

**Data Technician**

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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?** – Data Protection Act 2018 is a UK law that controls how organisations, businesses and the government use personal information.  **Why is it important?** – It is important as it protects people’s privacy by setting out how personal data can be collected and ensure that their personal information is handled securely and responsibly.  **Provide a real-world example of how you can follow it** - For example, if you work in a call centre where you handle customer complaints and sensitive information of customers such as their names addresses and account details.  First you should explain why it is necessary to ask for this information from them being as transparent as possible. For example, verifying their identity.  Only use the data collected to resolve the customers query do not use it for anything else unnecessary. As well as only ask for information that is necessary to solve the issue. Ensure accuracy when entering the data to make sure that the record is correct. Do not keep record of it for longer than the company’s policy or legal obligations.  Make sure if you step away from the computer that you lock the screen and do not write sensitive information down on paper.so that you can ensure integrity and confidentiality.  **How does it impact working with data?** – It impacts everyday tasks by enforcing accuracy, limiting access, protecting against breaches and granting individuals control over their data.  **What could happen if you breached it?** You could receive a fine up to £17.5million or 4% of annual global turnover reputational damage to the organisation and potential legal action. |
| GDPR | What is it? – The General Data Protection Regulation (GDPR) is a comprehensive data protection law which sets strict rules for how personal data is collected, used and stored.  Why is it important? It is important as it protects individuals’ privacy by ensuring their personal data is handled securely. It gives them more control on how their information is used. It fosters trust between organisations and customers, demonstrating a commitment to transparency and ethical practices.  Provide a real-world example of how you can follow it - For example, again if you work at a call centre handling sensitive information. You should always be transparent to the customer telling them why you need their data as well as get their consent for using it.  Also collect only essential data that you need to resolve the issue. And to not keep a record of it past the company policy.  Make sure payment details are encrypted and access to personal data is restricted to authorised employees.  As well as if a customer requests their data to be deleted then this should be fulfilled.  How does it impact working with data? - by requiring organisations to collect and process only necessary data with legal consent. Be transparent and protect data. Also grants individuals access to correct or delete their data.  What could happen if you breached it? – you could get significant penalties fines up to £17.5million or 4% of annual global turnover. It may also lead to reputational damage, legal action, and loss of customer trust. |
| Freedom of Information Act | What is it? - The Freedom of Information Act (FOIA) 2000 gives individuals the right to access information held by public authorities in the UK.  Why is it important? – It allows people to request records and documents from government bodies, public institutions, and certain private organisations.  Provide a real-world example of how you can follow it – For example, you can formally submit a request to the local council for information on their budget allocation for community development projects. Make sure to be clear and specific with your request, clearly outline the information you’re requesting avoiding any vague terms.  How does this impact working with data? – It requires organisation to maintain accurate records, respond quickly to requests and ensure that any data they hold is accessible unless exempted for reasons like national security or personal privacy.  What could happen if you breached it? - breaching the FOIA can lead to legal consequences, ICO enforcement, and significant damage to an organisation's credibility. |
| Computer Misuse Act | What is it? - The Computer Misuse Act 1990 is a UK law designed to protect computer systems and data from unauthorised access and cybercrime.  Why is it important? - The Act helps prevent cyberattacks, unauthorised data breaches, and misuse of computer systems, with penalties including fines and imprisonment.  Provide a real-world example of how you can follow it - Attempting to access a colleague's email account without their permission, even out of curiosity, violates the Computer Misuse Act. By accessing systems within your authorized scope and respecting security protocols, you avoid violating the Computer Misuse **Act** and help protect company data.  How does it impact working with data - The **Computer Misuse Act** impacts working with data by ensuring that only authorised individuals’ access, modify, or share data.  What could happen if you breached it - Breaching the **Computer Misuse Act** can result in fines, imprisonment of up to 10 years, and a permanent criminal record. It can also lead to job loss, reputational damage, and potential civil lawsuits from affected parties. |

# 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 ‘filter’ function, filter ‘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 | I imported the data from a csv file into power query. Where I cleaned and edited it. Then I loaded the data into excel.    I also played with the nested if function. |

# 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? |  |
| What country has sales in all markets? |  |
| What are the most profitable markets by country, age group, and gender? | Country: Australia and US        Age  Youth- Australia    Young adults – Australia    Adults – US    Gender:  Female – Australia    Male – United states |
| Any other findings? | Only 3 countries buy bikes from the youth. |

# 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:**

|  |  |  |
| --- | --- | --- |
| **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? | To prepare for delivering my findings to the board, I would structure a clear and concise presentation highlighting my findings. I would rehearse thoroughly, anticipate potential questions, and ensure all materials and technical equipment are ready to facilitate a confident and engaging delivery. |
| What tools would you use for the delivery? | For the delivery I would use excel to create the dashboard / presentation. Include a few pivot tables with slicers to make it more interactive. Maybe do a poll to make it even more interactive. I would also have a small flashcard with sentence starters and keyword reminders of what to cover. |
| What is prospecting and why would you complete this before your delivery? | Prospecting is the process of researching and identifying the key interests, priorities, and concerns of your audience. It is important to do this before the presentation as it makes sure that the presentation is tailored to their needs and focused on relevant insights. And it allows you to make sure that you have that you have addressed all the potential queries and questions in turn making the delivery more impactful and useful to the board of directors. |
| Tell me best practices for public speaking and providing updates to senior leaders | The best practices for public speaking are:   * Rehearsing – you can start off by writing out what you want to convey through your presentation and writing a full script then keep practicing whilst reducing the words on your script till you are just left with keywords. This will make your presentation more conversational and make you more confident with the delivery. * Structure your message with a clear beginning and make sure to be clear and concise * Preparation- try to predict the questions that might be asked and prepare to answer them. * Body language – have confident body language and maintain eye contact. Look at one person per each thought. |
| What will you show the board in your delivery? | * Key findings – first show them any key findings highlight the positives and negatives. For example, the customers leaving at the 12 month point. * Supporting data – I would use pivot tables and graphs to show this data and prove the findings * Then analyse the data and find a reason why. For example, looking at customer reviews or looking at a competitive comparison. * Actions – I would then look at strategies to try and change this trend and get a better outcome such as for example, pricing adjustments or improved communication. |
| How will you articulate the changes that are needed? | I will emphasise the benefits of these changes and clearly explain the root of the cause of the issue. Then like it to the actions and explain how these changes will only benefit us. |
| Provide a list of online resources and videos that will support your preparation for public speaking | <https://www.youtube.com/watch?v=Ns_z4wEtdRM>  This video would help with public speaking as it highlights the “do’s” and “don’ts” whilst presenting.  Using a flash card with keywords written on it. To help you stay on track and keep the structure of the presentation easy to follow. |
| Evaluate tools that provide visualisation.  Tell me what they are.  Tell me what you would choose when delivering your presentation and why | Microsoft Excel  It is ideal for creating basic visualisations like bar charts, pie charts, and scatter plots. Also, it offers quick formatting and customisation.  I would choose Excel for delivering my presentation as well ad you can use different slicers which helps you filter and change the graphs live which makes the presentation a lot more interactive and helps covey your findings better.  Also, you can remove the guidelines and other customisation features to make the presentation look cleaner. |

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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.**