

APPLE vs. SAMSUNG:

Comparing U.S. Sales

by Team Cyber, pin: 1289



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01



Data Sources

Counterpoint Research

US Smartphone Shipments Market Share (%)

Brands	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024
Apple	55%	53%	62%	52%	52%	53%
Samsung	23%	25%	17%	31%	24%	23%
Lenovo*	9%	11%	9%	9%	12%	14%
HMD	2%	2%	2%	2%	1%	1%
Others	11%	9%	10%	6%	11%	9%


<https://www.counterpointresearch.com/insights/us-smartphone-market-share/>

Companies Market Cap

Annual revenue		
Year	Revenue	Change
2024 ⓘ	\$219.17 B	11.38%
2023 ⓘ	\$196.77 B	-15.6%
2022 ⓘ	\$233.13 B	-3.15%
2021 ⓘ	\$240.71 B	18.33%
2020 ⓘ	\$203.43 B	2.73%
2019 ⓘ	\$198.03 B	-10.67%
2018 ⓘ	\$221.67 B	3.31%
2017 ⓘ	\$214.57 B	22.25%
2016 ⓘ	\$175.51 B	0.49%
2015 ⓘ	\$174.66 B	-10.53%
2014 ⓘ	\$195.22 B	-7.42%
2013 ⓘ	\$210.86 B	14.46%
2012 ⓘ	\$184.22 B	25.8%
2011 ⓘ	\$146.43 B	9.32%

<https://companiesmarketcap.com/samsung/revenue/>

U.S. Securities and Exchange Commission

<div> EDGAR Company Search Results</div> <div>FAQEDGAR search toolsFeedbackClassic version</div>									
<div>Home » Company Search</div> <div>Apple Inc. AAPL on Nasdaq</div> <div>Investor Toolkit: On ▼</div>									
<div>[+] Company Information</div>									
<div>Latest Filings (excluding insider transactions)</div> <div><div>May 6, 2025 - 424B2: Prospectus [Rule 424(b)(2)] Filing</div><div>May 6, 2025 - FWP: Filing under Securities Act Rules 163/433 of free writing prospectuses Filing</div><div>May 5, 2025 - 424B2: Prospectus [Rule 424(b)(2)] Filing</div><div>May 2, 2025 - 10-Q: Quarterly report for quarter ending March 29, 2025 Filing</div><div>May 1, 2025 - 8-K: Current report Filing **Earnings release**<div>2.02 - Results of Operations and Financial Condition</div><div>9.01 - Financial Statements and Exhibits</div></div><div>View filings</div></div>									
<div>Selected Filings</div> <div>[+] 8-K (current reports)</div> <div>[+] 10-K (annual reports) and 10-Q (quarterly reports)</div> <div>[+] Proxy (annual meeting) and information statements</div> <div>[+] Ownership disclosures</div>									
Form type	%	Form description	%	Filing date	↓	Reporting date	%		
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2025-05-02		2025-03-29			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2025-01-31		2024-12-28			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2024-11-01		2024-09-28			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2024-08-02		2024-06-29			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2024-05-03		2024-03-30			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2024-02-02		2023-12-30			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2023-11-03		2023-09-30			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2023-08-04		2023-07-01			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2023-05-05		2023-04-01			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2023-02-03		2022-12-31			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2022-10-28		2022-09-24			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2022-07-29		2022-06-25			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2022-04-29		2022-03-26			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2022-01-28		2021-12-25			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2021-10-29		2021-09-25			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2021-07-28		2021-06-26			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2021-04-29		2021-03-27			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2021-01-28		2020-12-26			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2020-10-30		2020-09-26			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2020-07-31		2020-06-27			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2020-05-01		2020-03-28			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2020-01-29		2019-12-28			
10-K		Annual report [Section 13 and 15(d), not S-K Item 405] Filing		2019-10-31		2019-09-28			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2019-07-31		2019-06-29			
10-Q		Quarterly report [Sections 13 or 15(d)] Filing		2019-05-01		2019-03-30			

<https://www.sec.gov/edgar/browse/?CIK=320193&owner=exclude>

Yearly/Quarterly Revenue

	June 29, 2024	July 1, 2023
iPhone®	\$ 39,296	\$ 39,669
Mac®	7,009	6,840
iPad®	7,162	5,791
Wearables, Home and Accessories	8,097	8,284

	2024	2023	2022
iPhone	\$ 201,183	\$ 200,583	\$ 205,489
Mac	29,984	29,357	40,177
iPad	26,694	28,300	29,292
Wearables, Home and Accessories	37,005	39,845	41,241

<https://www.sec.gov/ix?doc=/Archives/edgar/data/0000320193/000032019324000081/aapl-20240629.htm>
<https://www.sec.gov/ix?doc=/Archives/edgar/data/0000320193/000032019324000081/aapl-20240629.htm>

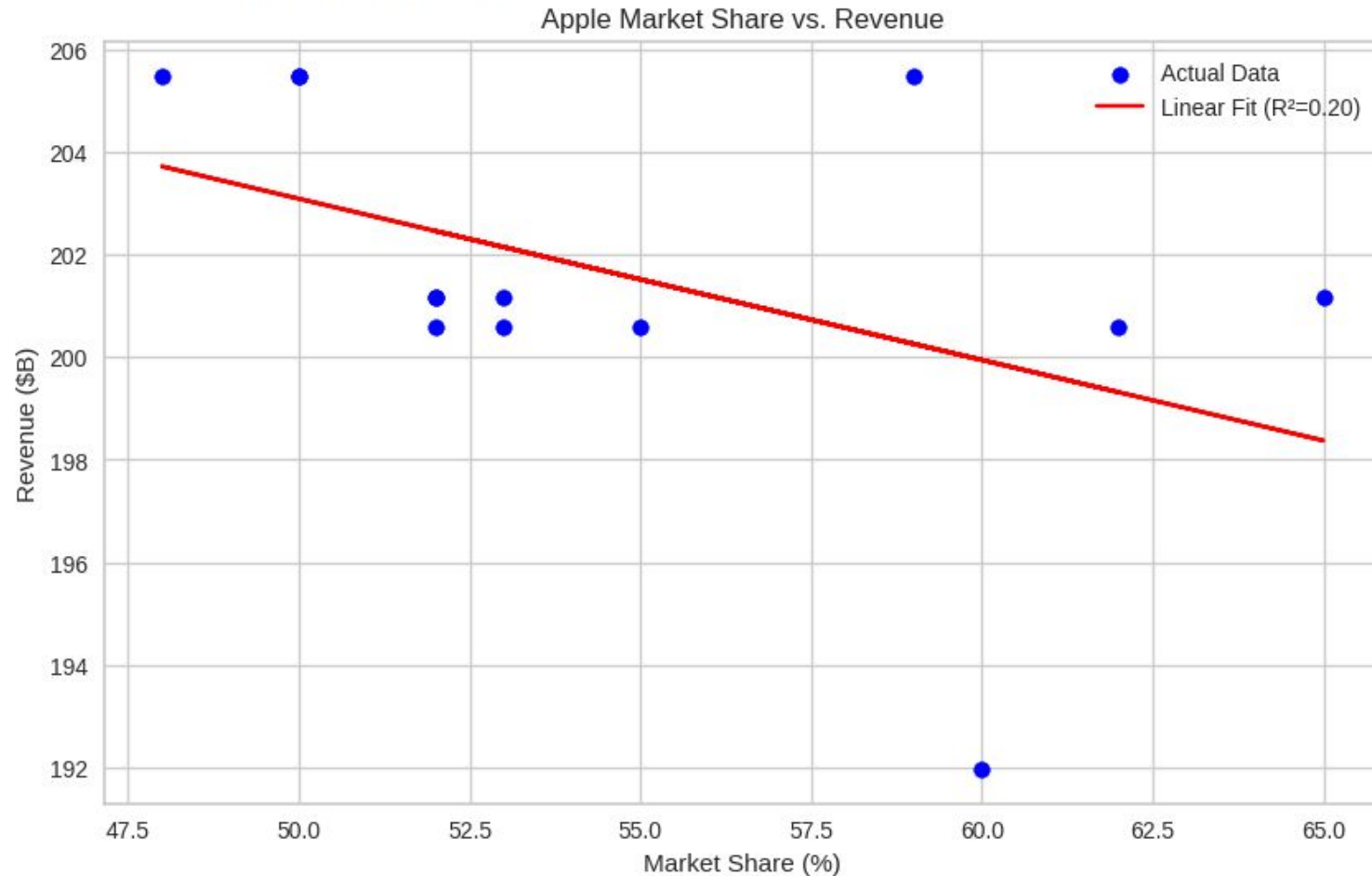
02



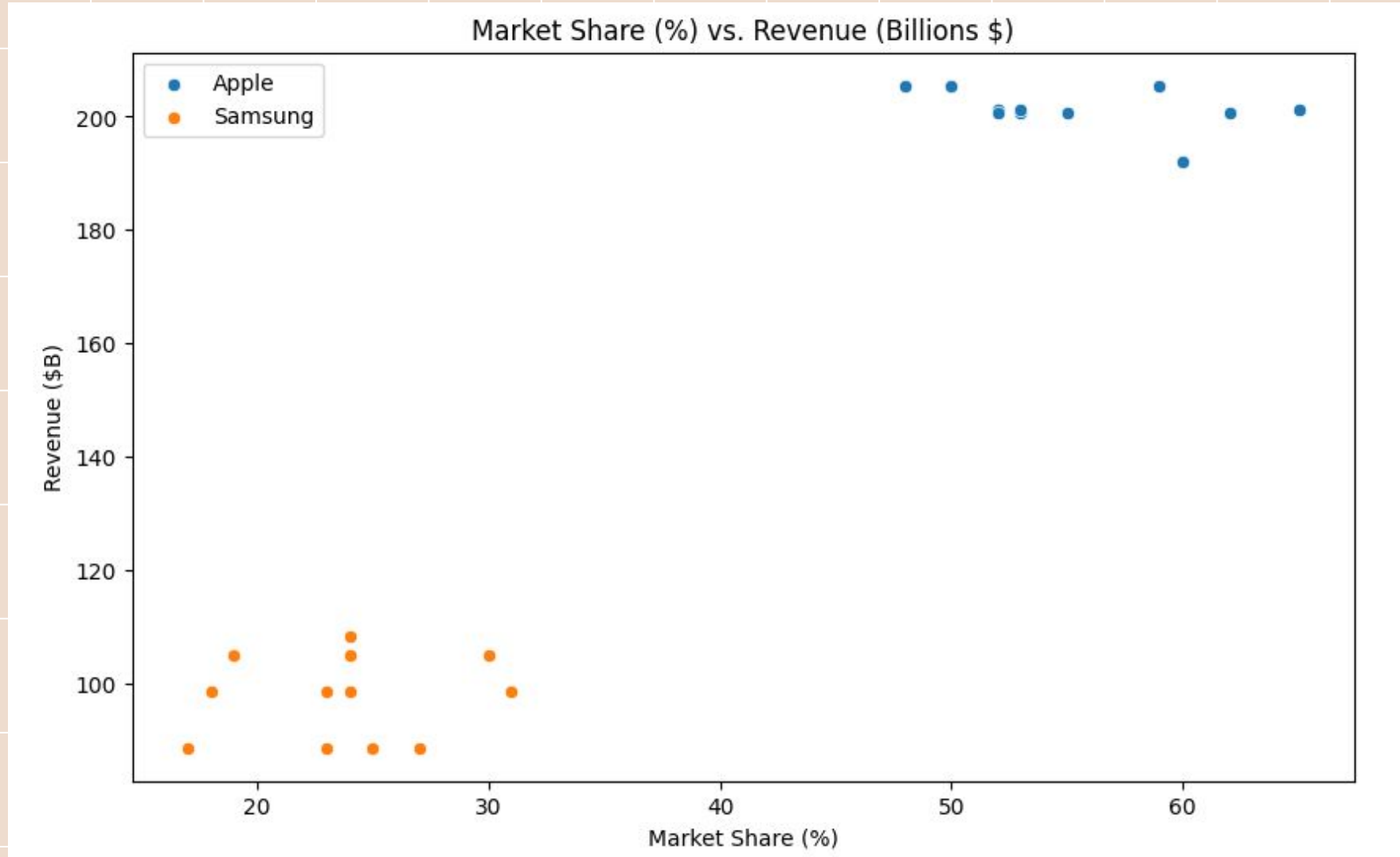
Statistics and Machine Learning Models

Linear Regression

Equation: $\text{Revenue} = -0.31 * \text{Apple_Share} + 218.81$
R-squared: 0.202 (Explains 20.2% of variance)



Scatterplot



Statistics

T-TEST

```
from scipy.stats import ttest_ind
t_stat, p_value = ttest_ind(merged['Apple'], merged['Samsung'])
print(f"t-statistics: {t_stat:.4f}")
print(f"p-value: {p_value:.4f}")
```

```
t-statistics: 16.7913
p-value: 0.0000
```

ARIMA Model

```
from statsmodels.tsa.arima.model import ARIMA

# Fit model with corrected dates
model = ARIMA(apple_ts, order=(1,1,1), freq='QE') # Explicit quarterly frequency
results = model.fit()

# Forecast next 4 quarters
forecast = results.get_forecast(steps=4)
print(forecast.summary_frame())
```

Apple	mean	mean_se	mean_ci_lower	mean_ci_upper
13	54.607105	5.375662	44.071002	65.143209
14	54.689245	5.370422	44.163412	65.215079
15	54.687994	5.370510	44.161988	65.214001
16	54.688013	5.370509	44.162009	65.214017

RandomForestRegressor

```
from sklearn.ensemble import RandomForestRegressor
```

```
# Prepare features and target
X = merged[['Apple', 'Samsung']]
y = merged['apple_revenue']
```

```
# Train model
model = RandomForestRegressor()
model.fit(X, y)
```

```
# Feature importance
print("Feature importance:", dict(zip(X.columns, model.feature_importances_)))
```

```
Feature importance: {'Apple': np.float64(0.8166058607916301), 'Samsung': np.float64(0.18339413920836983)}
```

Revenue Per Market Share

```
merged['Apple_revenue_per_share'] = merged['apple_revenue'] / merged['Apple']  
merged['Samsung_revenue_per_share'] = merged['samsung_revenue'] / merged['Samsung']  
  
print(merged[['year', 'Quarter',  
              'Apple_revenue_per_share',  
              'Samsung_revenue_per_share']].sort_values('year', ascending=False))
```

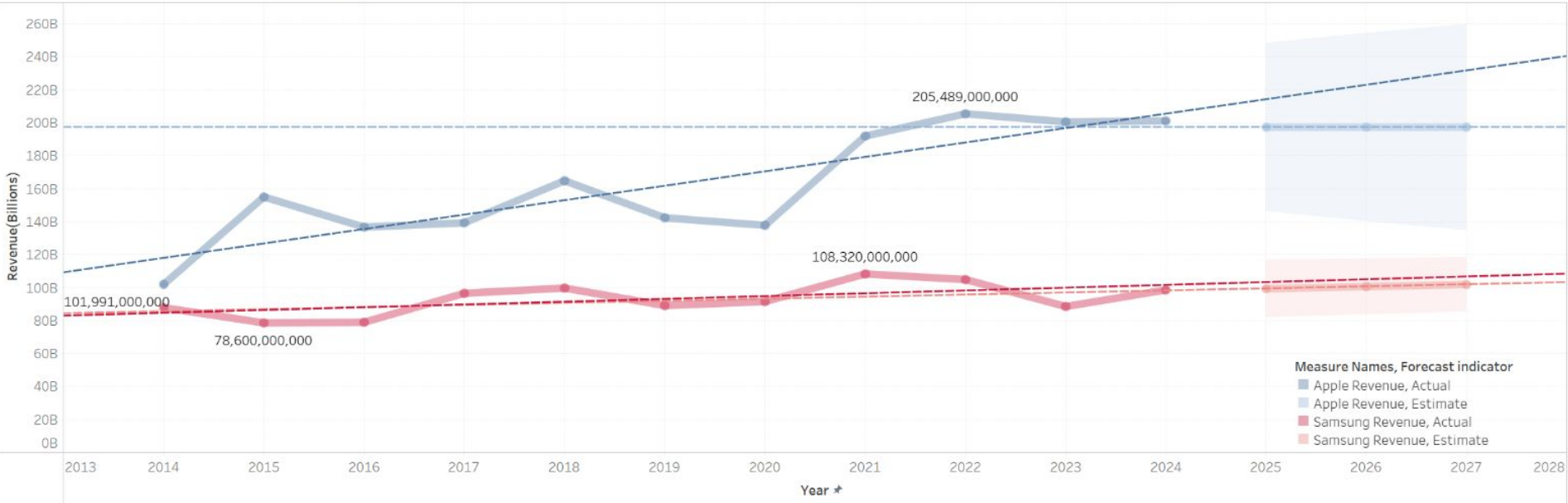
	year	Quarter	Apple_revenue_per_share	Samsung_revenue_per_share
2	2024	Q1	3.868904e+09	3.181613e+09
4	2024	Q3	3.795906e+09	4.288261e+09
3	2024	Q2	3.868904e+09	4.109583e+09
5	2024	Q4	3.095123e+09	5.479444e+09
0	2023	Q3	3.784585e+09	3.542000e+09
1	2023	Q4	3.235210e+09	5.208824e+09
6	2023	Q2	3.646964e+09	3.850000e+09
7	2023	Q1	3.857365e+09	3.279630e+09
8	2022	Q4	3.482864e+09	5.521579e+09
9	2022	Q3	4.109780e+09	4.371250e+09
10	2022	Q2	4.281021e+09	3.497000e+09
11	2022	Q1	4.109780e+09	4.371250e+09
12	2021	Q4	3.199550e+09	4.513333e+09

03

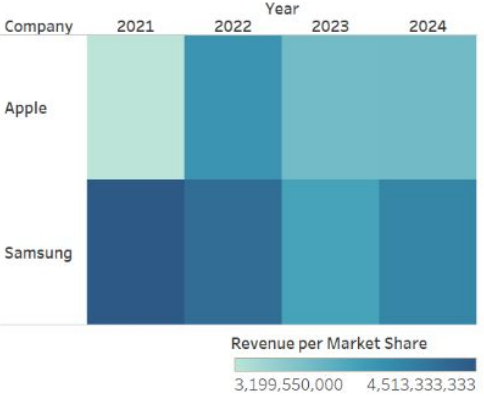


BI Visualization & Insights

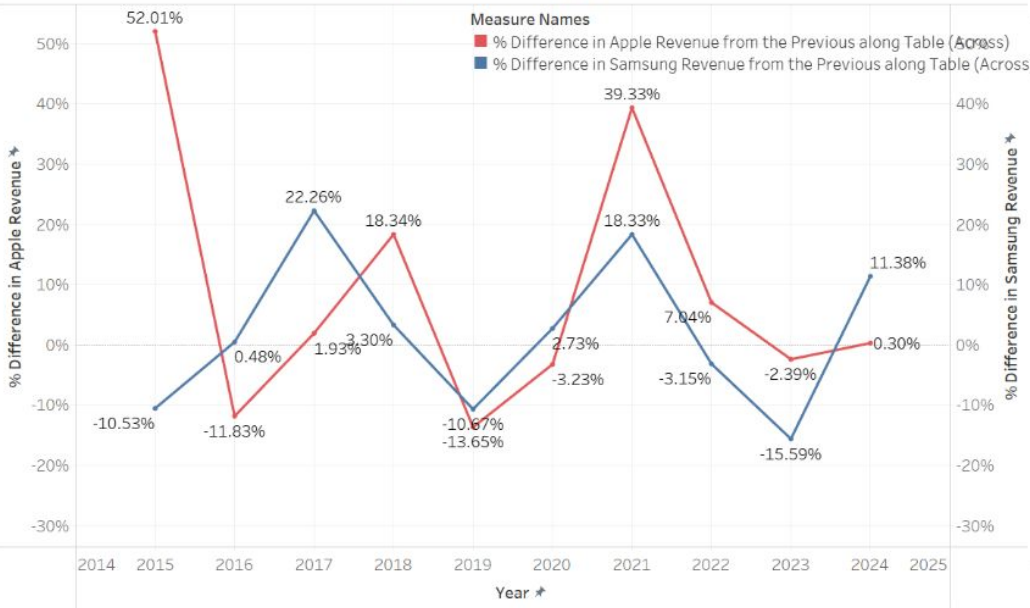
Revenue Trend(2014~2024) and Projected Revenue(2025~2027)



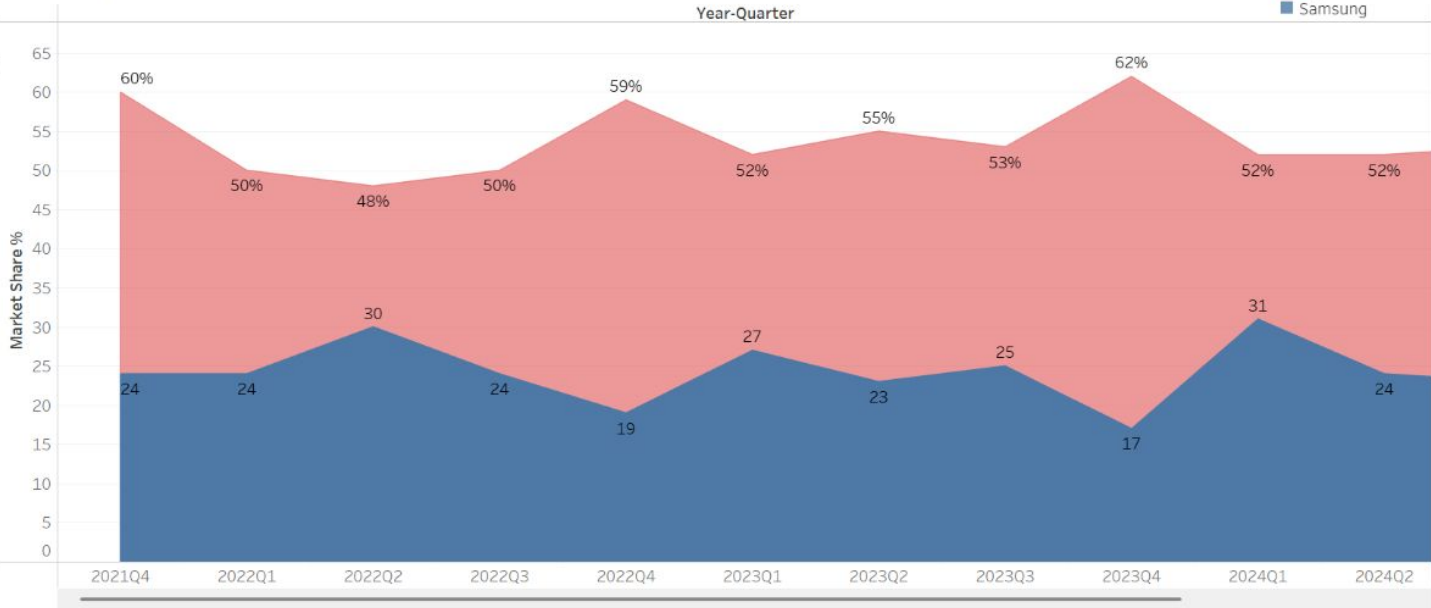
Revenue per Market Share



Year over Year Growth Percentage (2015~2024)

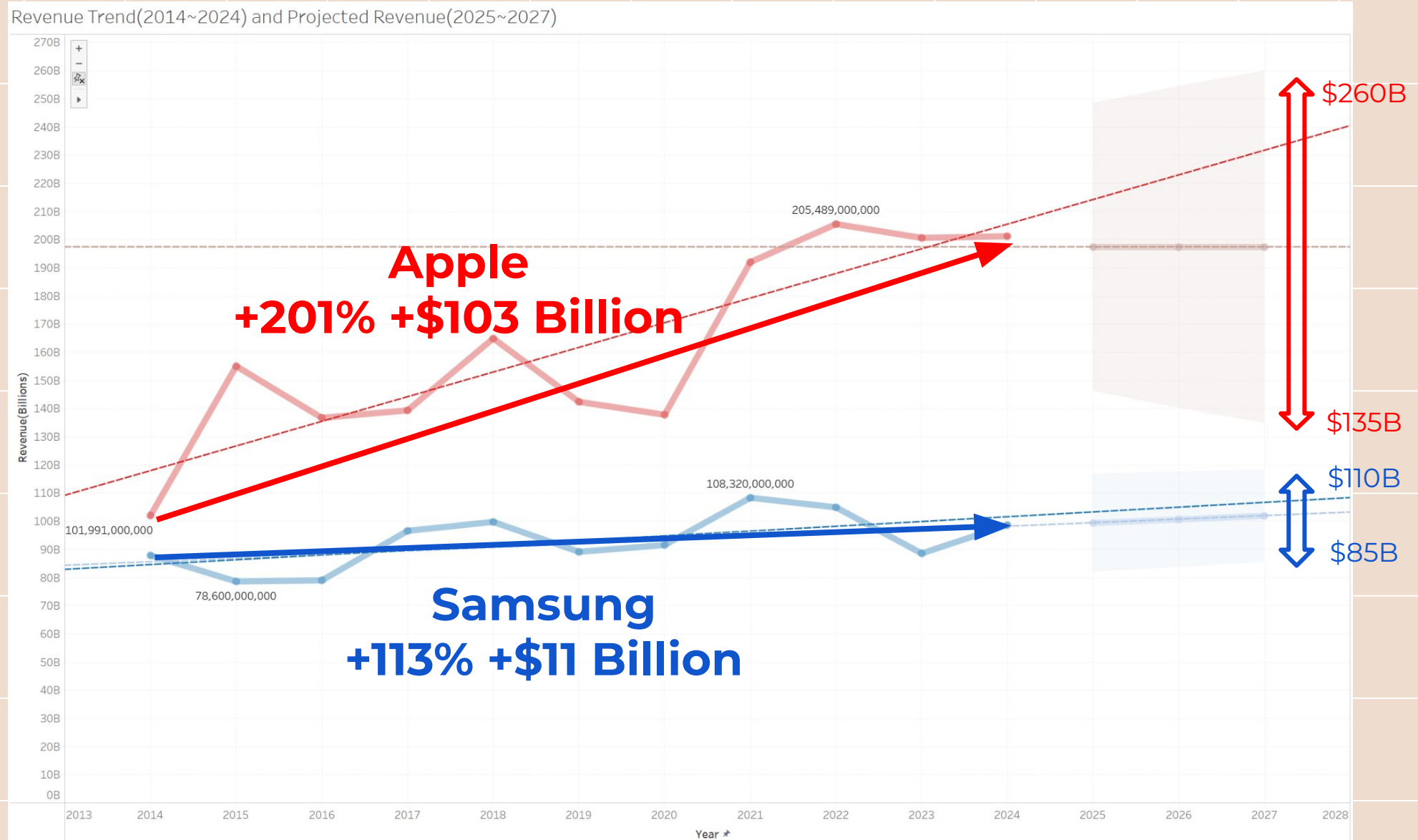


Market Share % (2021Q4~2024Q4)



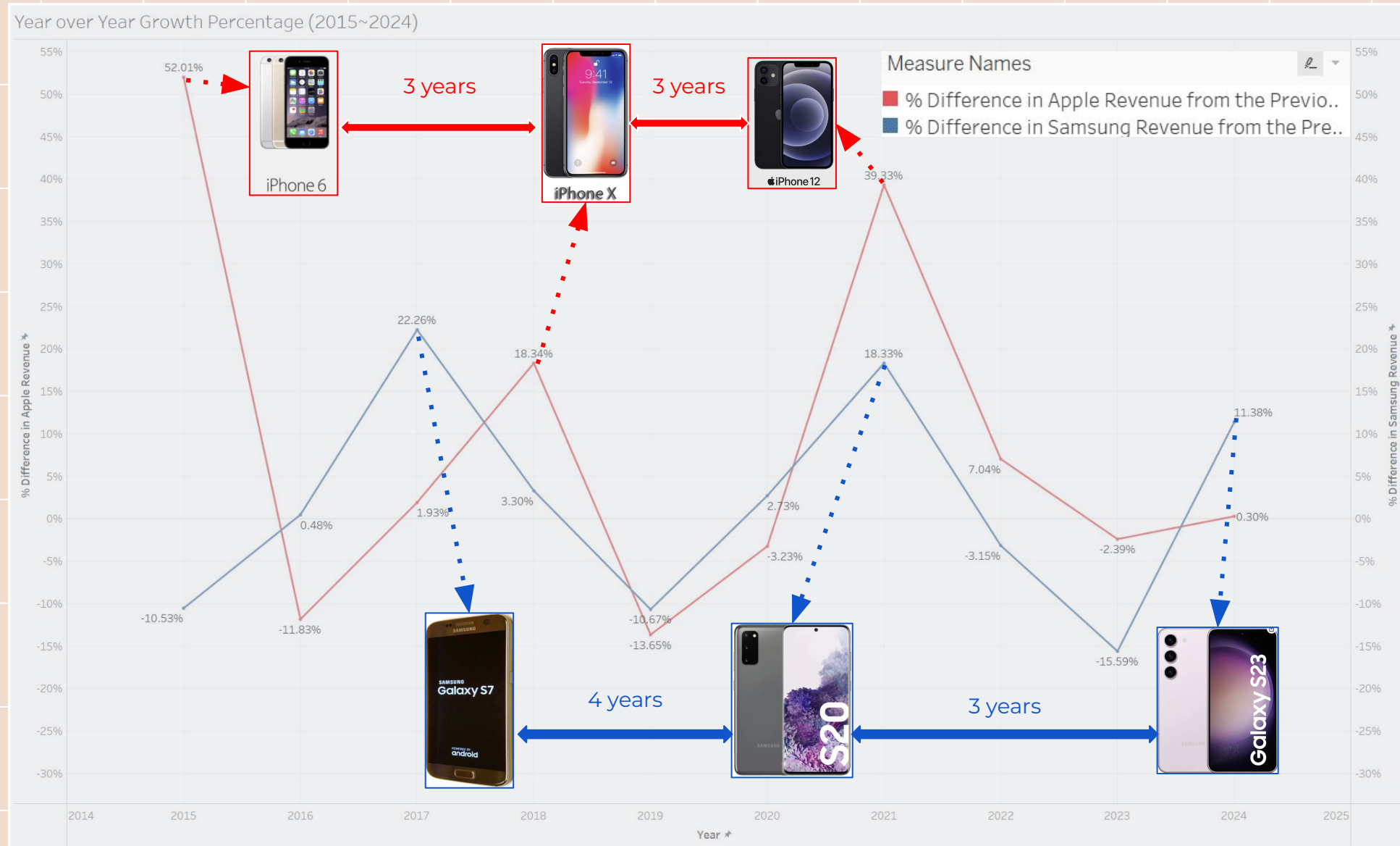


BI Visualization: Revenue Trend





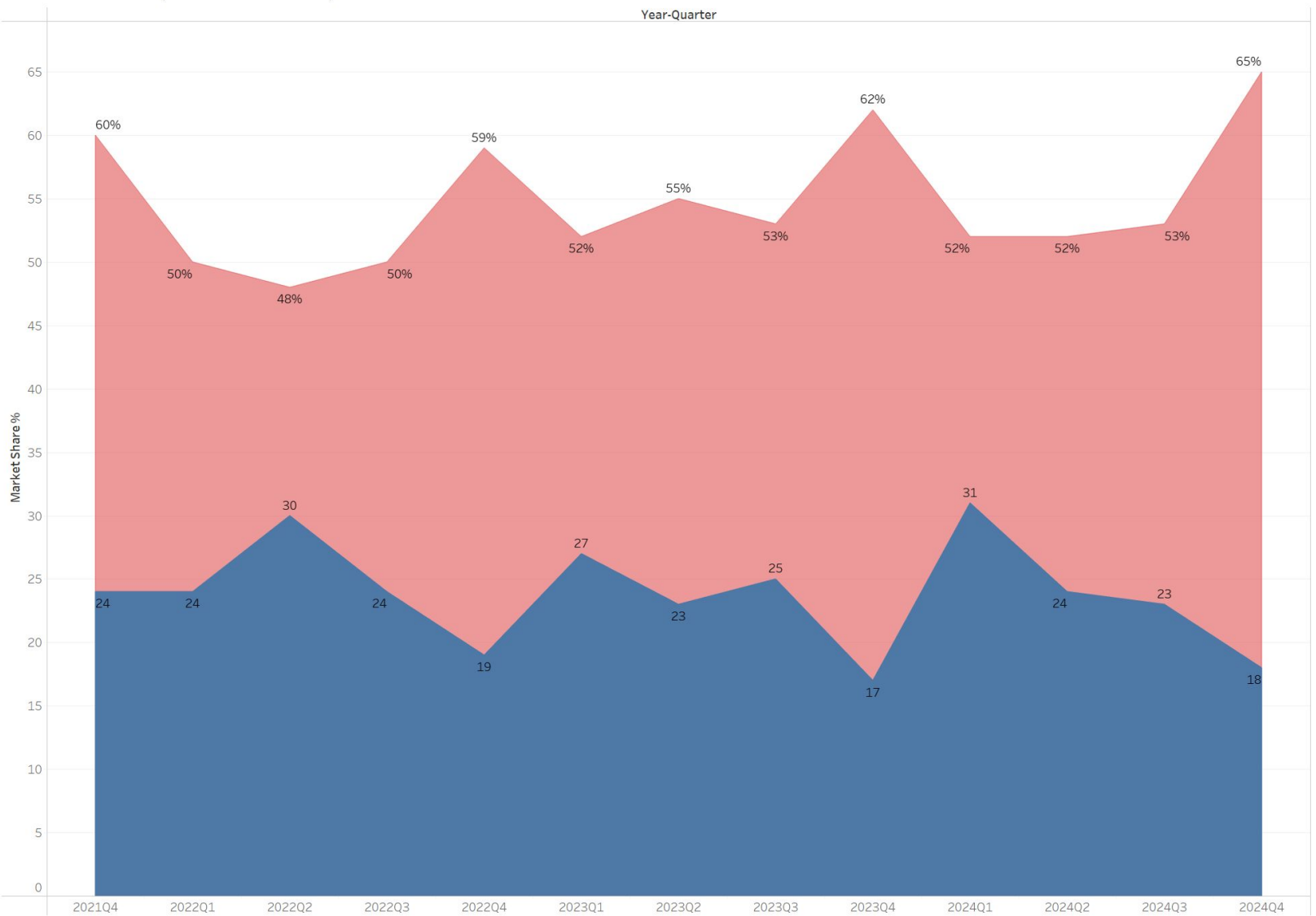
BI Visualization: Year over Year Growth





BI Visualization: Market Share

Market Share % (2021Q4~2024Q4)



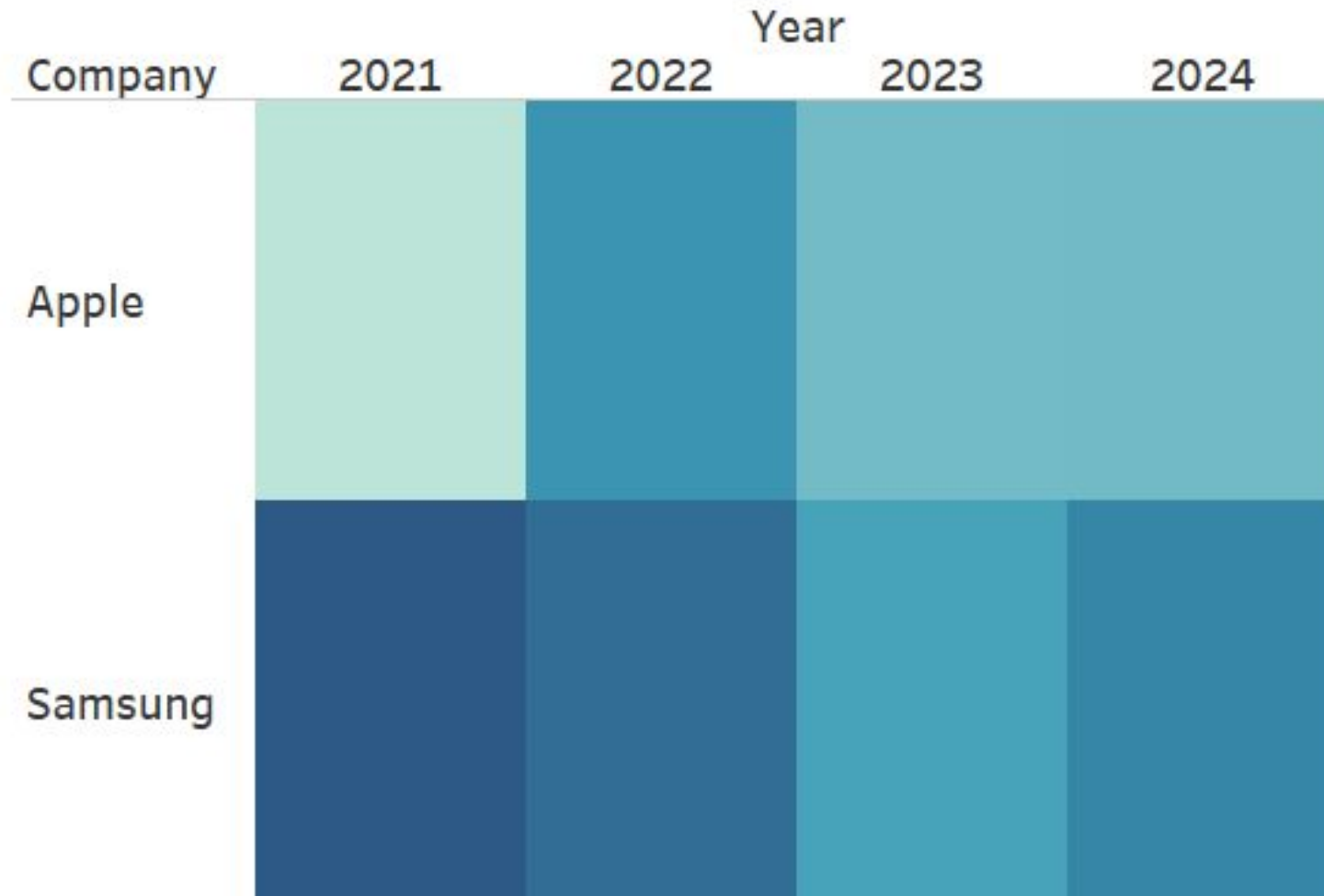
iPhone 13 / 13 Mini	iOS 15.0	September 24, 2021	September 9, 2024 (13) September 12, 2023 (13 Mini)
iPhone 13 Pro / 13 Pro Max	iOS 15.0	September 24, 2021	September 7, 2022
iPhone SE (3rd)	iOS 15.4	March 18, 2022	
iPhone 14 / 14 Plus	iOS 16.0	September 16, 2022 (14) October 7, 2022 (14 Plus)	February 19, 2025
iPhone 14 Pro / 14 Pro Max	iOS 16.0	September 16, 2022	September 12, 2023
iPhone 15 / 15 Plus	iOS 17.0	September 22, 2023	
iPhone 15 Pro / 15 Pro Max	iOS 17.0	September 22, 2023	September 9, 2024
iPhone 16 / 16 Plus	iOS 18.0	September 20, 2024	
iPhone 16 Pro / 16 Pro Max	iOS 18.0	September 20, 2024	
iPhone 16e	iOS 18.0	February 28, 2025	

Galaxy S20	February 11, 2020	March 6, 2020
Galaxy S21	January 14, 2021	January 29, 2021
Galaxy S22	February 9, 2022	February 25, 2022
Galaxy S23	February 1, 2023	February 17, 2023
Galaxy S24	January 17, 2024	January 31, 2024
Galaxy S25	January 22, 2025	February 7, 2025



BI Visualization: Revenue per Market Share

Revenue per Market Share



SUM(Revenue per Market Share)

3,199,550,000

4,513,333,333



Team Member Roles



Kenny Zhu – Dataset & Methodology Analysis

Misael Perez– Data Collection & Preprocessing

Joshua Jimenez – Data Collection & Preprocessing

Aila Choudhary – Business Intelligence & Insights

Minsu Kim– Business Intelligence & Insights



Q&A