls and monitoring systems to prevent internal misuse. In data contexts, it ensures only authorized personnel can access sensitive databases. Breaching this law, such as by accessing someone’s personal data without permission, can lead to prosecution, fines, and 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 – H** into a ‘table’
2. Using the ‘filter’ function, filter ‘Age’ to ‘largest to smallest’
3. Using the ‘SUM’ function, show me the commission total in cell ‘**P10’**
4. Using the ‘AVERAGE’ function, show me the average commission in cell **‘P11’**

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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 (35-64) |
| What country has sales in all markets? | United Kingdom & Australia |
| What are the most profitable markets by country, age group, and gender? | Most Profitable Country = United States    Most Profitable Age Group = Adults (35 – 64)    Most Profitable Gender = Female |
| Any other findings? |  |

# 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, within 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? | **Understand Your Audience**   * The **board of directors** cares about:   + Strategic business risk and growth   + Customer retention and revenue impact   + ROI and competitive advantage   **Preparation Steps**   * Clarify your **core message**: “We are losing customers at the 12-month mark due to renewal pricing—this has a measurable impact on revenue.” * Prepare a **5-slide deck** (max) with supporting data in the appendix. * Focus on **"What, Why, and What Now?"** * Prepare for potential questions: “What are competitors doing?”, “How big is the risk?”, “What have you tested so far?” |
| What tools would you use for the delivery? | * **Power BI -** Dynamic, interactive visuals to show churn over time, by segment * **PowerPoint/Google slides -** Main presentation – clean, focused slides with key visuals * **Excel/Google sheets -** Backup calculations or tables (appendix) * **Microsoft Teams -** For remote delivery |
| What is prospecting and why would you complete this before your delivery? | **Prospecting** means understanding your audience before your presentation.  It Includes:   * Know the stakeholders - Tailor the message for finance, marketing, CEO, etc. * Identify their goals and concerns - Align your recommendation with what matters to them * Anticipate objections - Be prepared with data to answer challenges or doubts * Set the tone and priorities - You’ll know whether to push cost-saving, retention, or growth |
| Tell me best practices for public speaking and providing updates to senior leaders | * Start with the insight * Be brief and strategic * Support with visuals * Use confident tone & pace * Leave room for questions * Have an executive summary |
| What will you show the board in your delivery? | 1. Title Slide 2. Key Finding 3. Root Cause 4. Business Impact 5. Recommended Actions |
| How will you articulate the changes that are needed? | Articulated using the Situation → Impact → Solution method  E.g. "At the 12-month point, we’re seeing a 32% churn rate, which directly aligns with when customers receive a renewal price—often with a significant increase. This results in an estimated annual revenue loss of £1.2M. We recommend testing personalized renewal offers, and a pre-renewal engagement strategy to improve retention." |
| Provide a list of online resources and videos that will support your preparation for public speaking | * TED Talks: Chris Anderson – “TED's Secret to Great Public Speaking” * <https://speaking.io/> * LinkedIn Learning – Public Speaking Foundations |
| Evaluate tools that provide visualisation.  Tell me what they are.  Tell me what you would choose when delivering your presentation and why | **Power BI** **& Tableau** provide interactive dashboards  For **pre-analysis exploration** and board members who want deeper insights.  **PowerPoint** creates slides for message delivery  For **the main presentation** – simple, focused, executive-ready visuals – ensuring message control and readability in high-stakes presentations. |

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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.**