Report Title : Market landscape Analysis of Matrimony Market both at Global and Indian indian Market Report By: Anumoy Modak, MR Analyst. Organisation: Quantuva Technology. Excercise : Data Visualization Excercise of collected Data on Market size, CAGR, Projected market size on matrimony Industries both at global and regional level(India)

[Note: Data mentioned here are real-time approximated values]

Data souece : https://www.matrimony.com/sites/default/files/newsroom-assets/2023-05/PowerPoint%20Presentationq4.pdf, https://www.custommarketinsights.com/report/matchmaking-market/ , https://www.wedmegood.com/blog/wedmegood-annual-wedding-industry-report-2023-2024/ , https://www.cnbctv18.com/business/expect-weddings-to-be-05-trillion-market-in-india-over-10-years-matrimonycom-11580312.htm .

1. data frame presentation

```python
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# Data for Market Size and Growth
data = {
    'Region': ['Global', 'India'],
    'Market Size 2023 (Billion USD)': [8.5, 1.5],
    'CAGR (2023-2028) in %': [10, 12],
    'Projected Market Size 2028 (Billion USD)': [14, 2.4]
}

# Creating DataFrame
df = pd.DataFrame(data)

# Displaying the DataFrame
df
```

	Region	Market Size 2023 (Billion USD)	CAGR (2023-2028) in %	Projected Market Size 2028 (Billion USD)
0	Global	8.5	10	14.0
1	India	1.5	12	2.4

1. data visualization of market size 2023 and projected market size (2023-2028)

```python
import matplotlib.pyplot as plt

# Data
regions = ['Global', 'India']
market_size_2023 = [8.5, 1.5]
projected_market_size_2028 = [14, 2.4]
cagr = [10, 12]

# Plotting
fig, ax1 = plt.subplots()

bar_width = 0.35
index = range(len(regions))

# Bar chart for market sizes
bar1 = ax1.bar(index, market_size_2023, bar_width, label='2023', color='blue')
bar2 = ax1.bar([i + bar_width for i in index], projected_market_size_2028, bar_width, label='2028', color='green')

ax1.set_xlabel('Region')
ax1.set_ylabel('Market Size (in billion $)')
ax1.set_title('Matrimony Market Size: 2023 vs 2028')
ax1.set_xticks([i + bar_width / 2 for i in index])
ax1.set_xticklabels(regions)
ax1.legend()

# Adding data labels for market sizes
for i in range(len(regions)):
    ax1.text(i, market_size_2023[i] + 0.1, f'{market_size_2023[i]}', ha='center', va='bottom')
    ax1.text(i + bar_width, projected_market_size_2028[i] + 0.1, f'{projected_market_size_2028[i]}', ha='center', va='bottom')

# Line chart for CAGR
ax2 = ax1.twinx()
ax2.plot([i + bar_width / 2 for i in index], cagr, color='red', marker='o', linestyle='dashed', linewidth=2, markersize=8, label='CAGR (%)'
ax2.set_ylabel('CAGR (%)')
ax2.legend(loc='upper left')

plt.tight_layout()
plt.show()
```
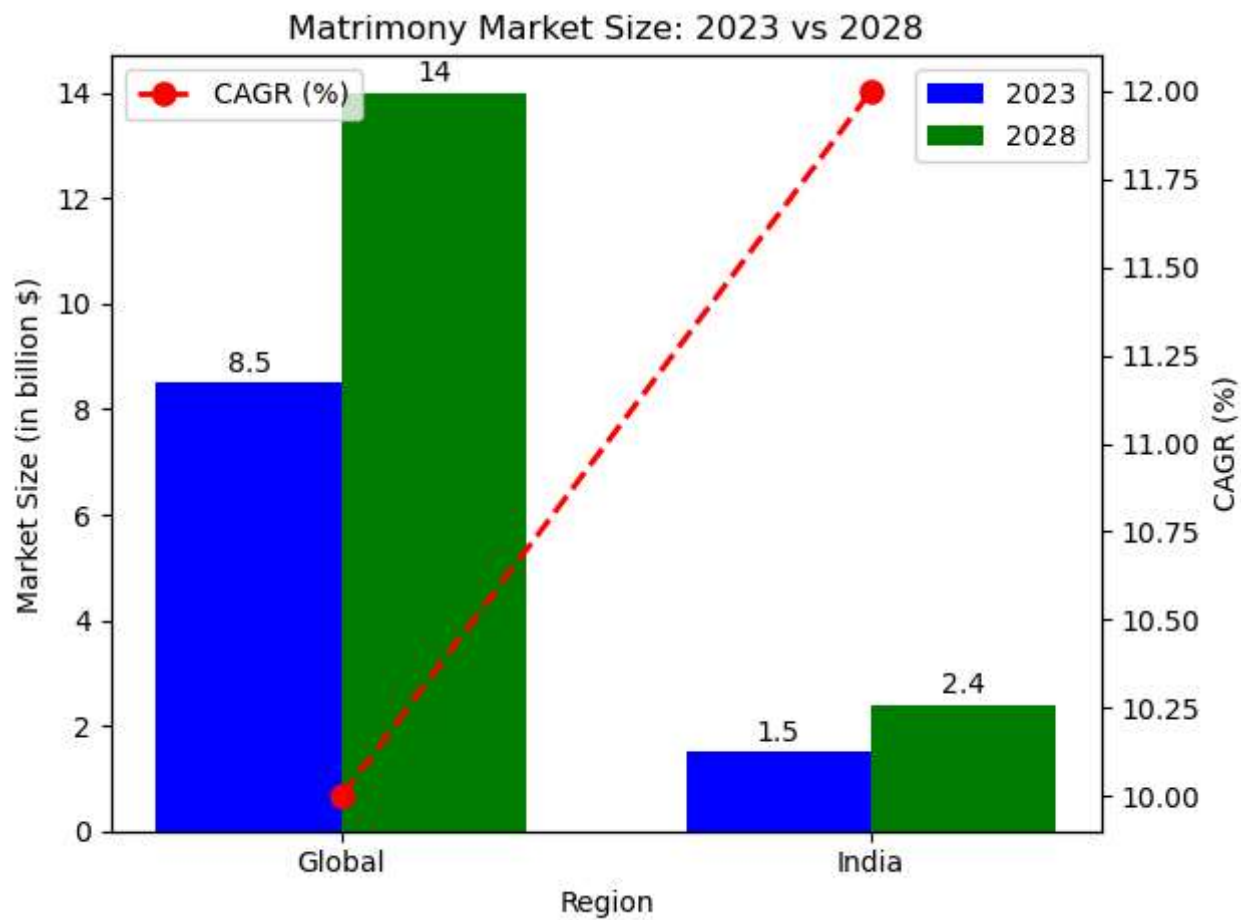
Matrimony Market Size: 2023 vs 2028

1. seperate visualization of projected market size :

```python
import matplotlib.pyplot as plt

# Data
regions = ['Global', 'India']
projected_market_size_2028 = [14, 2.4]

# Plotting
fig, ax = plt.subplots()
bar_width = 0.5
index = range(len(regions))

bar = plt.bar(index, projected_market_size_2028, bar_width, color=['blue', 'green'])
```
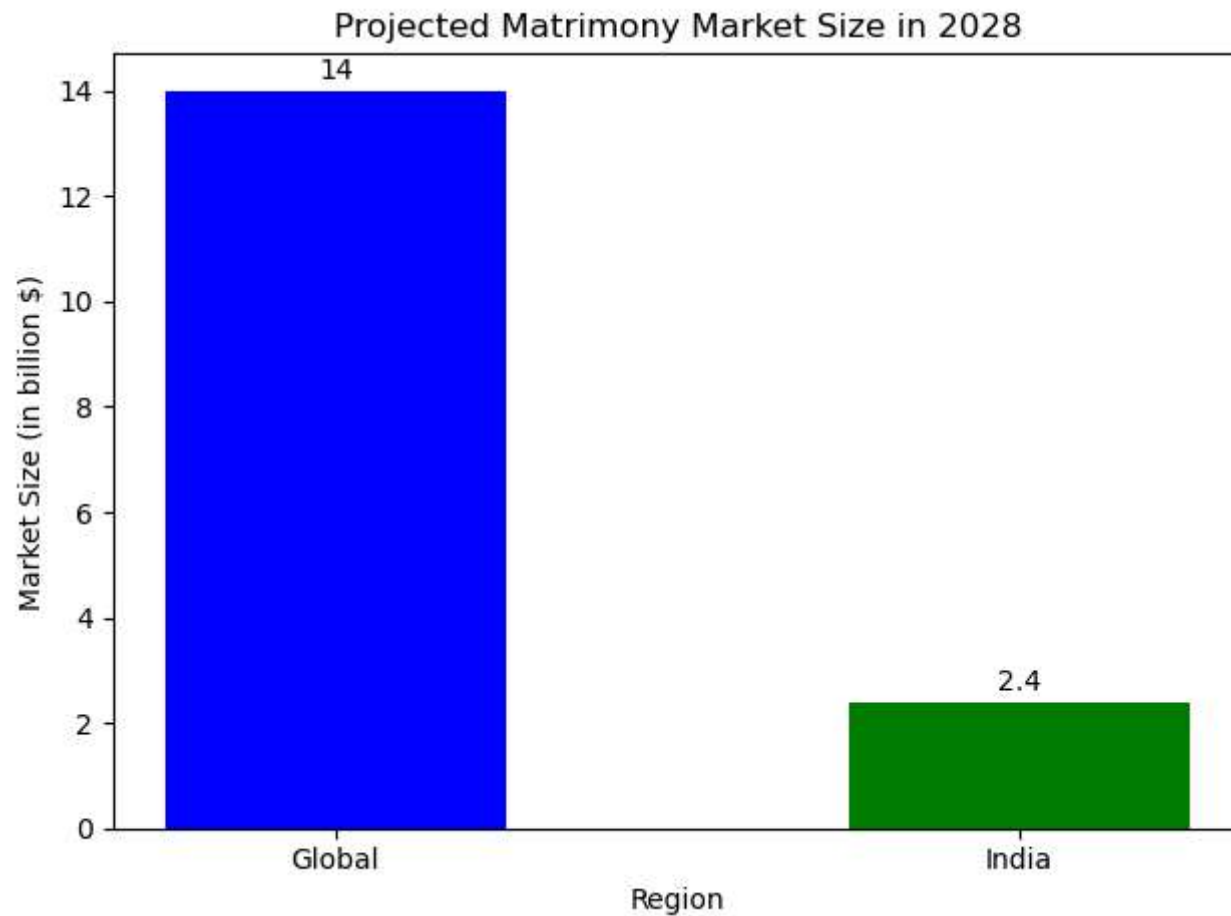
```
plt.xlabel('Region')
plt.ylabel('Market Size (in billion $)')
plt.title('Projected Matrimony Market Size in 2028')
plt.xticks(index, regions)

# Adding data labels
for i in range(len(regions)):
    plt.text(i, projected_market_size_2028[i] + 0.1, f'{projected_market_size_2028[i]}', ha='center', va='bottom')

plt.tight_layout()
plt.show()
```


Projected Matrimony Market Size in 2028

1. Current Market trends of Matrimony trends:

```python
In [ ]:  import pandas as pd
         import matplotlib.pyplot as plt

         # Data
         data = {
             'Trend': ['Adoption of AI', 'Mobile App Dominance', 'Niche Platforms', 'Privacy and Security', 'Virtual Meetings'],
             'Increase (%)': [25, 40, 50, 20, 45],
             'Success Rate (%)': [30, 35, 40, 15, 50],
             'Market Reach (%)': [20, 70, 25, 30, 35]
         }

         # Create DataFrame
         df = pd.DataFrame(data)

         # show DataFrame
         df
```

Out[ ]:

	Trend	Increase (%)	Success Rate (%)	Market Reach (%)
0	Adoption of AI	25	30	20
1	Mobile App Dominance	40	35	70
2	Niche Platforms	50	40	25
3	Privacy and Security	20	15	30
4	Virtual Meetings	45	50	35

```python
In [ ]:  # Plotting
         fig, ax = plt.subplots(1, 3, figsize=(18, 6))

         # Bar plot for Increase
         df.plot(kind='bar', x='Trend', y='Increase (%)', ax=ax[0], color='skyblue')
         ax[0].set_title('Increase in Engagement and Usage')
         ax[0].set_ylabel('Increase (%)')

         # Bar plot for Success Rate
         df.plot(kind='bar', x='Trend', y='Success Rate (%)', ax=ax[1], color='lightgreen')
         ax[1].set_title('Success Rate Comparison')
         ax[1].set_ylabel('Success Rate (%)')

         # Bar plot for Market Reach
         df.plot(kind='bar', x='Trend', y='Market Reach (%)', ax=ax[2], color='salmon')
         ax[2].set_title('Market Reach Comparison')
         ax[2].set_ylabel('Market Reach (%)')
```

```
plt.tight_layout()
plt.show()
```