nba_draft_plot

July 22, 2021

The goal of this notebook is to recreate a plot i did in R. This is about the NBA teams with the most picks from 2010-2020

0.1 Data Wrangling

[7]:
```
# environment info
import os
os.getcwd() # get the wd
os.chdir("./Data_Scientist_Path/Datasets/nba_dataset/") # change wd
```

[7]:
```
'/Users/mamba/Downloads/Data_Scientist_Path/Datasets/nba_dataset'
```

[8]:
```
# libraries loading
import pandas as pd
import  numpy as np
import plotly.express as px
```

[15]:
```
# we import the data
nba = pd.read_csv('draft_history.csv')
nba.head()
nba.dtypes
```

[15]:
```
yearDraft                  int64
numberPickOverall          int64
numberRound                int64
numberRoundPick            int64
namePlayer                object
slugTeam                  object
nameOrganizationFrom      object
typeOrganizationFrom      object
idPlayer                   int64
idTeam                     int64
nameTeam                  object
cityTeam                  object
teamName                  object
PLAYER_PROFILE_FLAG        int64
slugOrganizationTypeFrom  object
locationOrganizationFrom  object
```

```
dtype: object
```

[48]:
```
# convert slugTeam variable to factor
nba["slugTeam"] = pd.Categorical(nba["slugTeam"])

# filter out years before 2010
#nba["yearDraft"]

test = nba[(nba['yearDraft'] >= 2010) & (nba['numberRound'] == 1) &␣
↪(nba['numberRoundPick'] <= 14)]

test = test.groupby(['slugTeam'])['slugTeam'].agg(['count'])

# remove teams with 0 pick, sort by descending order and pick the 10 1st teams
#test = test[(test['count'] > 0)] # this step is optional since i only pick the␣
↪first ten
test = test.sort_values('count', ascending = False)
test = test.head(n = 10)

# use the index as a column
test.reset_index(level=0, inplace=True)
```

[48]:
```
slugTeam
SAC    11
PHX    11
MIN     9
CHA     9
CLE     8
PHI     8
UTA     7
DET     7
ORL     6
WAS     6
Name: count, dtype: int64
```

0.2 Visualization

[56]:
```
fig = px.bar(test, x='slugTeam', y='count', text = 'count')
fig.update_traces(texttemplate='%{text:.2s}', textposition='outside')
fig.update_layout(uniformtext_minsize=8, uniformtext_mode='hide')
fig.show()
```

[53]:
```
import plotly.graph_objects as go
#x = ['Product A', 'Product B', 'Product C']
#y = [20, 14, 23]

# Use textposition='auto' for direct text
```

```
fig = go.Figure(data=[go.Bar(
            x=test['slugTeam'], y=test['count'],
            text=test['count'],
            textposition='auto',
        )])

fig.show()
```

[ ]: