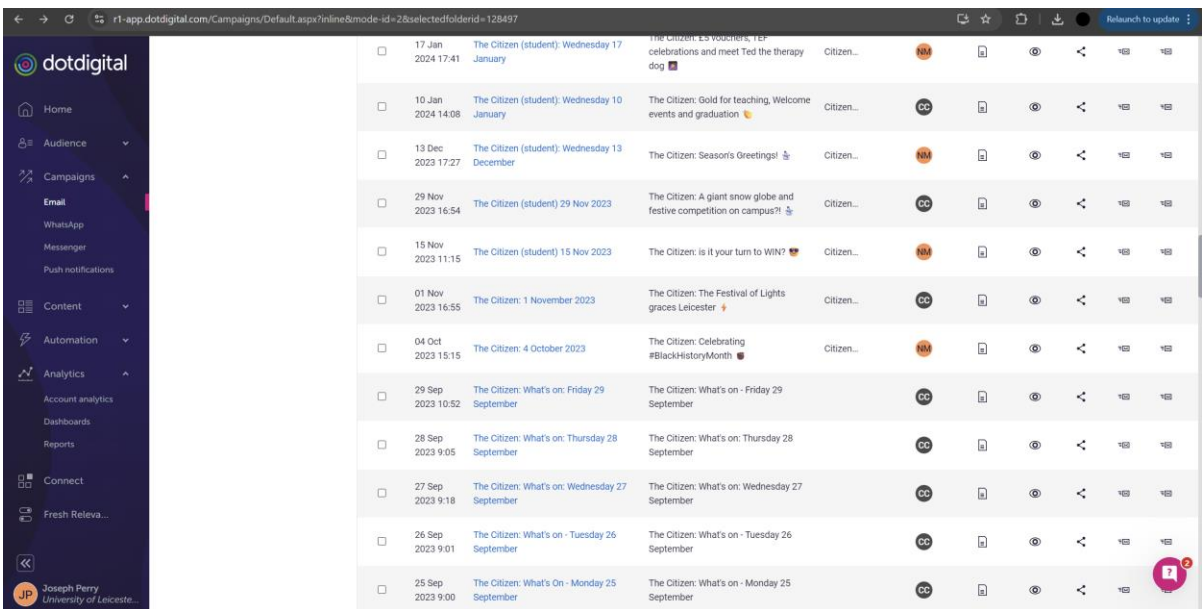


1. Accessed DotDigital portal where statistical data on university records is found.



<input type="checkbox"/>	17 Jan 2024 17:41	The Citizen (student): Wednesday 17 January	The Citizen: Es voochere, ted celebrations and meet Ted the therapy dog 🐕	Citizen...	NM	100	100
<input type="checkbox"/>	10 Jan 2024 14:08	The Citizen (student): Wednesday 10 January	The Citizen: Gold for teaching, Welcome events and graduation 🎓	Citizen...	CC	100	100
<input type="checkbox"/>	13 Dec 2023 17:27	The Citizen (student): Wednesday 13 December	The Citizen: Season's Greetings! 🎄	Citizen...	NM	100	100
<input type="checkbox"/>	29 Nov 2023 16:54	The Citizen (student): 29 Nov 2023	The Citizen: A giant snow globe and festive competition on campus?!	Citizen...	CC	100	100
<input type="checkbox"/>	15 Nov 2023 11:15	The Citizen (student): 15 Nov 2023	The Citizen: is it your turn to WIN? 🏆	Citizen...	NM	100	100
<input type="checkbox"/>	01 Nov 2023 16:55	The Citizen: 1 November 2023	The Citizen: The Festival of Lights graces Leicester 🎆	Citizen...	CC	100	100
<input type="checkbox"/>	04 Oct 2023 15:15	The Citizen: 4 October 2023	The Citizen: Celebrating #BlackHistoryMonth 🏴‍☠️	Citizen...	NM	100	100
<input type="checkbox"/>	29 Sep 2023 10:52	The Citizen: What's on: Friday 29 September	The Citizen: What's on - Friday 29 September	CC	100	100	100
<input type="checkbox"/>	28 Sep 2023 9:05	The Citizen: What's on: Thursday 28 September	The Citizen: What's on: Thursday 28 September	CC	100	100	100
<input type="checkbox"/>	27 Sep 2023 9:18	The Citizen: What's on: Wednesday 27 September	The Citizen: What's on: Wednesday 27 September	CC	100	100	100
<input type="checkbox"/>	26 Sep 2023 9:01	The Citizen: What's on - Tuesday 26 September	The Citizen: What's on - Tuesday 26 September	CC	100	100	100
<input type="checkbox"/>	25 Sep 2023 9:00	The Citizen: What's On - Monday 25 September	The Citizen: What's on - Monday 25 September	CC	100	100	100

2. Collected datasets from freshers week within the past two years.

Name	Date modified	Type	Size
September252023	24/06/2025 2:46 PM	File folder	
September262023	24/06/2025 11:14 AM	File folder	
September272023	24/06/2025 11:14 AM	File folder	
September282023	24/06/2025 11:21 AM	File folder	
September292023	24/06/2025 11:27 AM	File folder	

3. Pre-processed data, using best approaches for the given data.

<input type="checkbox"/>	dataset_September252023.ipynb	Running 4 days ago	192 kB
<input type="checkbox"/>	dataset_September262023.ipynb	Running 4 days ago	178 kB
<input type="checkbox"/>	dataset_September272023.ipynb	Running 4 days ago	203 kB
<input type="checkbox"/>	dataset_September282023.ipynb	Running 3 days ago	200 kB
<input type="checkbox"/>	dataset_September292023.ipynb	Running 3 days ago	199 kB

4. Defined functions and new columns for additional calculations.

```

In [44]: def total_opens():
          total_opens = df_emailopened["NumOpens"].sum()
          print("Total number of NumOpens: ", total_opens)

          total_opens()

Total number of NumOpens: 28672

In [47]: average_opens = df_emailopened["NumOpens"].mean()
          df_emailopened["AverageNumOpens"] = average_opens

          print("Average number of NumOpens:", average_opens)

Average number of NumOpens: 2.1965831609591664

In [48]: minimum_opens = df_emailopened["NumOpens"].min()
          df_emailopened["MinimumOpens"] = minimum_opens
          print("Minimum number of NumOpens: ", minimum_opens)

Minimum number of NumOpens: 1

In [32]: maximum_opens = df_emailopened["NumOpens"].max()
          print("Maximum number of NumOpens: ", maximum_opens)

Maximum number of NumOpens: 30

In [49]: df_emailopened["DateOpened"] = pd.to_datetime(df_emailopened["DateOpened"], format="%d/%m/%Y %H:%M") #convert string to datetime

In [34]: df_emailopened["DateOpenedLast"] = pd.to_datetime(df_emailopened["DateOpenedLast"], format="%d/%m/%Y %H:%M") #convert string to a
          ◀────────────────────────────────────────────────────────────────────────────────────────────────────────────────────────▶

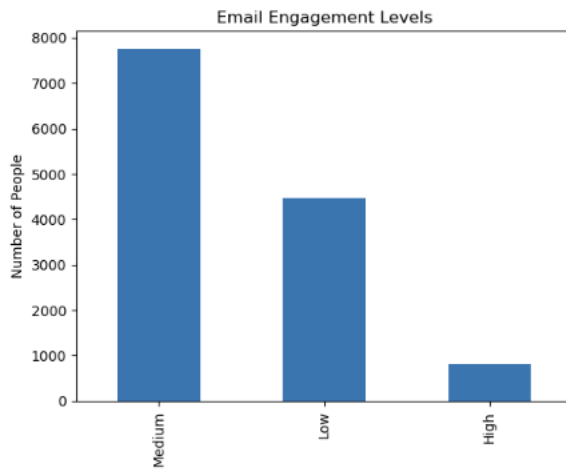
In [35]: df_emailopened["EngagementSpan"] = df_emailopened["DateOpenedLast"] - df_emailopened["DateOpened"]
          df_emailopened.head(10)

```

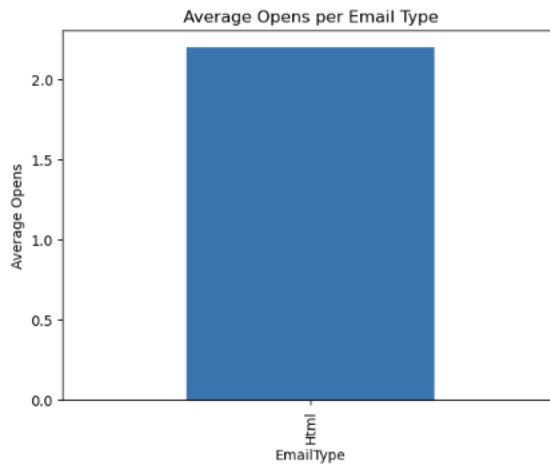
## 5. Analysed data between comparable variables and information.

6. Created visualisations and trends for the appropriate variables useful for addressing the business problem.

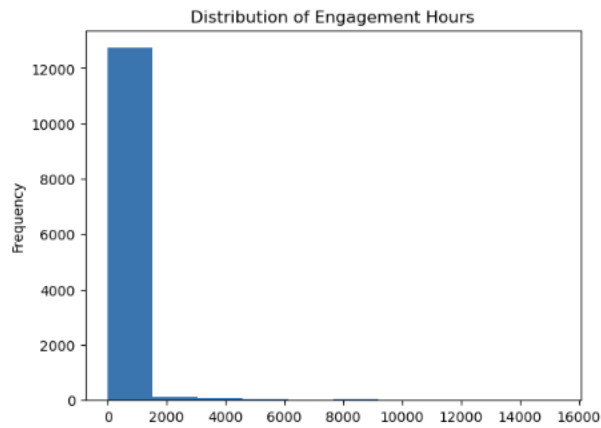
```
In [39]: df_emailopened["OpenLevel"].value_counts().plot(kind='bar', title='Email Engagement Levels')
plt.ylabel("Number of People")
plt.show()
#high Levels of medium open Level
#Low Levels of high open Level
```



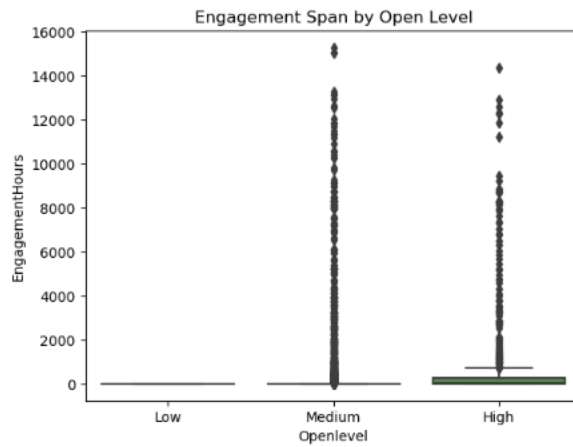
```
In [50]: df_emailopened.groupby("EmailType")["AverageNumOpens"].mean().plot(kind="bar", title="Average Opens per Email Type")
plt.ylabel("Average Opens")
plt.show()
```



```
In [41]: df_emailopened['EngagementHours'].plot(kind='hist', bins=10, title='Distribution of Engagement Hours')
plt.show()
```



```
In [42]: sns.boxplot(x='Openlevel', y='EngagementHours', data=df_emailopened).set_title('Engagement Span by Open Level')
Out[42]: Text(0.5, 1.0, 'Engagement Span by Open Level')
```



7. Created a presentation to present findings and deliver recommendations.

Microinternship Presentation

File Edit View Insert Format Slide Arrange Tools Extensions Help

Slideshow

Share

Menus

Background Layout Theme Transition

1

Email Data Analysis

2

Supporting evidence for the findings

3

Design Email System

4

Validation of proposed design for usability

5

Supporting evidence for the design

6

Recommendations

Recommendations

- Redesign email wording, system, and display
- Utilise drop-in locations on campus for university surveys
- Create different welcome emails for student situation

use more general terms for prizes, I'm not sure if everyone would be appealed to only food and drink vouchers.