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In [2]: ▶ import pandas as pd
import matplotlib.pyplot as plt

data = pd.read_csv("data.csv")

mean = data.mean()
mean_question_group_1 = mean.iloc[:3]
mean_question_group_2 = mean.iloc[3:6]
mean_question_group_3 = mean.iloc[6:9]
mean_question_group_4 = mean.iloc[9:12]

median = data.median()
median_question_group_1 = median.iloc[:3]
median_question_group_2 = median.iloc[3:6]
median_question_group_3 = median.iloc[6:9]
median_question_group_4 = median.iloc[9:12]

std = data.std()
std_question_group_1 = std.iloc[:3]
std_question_group_2 = std.iloc[3:6]
std_question_group_3 = std.iloc[6:9]
std_question_group_4 = std.iloc[9:12]

variance = data.var()
variance_question_group_1 = variance.iloc[:3]
variance_question_group_2 = variance.iloc[3:6]
variance_question_group_3 = variance.iloc[6:9]
variance_question_group_4 = variance.iloc[9:12]

mean_data = [mean_question_group_1, mean_question_group_2, mean_question_group_3, mean_question_group_4]
median_data = [median_question_group_1, median_question_group_2, median_question_group_3, median_question_group_4]
std_data = [std_question_group_1, std_question_group_2, std_question_group_3, std_question_group_4]
variance_data = [variance_question_group_1, variance_question_group_2, variance_question_group_3, variance_question_group_4]

labels = ['Integration', 'Adoption', 'Ethical Considerations', 'Perceived

fig1, ax1 = plt.subplots(figsize=(8,6))
fig2, ax2 = plt.subplots(figsize=(8,6))
fig3, ax3 = plt.subplots(figsize=(8,6))
fig4, ax4 = plt.subplots(figsize=(8,6))

ax1.bar(labels, [data.mean() for data in mean_data])
ax1.set_title('Mean')
ax2.bar(labels, [data.median() for data in median_data])
ax2.set_title('Median')
ax3.bar(labels, [data.std() for data in std_data])
ax3.set_title('Standard Deviation')
ax4.bar(labels, [data.var() for data in variance_data])
ax4.set_title('Variance')

fig1.text(0.04, 0.5, 'Metric Value', va='center', rotation='vertical')
fig2.text(0.04, 0.5, 'Metric Value', va='center', rotation='vertical')
fig3.text(0.04, 0.5, 'Metric Value', va='center', rotation='vertical')
fig4.text(0.04, 0.5, 'Metric Value', va='center', rotation='vertical')

for ax in [ax1, ax2, ax3, ax4]:
    ax.set_xticklabels(labels, rotation=45, ha='right')

```

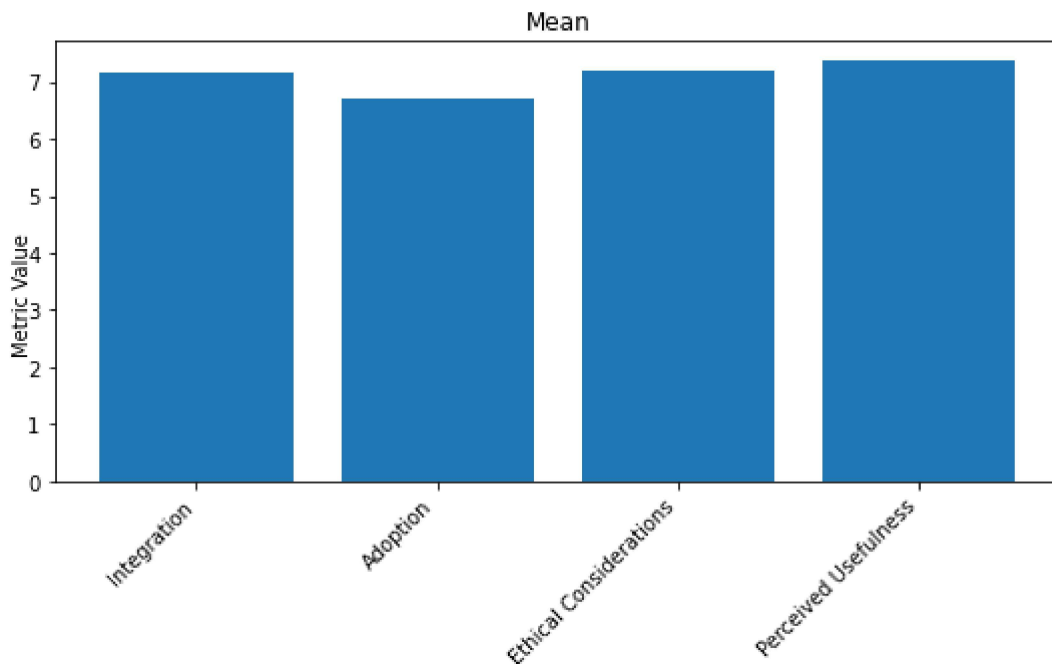
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ax.axhline(0, color='grey', lw=1)

fig1.suptitle('Comparison of Mean by Question Group')
fig1.tight_layout(pad=3.0)
fig2.suptitle('Comparison of Median by Question Group')
fig2.tight_layout(pad=3.0)
fig3.suptitle('Comparison of Standard Deviation by Question Group')
fig3.tight_layout(pad=3.0)
fig4.suptitle('Comparison of Variance by Question Group')
fig4.tight_layout(pad=3.0)

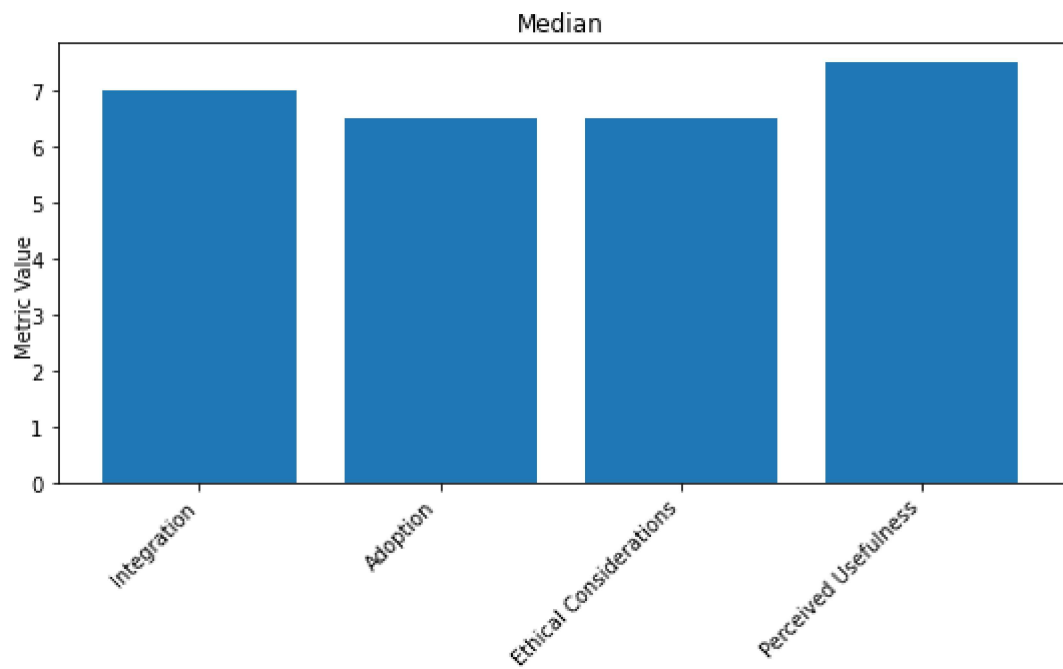
plt.show()
```

C:\Users\manoj\AppData\Local\Temp\ipykernel_13420\2011223204.py:57: UserWarning: FixedFormatter should only be used together with FixedLocator
ax.set_xticklabels(labels, rotation=45, ha='right')

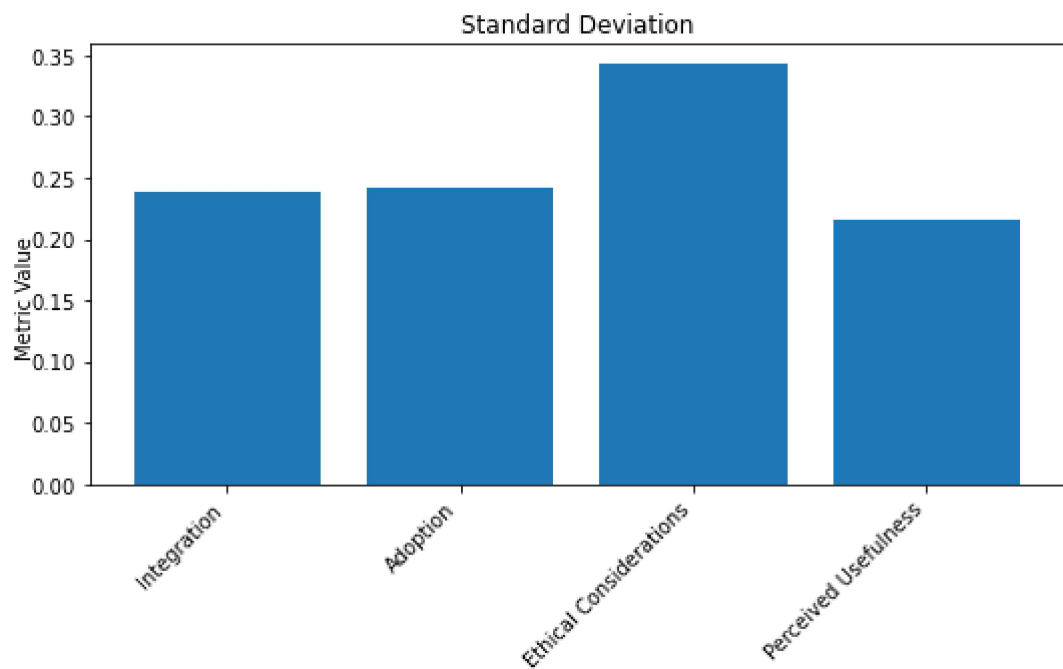
Comparison of Mean by Question Group



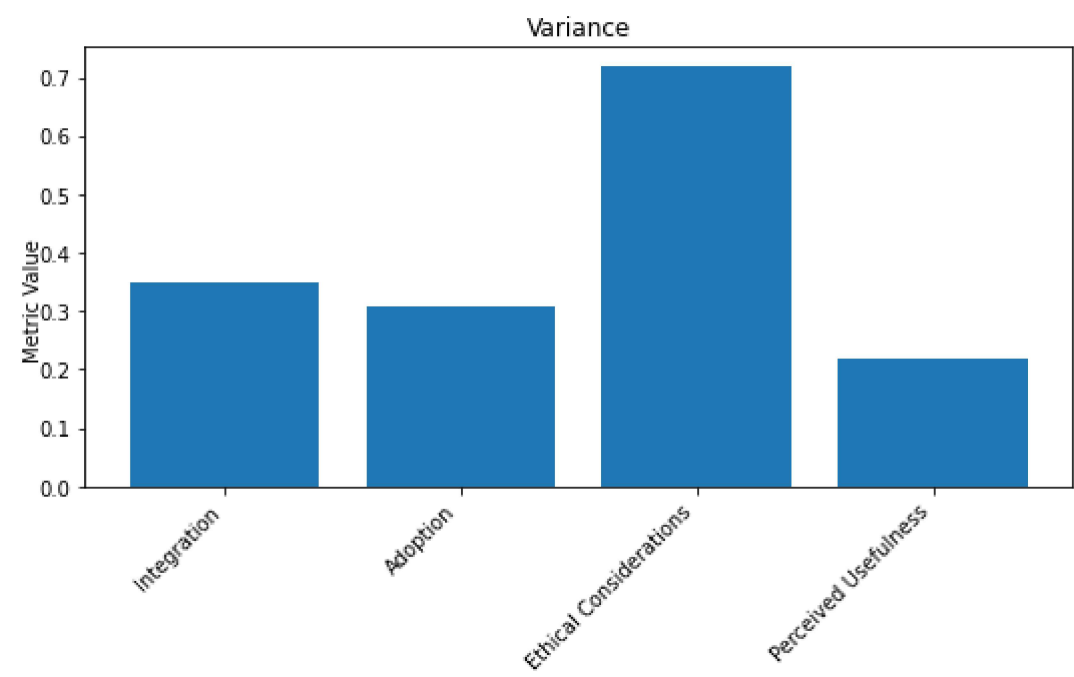
Comparison of Median by Question Group



Comparison of Standard Deviation by Question Group



Comparison of Variance by Question Group



In []: 