01 Statistics Visualizing Information

April 30, 2018

1 Visualizing Information

```
In [1]: # importing required libraries
        import numpy as np
        import pandas as pd
        import matplotlib.pyplot as plt
        %matplotlib inline
        plt.style.use('fivethirtyeight')
```

Analysing "Data Flick's solutions private limited"
importing data

```
In [2]: no_units = pd.read_excel('./data/statistics/df_genre_units.xlsx') # reading data
```
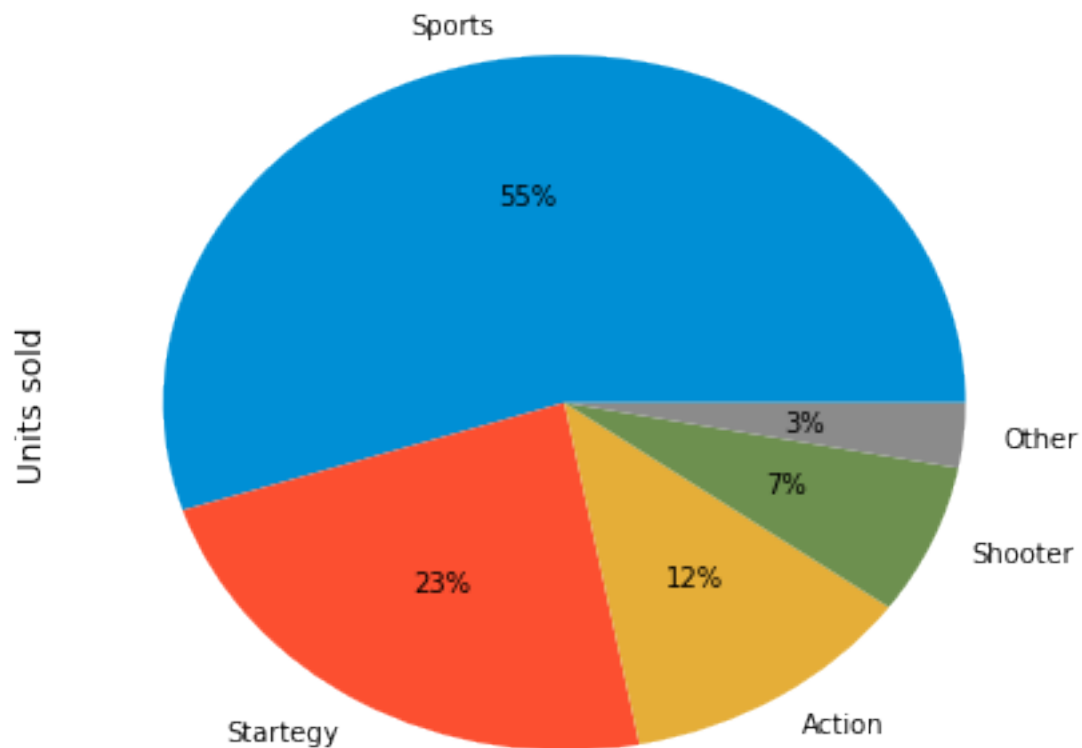
```
In [3]: no_units = no_units.set_index('Genre')
```

```
In [4]: no_units
```

```
Out[4]:          Units sold
        Genre
        Sports        27500
        Startegy      11500
        Action         6000
        Shooter        3500
        Other          1500
```

```
In [5]: plt.figure(figsize=(6,6))
        no_units['Units sold'].plot.pie(autopct='%.0f%%')
        plt.show()
```
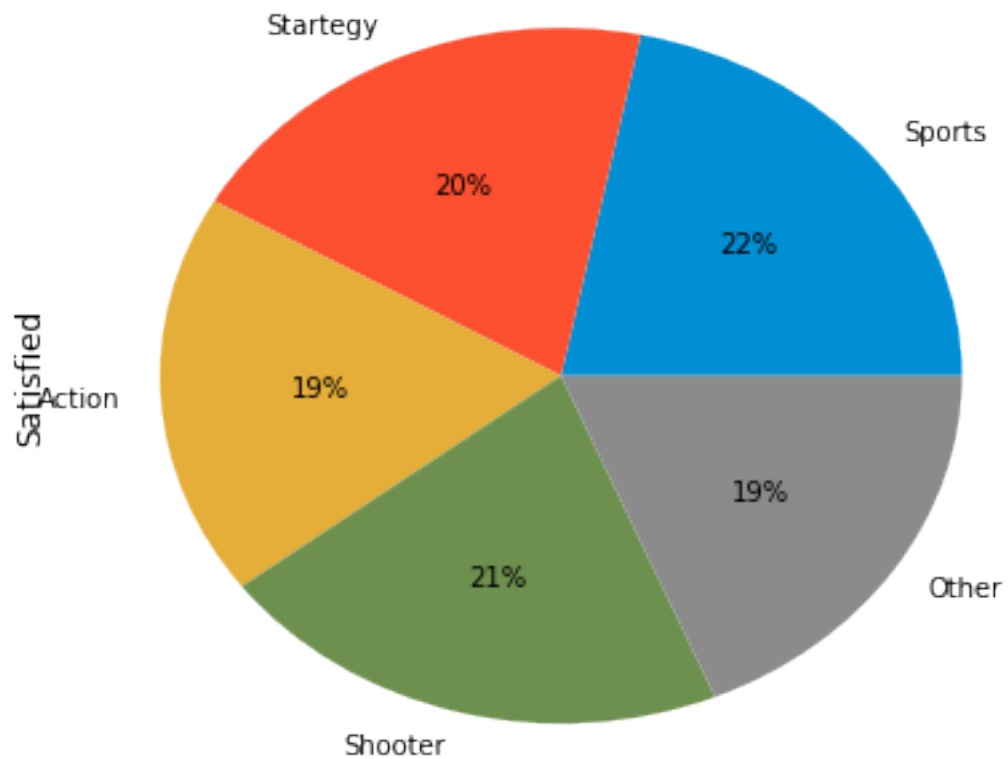
Visualizing statisfied customers

```
In [6]: satisfied = pd.read_excel('./data/statistics/df_statisfied.xlsx') # reading data
        satisfied = satisfied.set_index('Genre')
        satisfied

Out[6]:          Satisfied
        Genre
        Sports        99
        Startegy      90
        Action        85
        Shooter       95
        Other         85

In [7]: plt.figure(figsize=(6,6))
        satisfied['Satisfied'].plot.pie(autopct='%.0f%%')

Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x7f589a120b10>
```
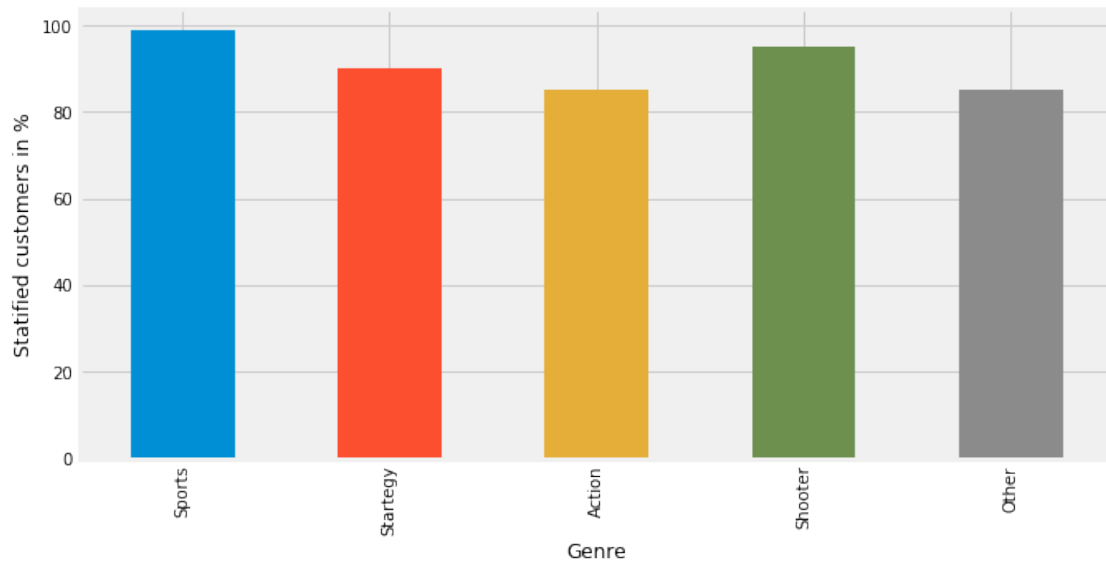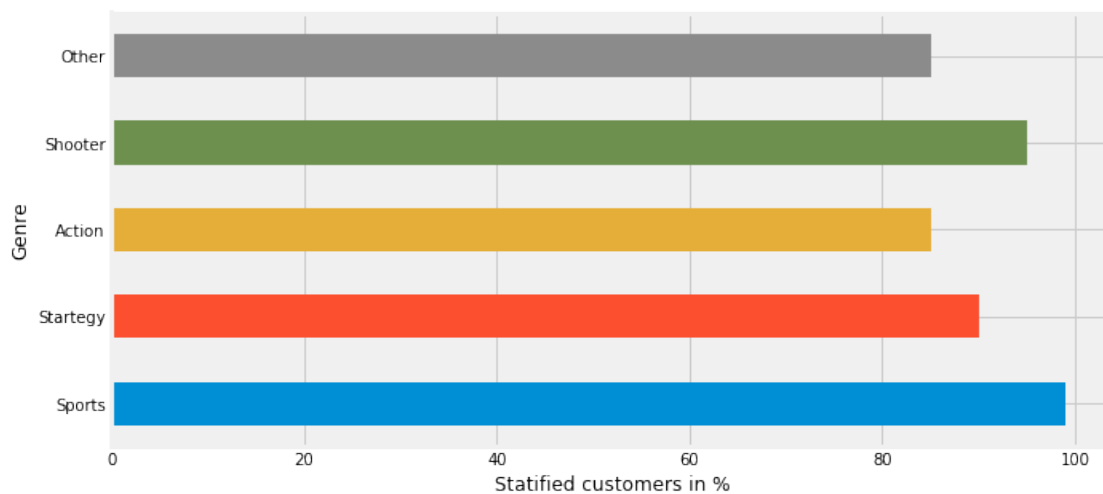
Bar plot > vertical plot

```
In [8]: plt.figure(figsize=(10,5))
        satisfied['Satisfied'].plot.bar()
        plt.ylabel('Statified customers in %')
        plt.show()
```

horizontal plot

```
In [9]: plt.figure(figsize=(10,5))
        satisfied['Satisfied'].plot.barh()
        plt.xlabel('Statified customers in %')
        plt.show()
```



```
In [10]: satisfied['unsatisfied']  = 100-satisfied['Satisfied']

In [11]: satisfied
```

```
Out[11]:         Satisfied   unsatisfied
         Genre
         Sports          99             1
         Startegy        90            10
         Action          85            15
         Shooter         95             5
         Other           85            15
```
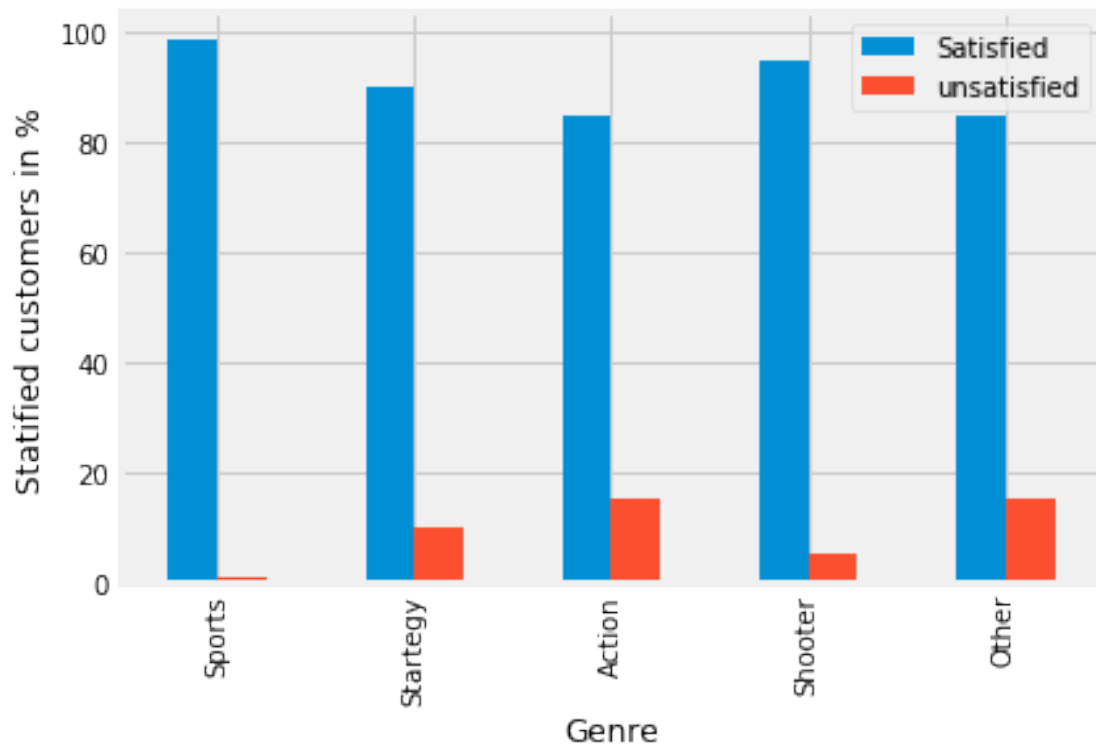
Split Category bar plot > Vertical

```
In [12]: plt.figure(figsize=(10,5))
         satisfied.plot.bar()
         plt.ylabel('Statified customers in %')
         plt.show()
```
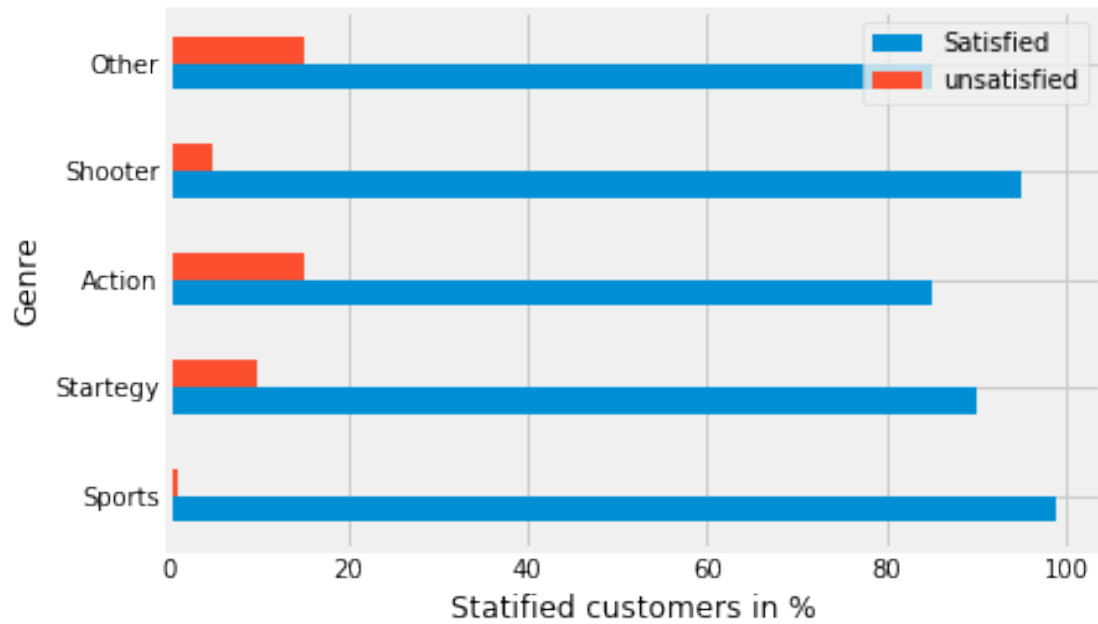
```
<Figure size 720x360 with 0 Axes>
```


Horizontal

```
In [13]: plt.figure(figsize=(15,7))
         satisfied.plot.barh()
         plt.xlabel('Statified customers in %')
         plt.show()
```

```
<Figure size 1080x504 with 0 Axes>
```
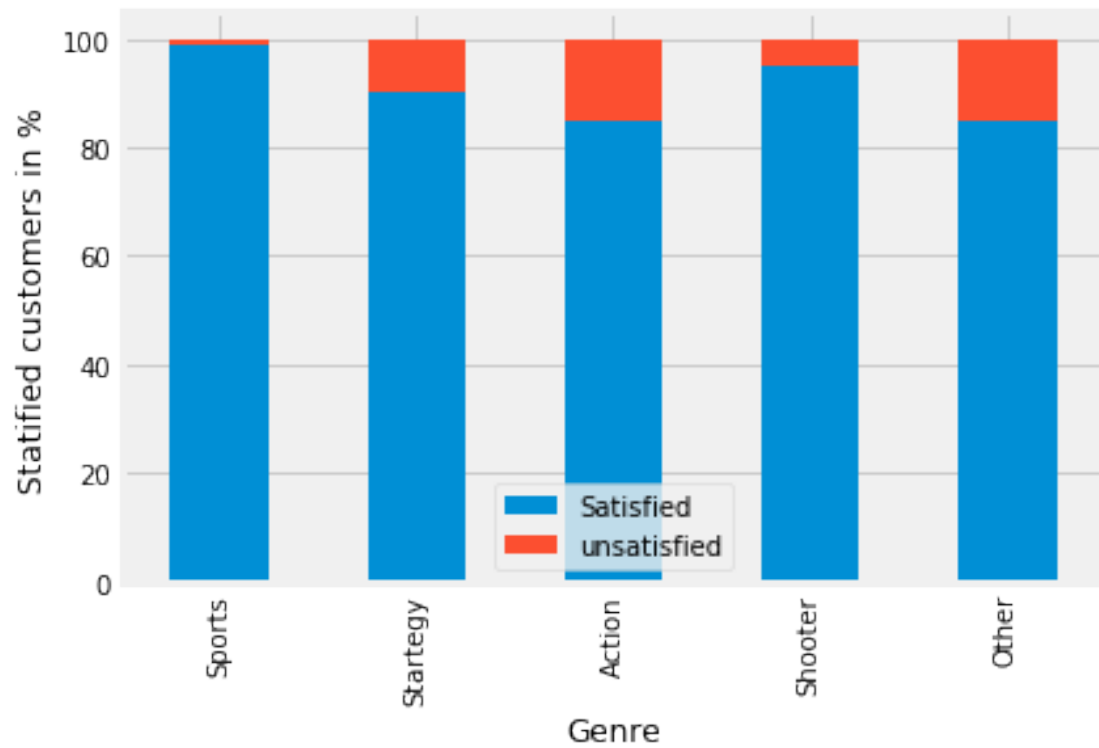

Split Category bar plot > Vertical

```
In [14]: plt.figure(figsize=(10,5))
         satisfied.plot.bar(stacked = True)
         plt.ylabel('Statified customers in %')
         plt.show()
```

```
<Figure size 720x360 with 0 Axes>
```

```
In [15]: plt.figure(figsize=(10,5))
         satisfied.plot.barh(stacked = True)
         plt.xlabel('Statified customers in %')
         plt.show()
```

<Figure size 720x360 with 0 Axes>