In [3]:

```python
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
from scipy.stats.stats import pearsonr
from scipy.stats import linregress
%matplotlib inline


tesla = pd.read_excel(r'C:\Users\timod\Desktop\TESLA_3M.xlsx')
tsla = pd.read_excel(r'C:\Users\timod\Desktop\TSLA_3M.xlsx')
tslaHD = pd.read_csv(r'C:\Users\timod\Desktop\TSLA Historical Data.csv')
```

In [6]:

```python
tslaHD = tslaHD[::-1]
```

In [ ]:

In [ ]:

In [ ]:

```python
fig, axs = plt.subplots(3, sharex=True, sharey=False)
fig.suptitle('Sharing both axes')
axs[0].plot(x, y ** 2)
axs[1].plot(x, 0.3 * y, 'o')
axs[2].plot(x, y, '+')
```

In [23]:

```python
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
from scipy.stats.stats import pearsonr
from scipy.stats import linregress
%matplotlib inline

tesla = pd.read_excel(r'C:\Users\timod\Desktop\TESLA_3M.xlsx')
tsla = pd.read_excel(r'C:\Users\timod\Desktop\TSLA_3M.xlsx')
tslaHD = pd.read_excel(r'C:\Users\timod\Desktop\TSLA_HD_3M.xlsx')

print(tesla.shape)
print(tsla.shape)
print(tslaHD.shape)
```

```
(60, 2)
(60, 2)
(60, 2)
```

In [92]:

```python
fig, axs = plt.subplots(3, sharex=True, sharey=False, figsize=(13,10))
#fig.suptitle('Relevance and Stock Price Over Time')

axs[0].set_title('Relevance and Stock Price Over Time',pad=20)


x = tesla['date']
plt.xticks(rotation=90, fontsize=6)
```

```
axs[0].yaxis.grid()
axs[1].yaxis.grid()
axs[2].yaxis.grid()


axs[0].plot(x, tesla['relevance'],color='#5C6BC0')
axs[1].plot(x, tsla['relevance'],color='#673AB7')
axs[2].plot(x, tslaHD['close'])


axs[0].axvline(x='2020-01-31',color='red')
axs[1].axvline(x='2020-01-31',color='red')
axs[2].axvline(x='2020-01-31',color='red')
axs[0].axvline(x='2020-02-04',color='red')
axs[1].axvline(x='2020-02-04',color='red')
axs[2].axvline(x='2020-02-04',color='red')


axs[0].set_ylabel("Relevance of 'tesla'")
axs[1].set_ylabel("Relevance of 'tsla'")
axs[2].set_ylabel("Tesla Inc. Share Price")
```
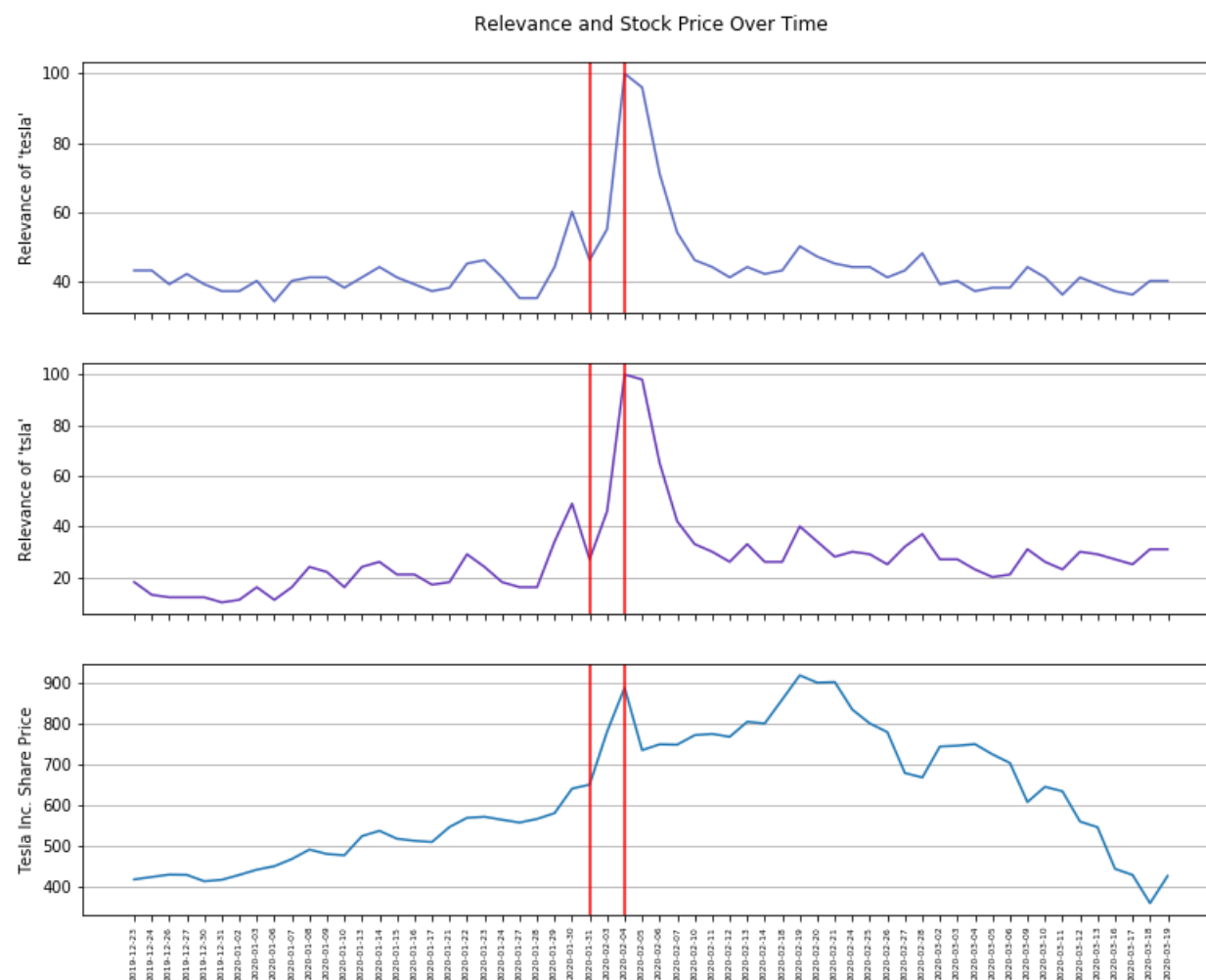
Out[92]:

Text(0, 0.5, 'Tesla Inc. Share Price')

In [ ]:

In [ ]: