

standard media index

MSMI Consulting Team



July. 24, 2014



AGENDA

- **Industry Analysis** – *2 mins*
- **Competitive Analysis** – *5 mins*
- **Forecasting** – *8 mins*
- **Conclusion & Next Steps** – *2 mins*



Industry Analysis

COMPETITIVE
ANALYSIS

Industry
Analysis

Comparative
Analysis

Perceptual Map

SWOT Matrix

Insights



Only **60%** tightly integrate
Marketing Intelligence with decision making



--GIA: "The State of Market Intelligence in 2013"

Because clients want:

- Insights or the facts?
- Specific data on typical problems.
- Doable recommendations & suggestions.



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Trend 1

More consolidation in advertising related industries

economies of scale

creativity



better negotiating power



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Trend 2

But...

More consolidation, even acquisition, for
3rd party research suppliers...

definition inconsistency *economies of scale*



creativity

brings more challenges

better negotiating power

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Trend 2

But...

More consolidation, even acquisition, for
3rd party research suppliers

definition inconsistency

+ disparate array of services

+ clients' requests for more integrated
insights

brings **more challenges**



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Trend 3

Standardization in the industry is
more and more difficult

Opportunity for SMI?

*Multi-domain Data
Standardization Service*



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**SWOT Matrix
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Industry Analysis

Other Trends

More demands for:

- Audience Segmentation Profiling
- Interest Based Measurement
- Cross-platform Audience Measurement



COMPARATIVE ANALYSIS

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- 4 major competitors:

nielsen
AD*VIEWS



- 21 variables:

Features/Benefits/USP/Coverage (media, industry & market) /Data source/Users/Clients/direct competitors/Technology/ etc.



COMPARATIVE ANALYSIS

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- **Products**

Company	Products
SMI	DataMiner
Nielsen	Monitor plus+ Ad *Views
Kantar	AdSpender, StrADegy
SQAD	Netcosts, MMG National, WebCosts, Spot TV, Spot Radio, Hispanic Spot TV Plus
Gfk MRI	Survey of the American Consumer, Consumer Insights, Market Solutions



COMPARATIVE ANALYSIS

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- Media Coverage

Media Type	SMI	Nielsen	Kantar	SQAD	MRI
Broadcast	√	√	√	√	√
Print Media	√	√	√	√	√
Cable	√	√	√	√	
Online	√	√	√	√	√
Digital	√	√	√		√
Outdoor	√	√	√		



PERCEPTUAL MAP

COMPETITIVE
ANALYSIS

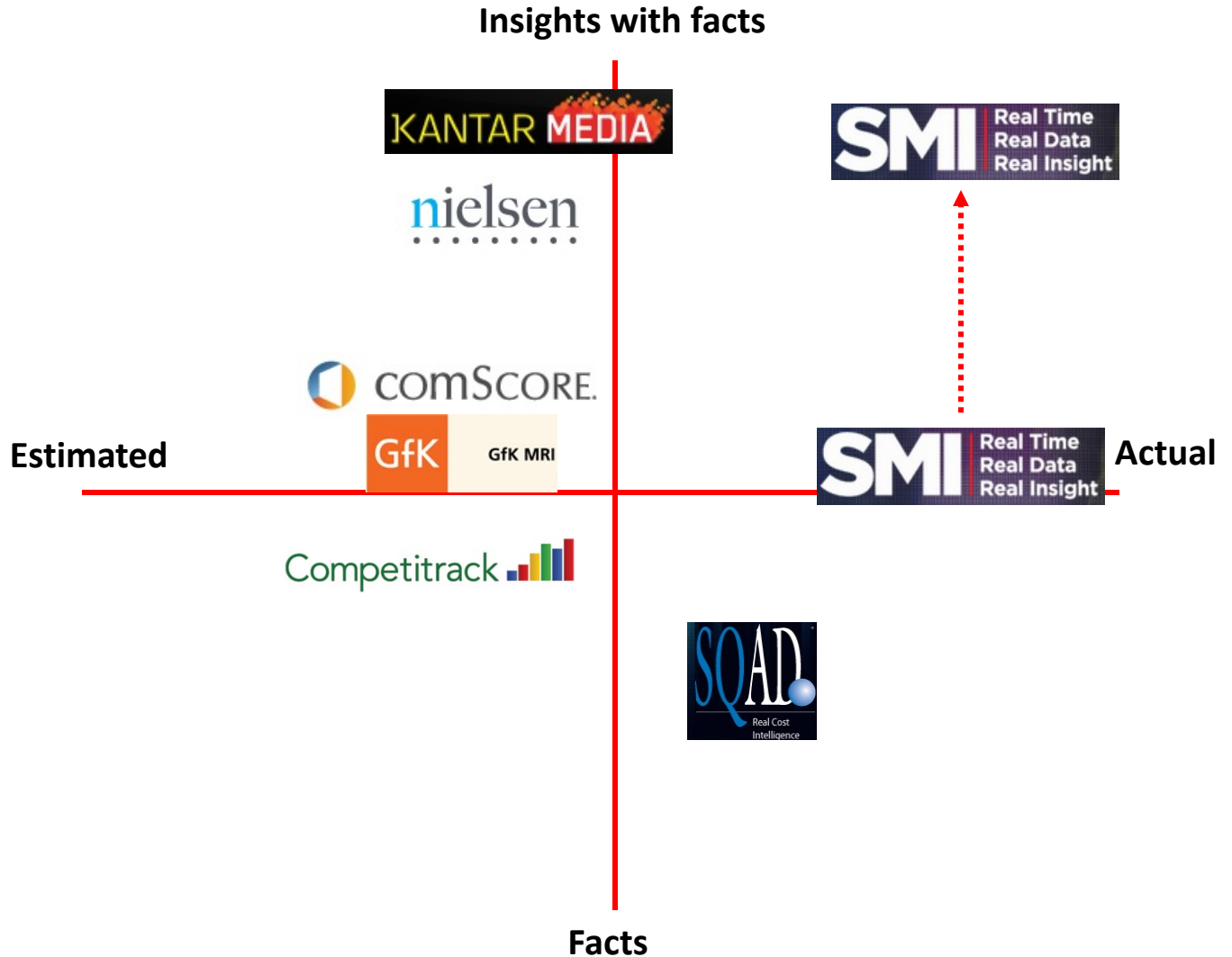
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SWOT MATRIX

COMPETITIVE ANALYSIS

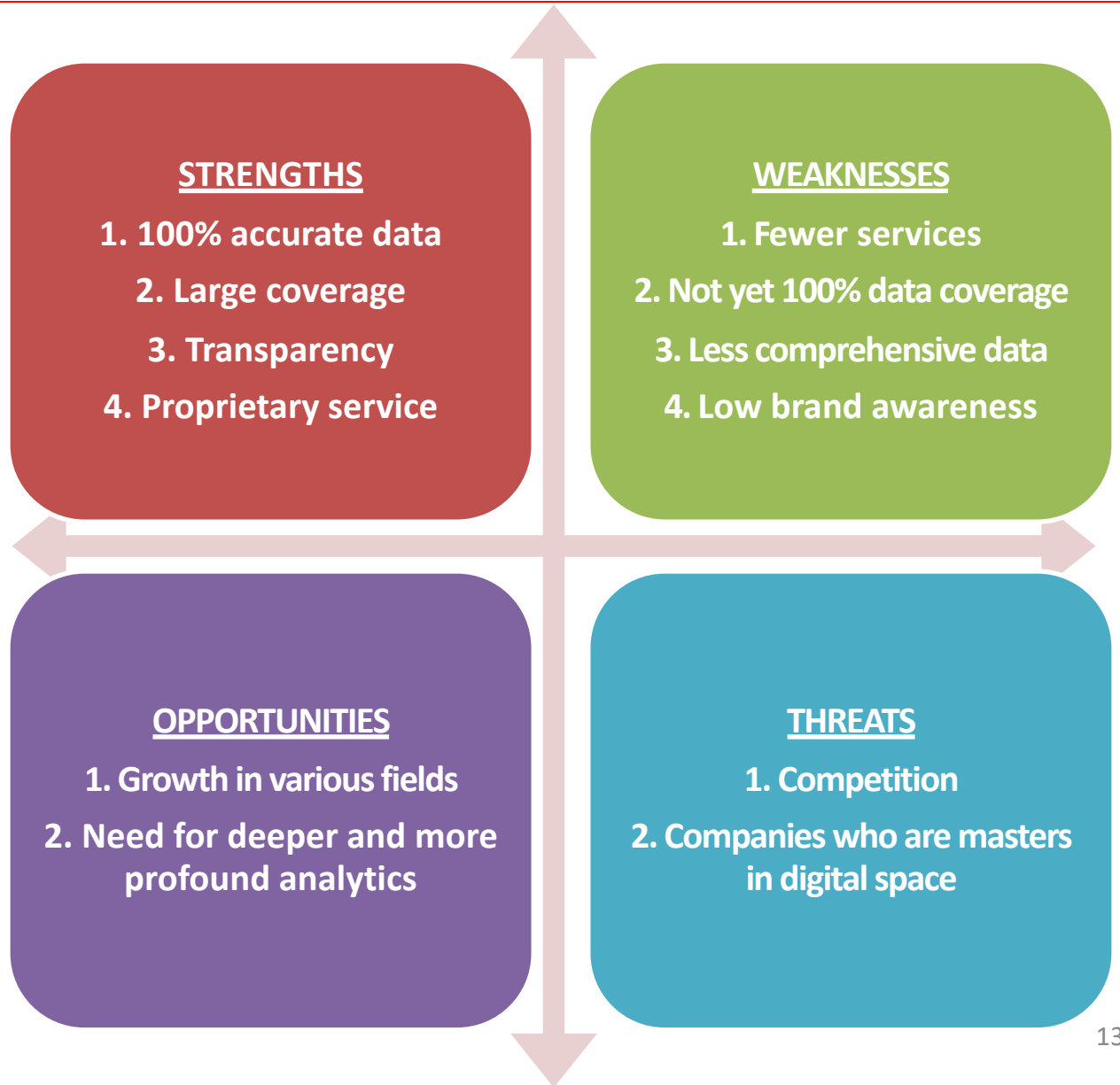
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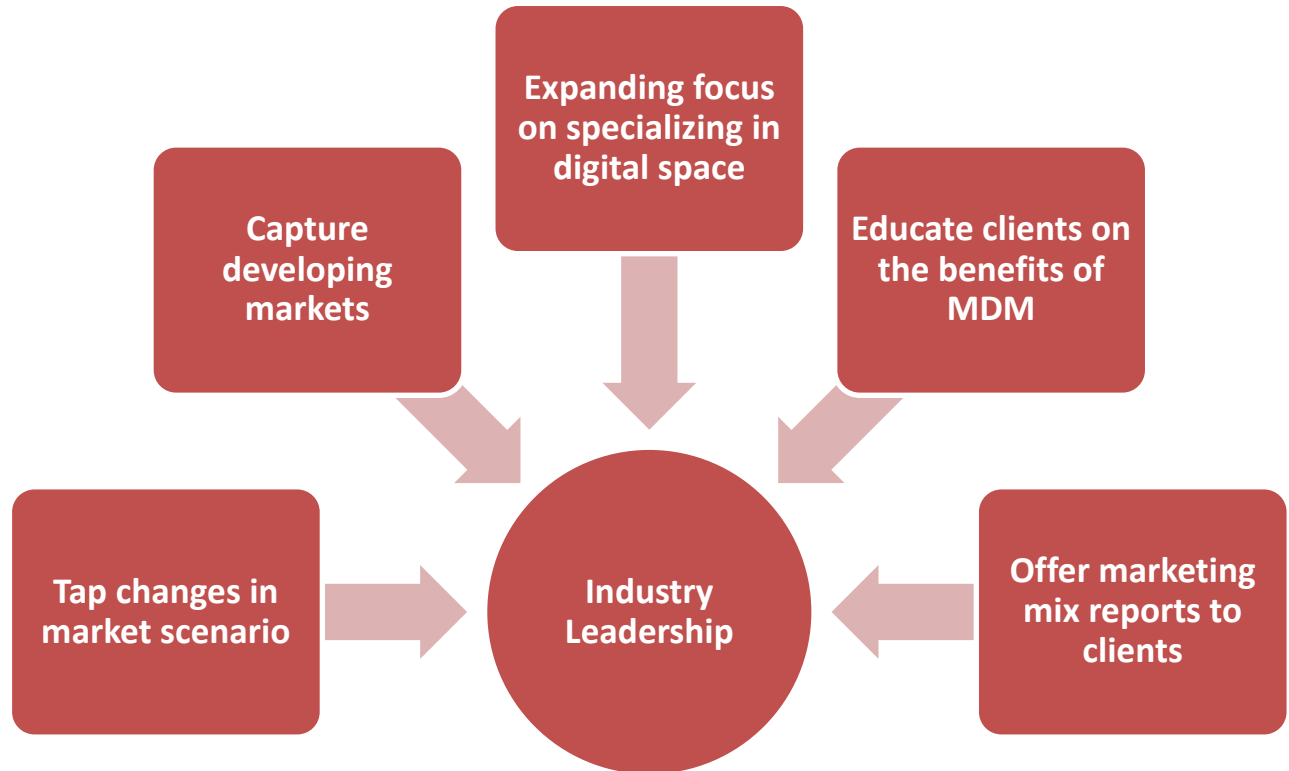
SWOT Matrix

Insights



INSIGHTS FROM COMPETITIVE ANALYSIS

USP: SMI provides real clarity and timeliness on shifts happening in the media industry by creating standardized coding, and providing relevant and meaningful insights to agencies as well as corporations.



COMPETITIVE
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FORECASTING



OVERVIEW

FORECASTING

Overview

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Regression Analysis & Backtesting

Results

Conclusions and Next Steps

- Developed forecasting models to predict quarter line revenue(domestic/Ad revenue) of public companies
- Models were examined by actual figures of latest 6 quarters
- 8 Companies were examined: Walt Disney Company, Viacom, Discovery Communications, Clear Channel Media Holdings, Yahoo!, AOL, AMC Networks, Google
- **8 out of 8** models (companies) achieved **less than 3%** Average Absolute Deviation (Average of the 6 quarter absolute error rate)



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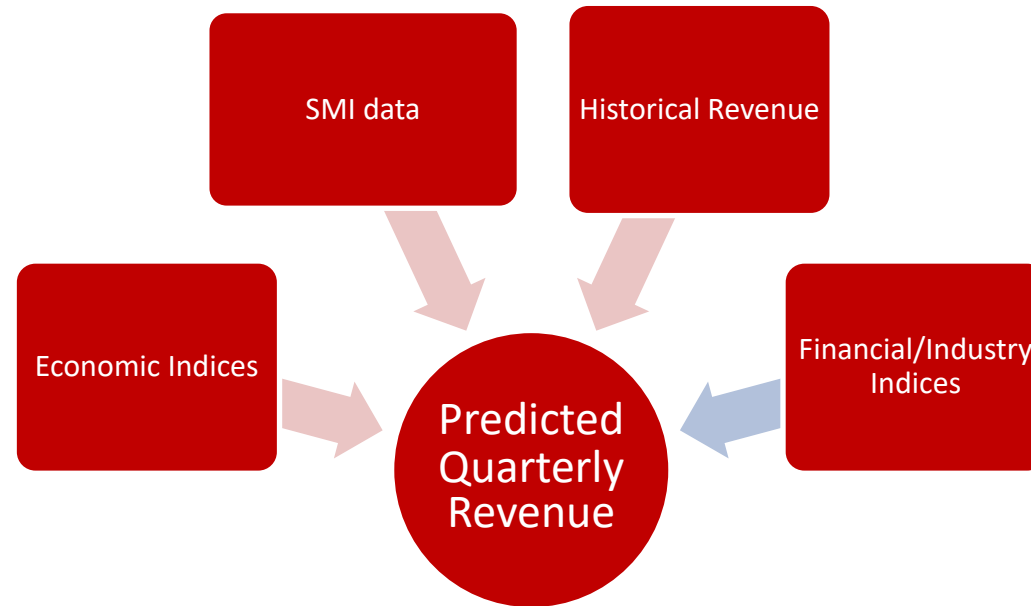
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- Data Source:
 - Federal Economic data, Yahoo! Finance, Standard Media Index, Public financial reports
- Time Range: From Jan 2009 - Jun2014
- Every company has a **unique** combination of variables

INTRODUCTION

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Approach A (Completed)

Organized at Quarterly Level

-Model valid from: End of current quarter until Release of financial report (at least 1.5 months gap)

*Shorter valid period, but **more accurate**

Approach B (Incomplete)

Organized by every first 2 months of quarter

-Model valid from: End of first 2 months until financial report is released (at least 2.5 months gap)

METHODOLOGY

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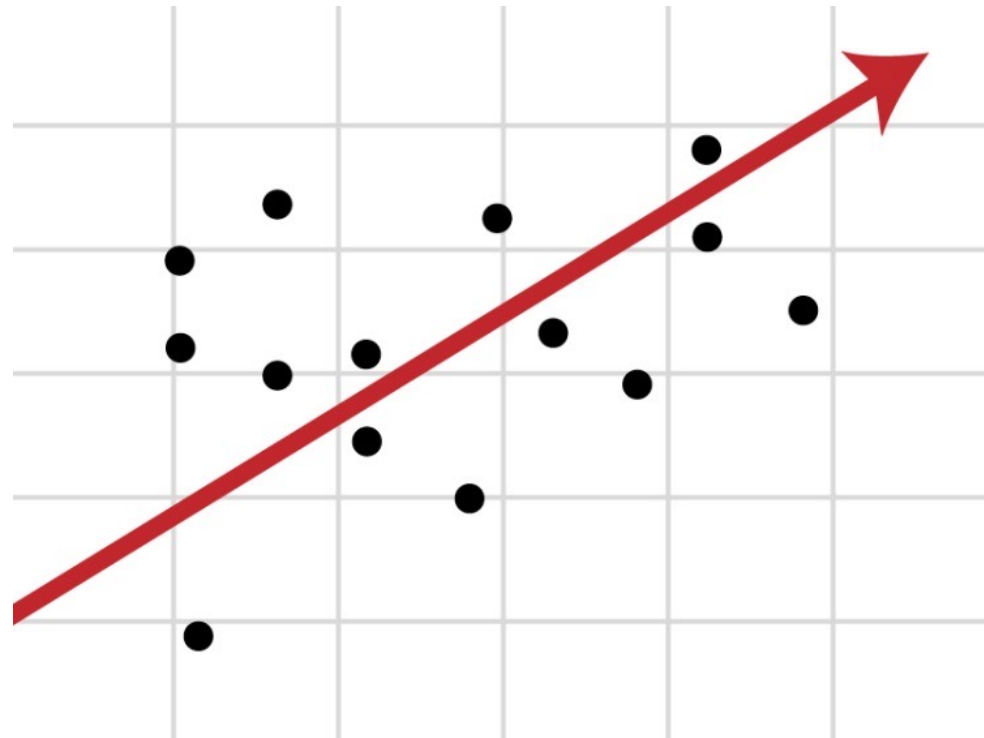
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Linear Regression w/ backtesting



RESULTS

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Average Abs Deviation(Approach A): Our team v/s Last team

Company	% Error Our Team	% Error Last Team	% Improvement
*Google	1.50%	8.69%	82.74%
Viacom	1.90%	3.63%	47.66%
AOL	2.53%	4.50%	43.78%
Yahoo!	1.68%	2.98%	43.62%
Disney	2.87%	6.75%	57.48%
Clear Channel	2.81%	1.82%	-
AMC	1.76%	1.81%	2.76%
Discovery	1.80%	1.70%	-

- Google---- All 6 quarters < **2%**
- 8 of 8 companies < **3%**
- 5 of 8 companies < **2%**

REGRESSION ANALYSIS & CENSORED BACKTESTING

FORECASTING

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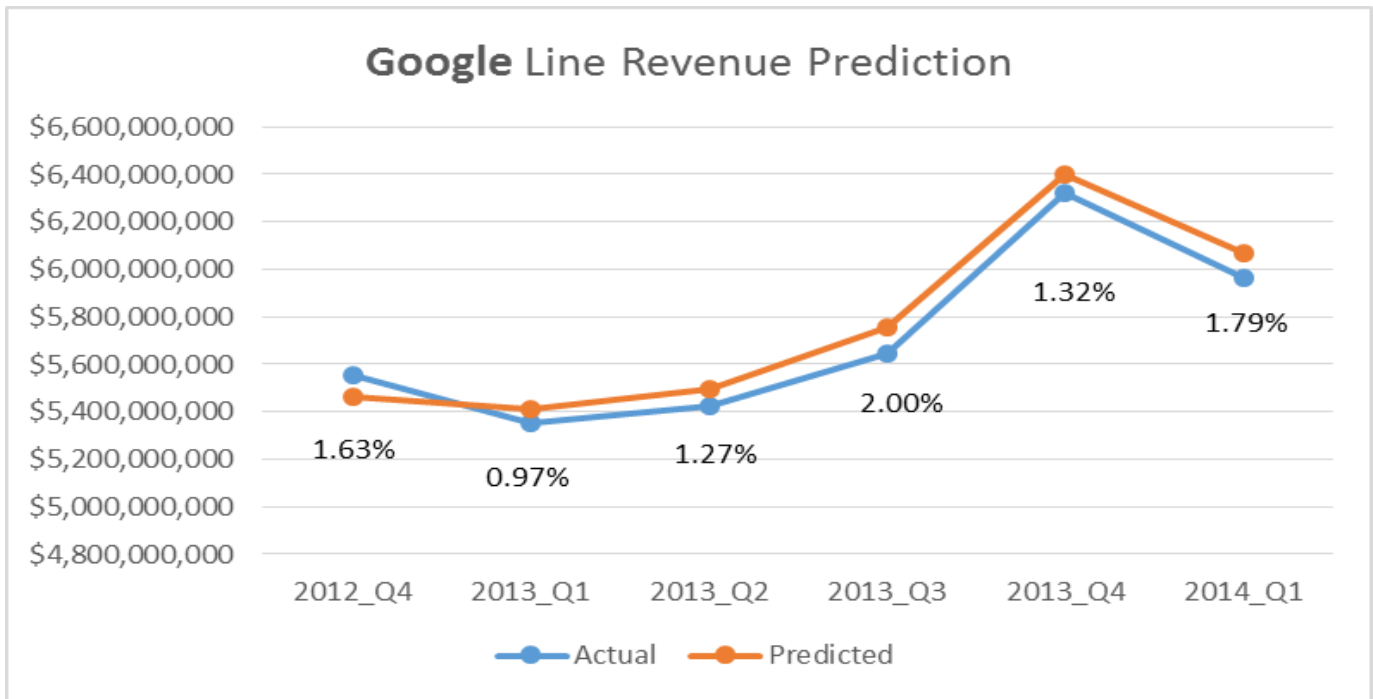
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Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev	Avg_NASDAQ, T_Bill_6Month	TotSpend, Digital_US PC_Retail, PC_Finan, PC_Tele, MST_Display	Lag_Avg_GDP

Average Absolute Deviation = 1.50%

- %Error of all 6 quarters ≤ 2%



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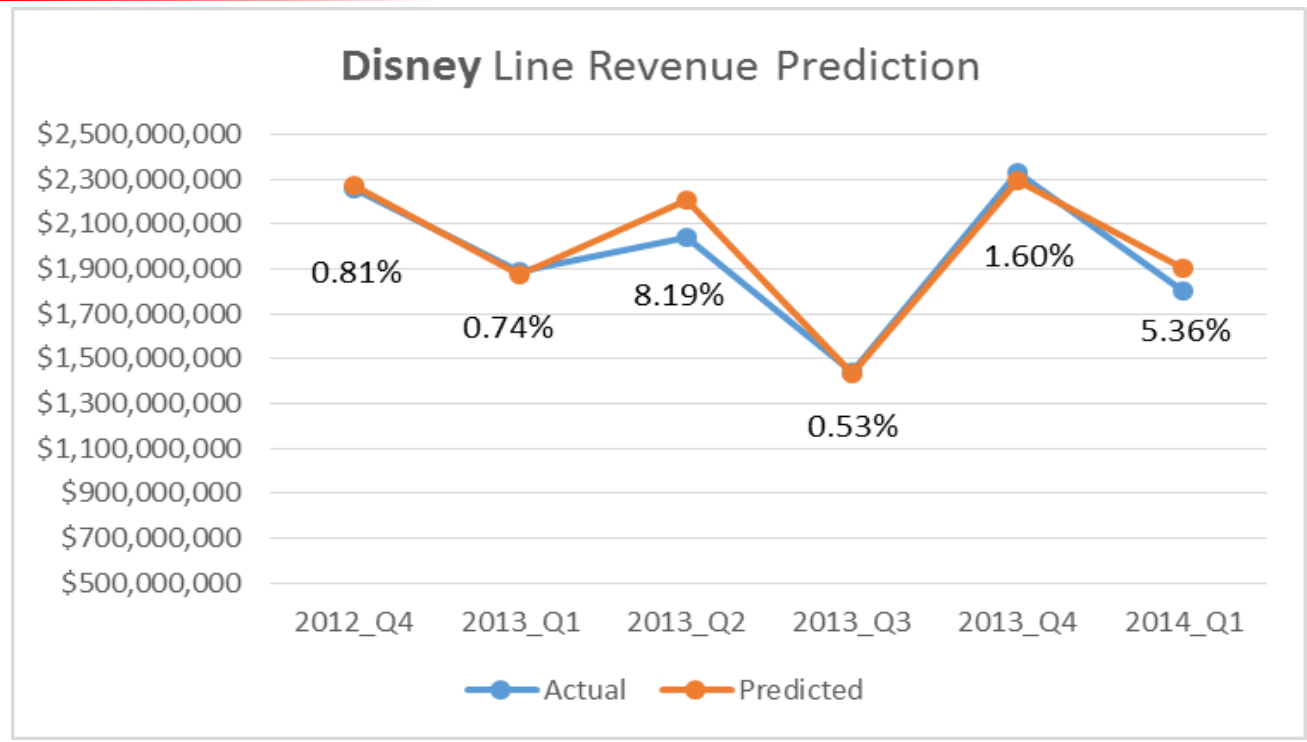
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Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev, Lag2_Rev, Lag1Year_Rev	none	MST_BroadcastTV, MST_CableTV, PC_Retail	Lag_Avg_GDP, Lag_Avg_Unemployment

Average Absolute Deviation = 2.87%

- %Error fluctuating
- Assumption: Revenue not well explained by Ad spend



RESULTS

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Average Abs Deviation(Approach B): Our team v/s Last team

Company	% Error Our Team	% Error Last Team
Google	-	8.69%
Viacom	-	3.63%
AOL	-	4.50%
Yahoo!	-	2.98%
Disney	-	6.75%
Clear Channel	2.50%	1.82%
AMC	-	1.81%
Discovery	3.28%	1.70%

- For further improvement



REGRESSION ANALYSIS & CENSORED BACKTESTING

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Line Revenue Prediction for 2014 Q2 (Approach A)

Company	Prediction	Actual	% Error
Google	5710980800	6030780000	5.30%
Viacom	1335480405	-	-
AOL	346589827	-	-
Yahoo!	951864549	-	-
Disney	1873762069	-	-
Clear Channel	801911834	-	-
AMC	443996174	-	-
Discovery	433567155	-	-



CONCLUSIONS & NEXT STEPS

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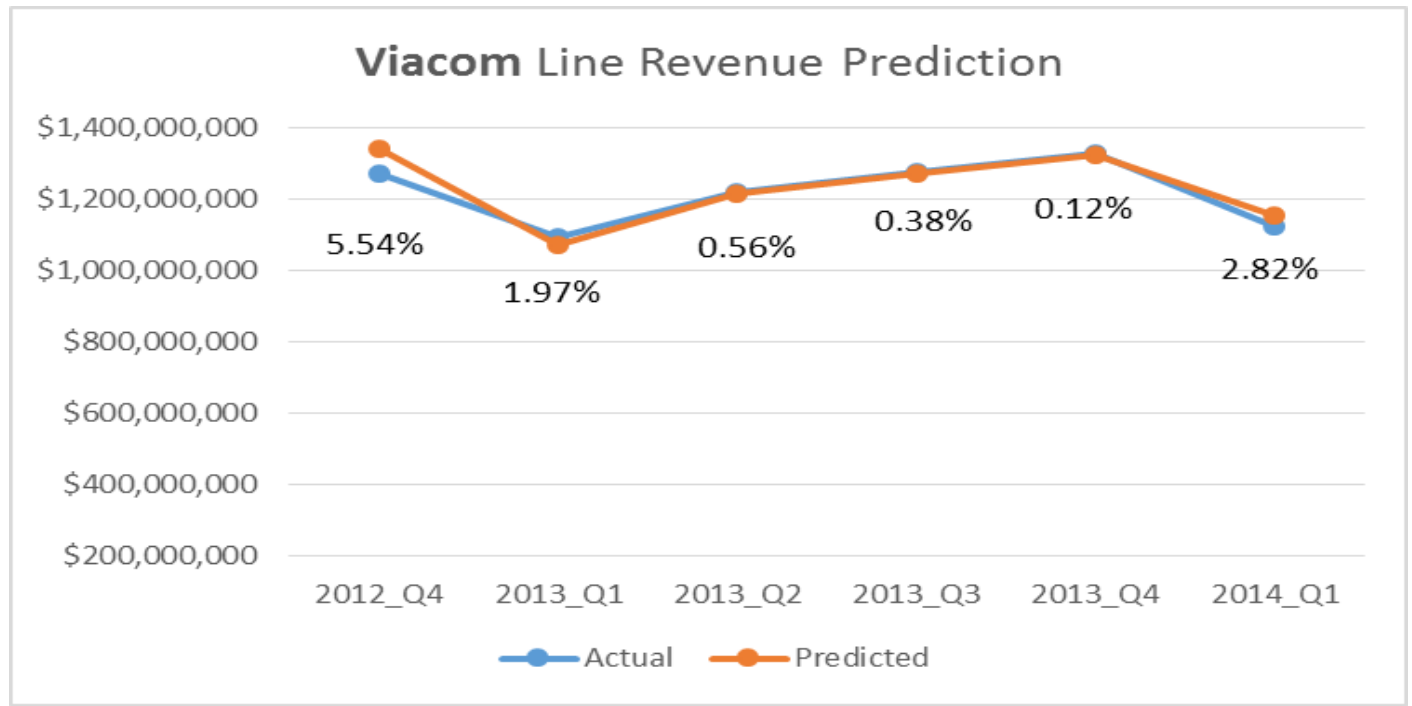
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Conclusions and Next Steps

1. For **Disney**, consider introducing new variables other than Ad Spend (e.g data from entertainment industry)
2. Extend the *Approach B* to the next level
3. Accuracy impacted by quickly expanding **Ad Spend** data
4. Great potential to predict revenue of more public companies, with customized approaches



REGRESSION ANALYSIS & CENSORED BACKTESTING



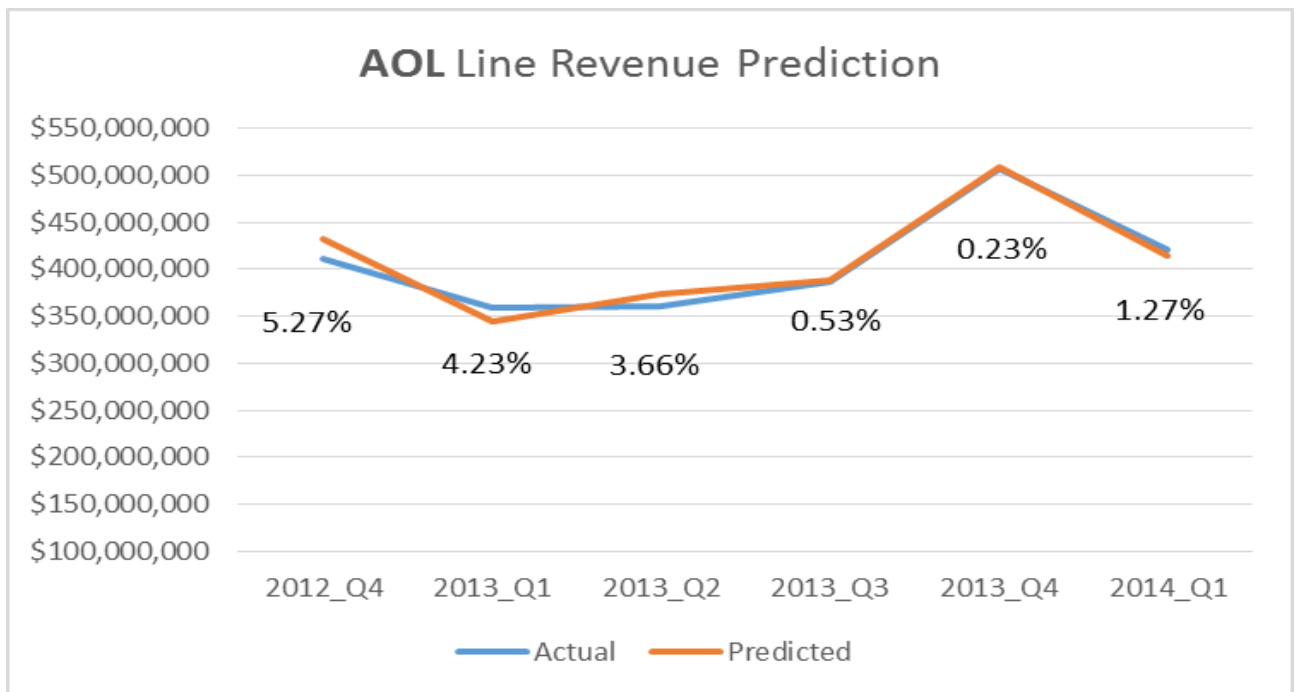
Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev,	T_Bill_6Month	Magazines_US, Television_US, MST_CableTV, PC_Ent	Lag_Avg_Unemployment

Average Absolute Deviation = 1.90%

- Very satisfying accuracy
- AAD of latest 5 quarters = **1.17%**



REGRESSION ANALYSIS & CENSORED BACKTESTING

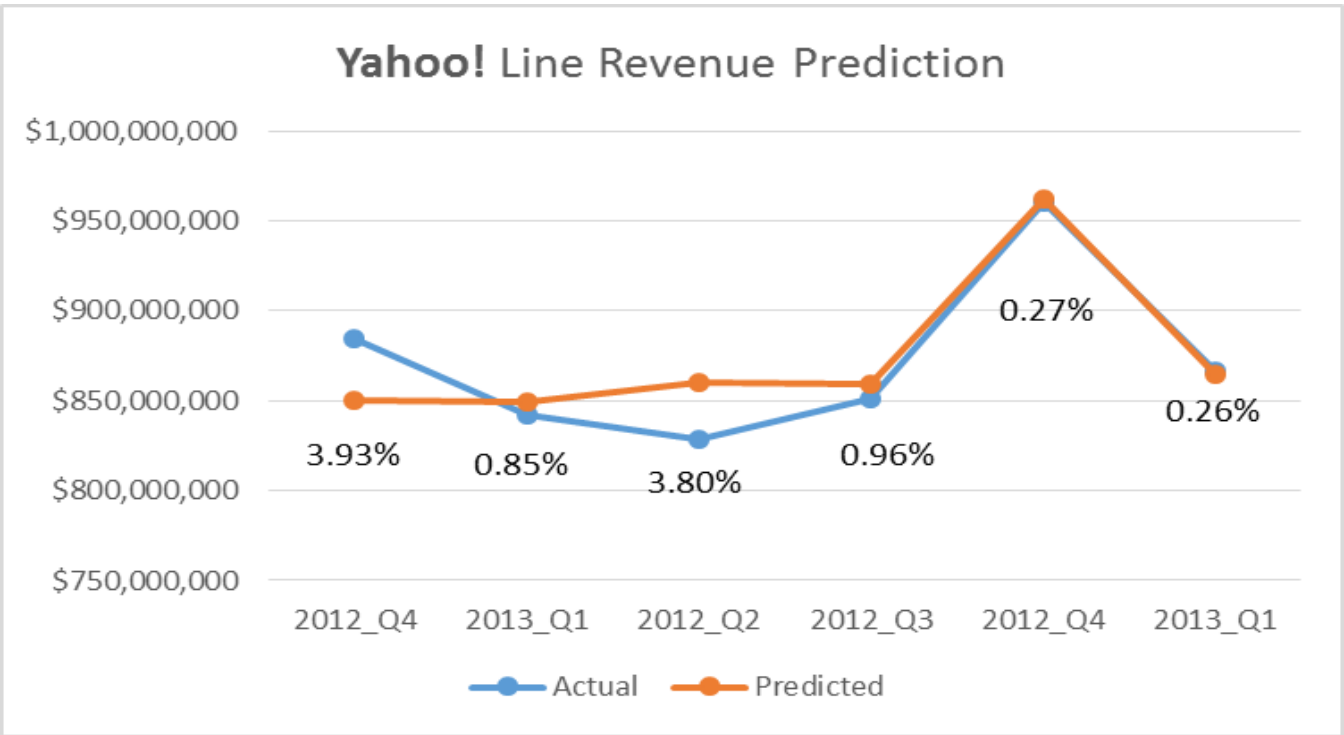


Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev, Lag2_Rev	none	TotSpend, MST_AdNetwk, MST_Exchng, PC_Auto, Digital_US	none
Average Absolute Deviation =2.53%			

- %Error significantly dropping
- AAD of latest 3 quarters= 0.68%



REGRESSION ANALYSIS & CENSORED BACKTESTING



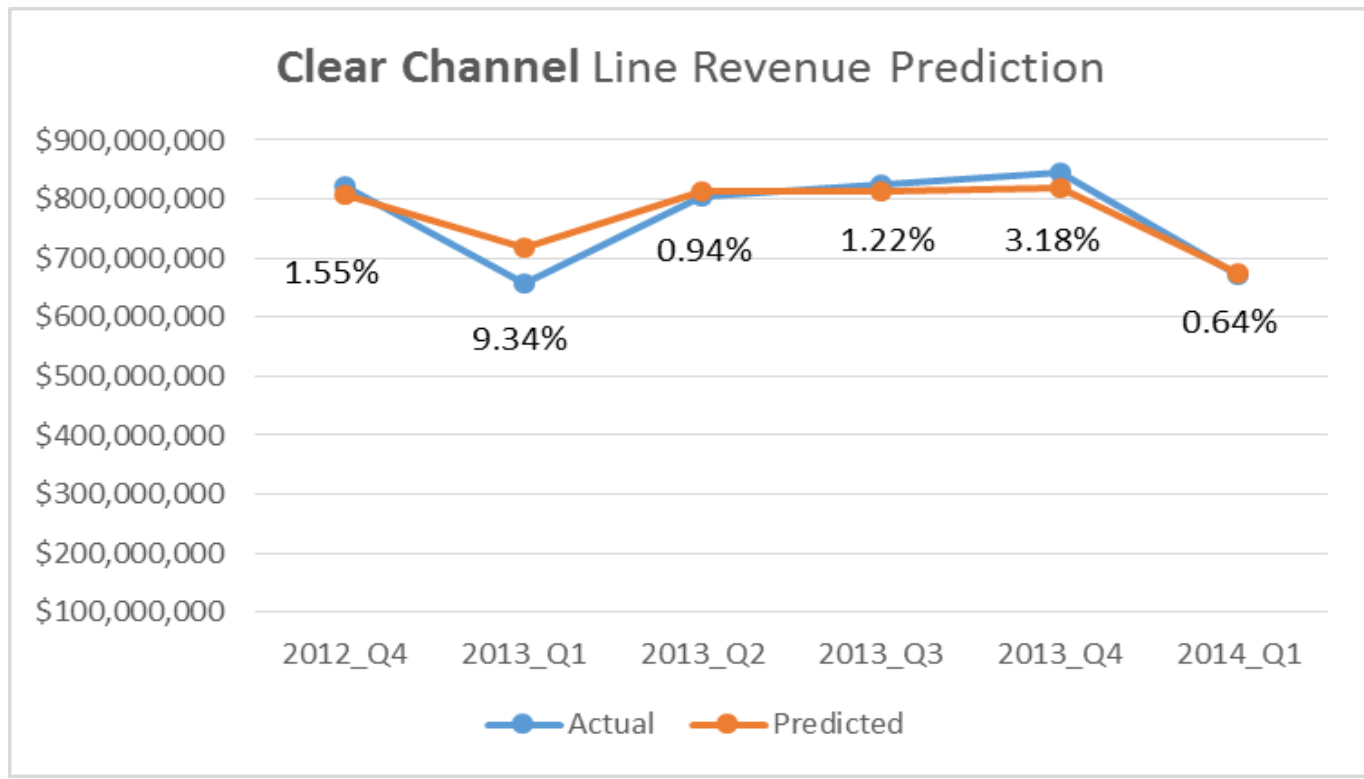
Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev, Lag2_Rev	LIBOR_3Month	TotSpend, Digital_US, OOH_US, Magazines_US	Lag_Avg_GDP

Average Absolute Deviation = 1.68%

- Accuracy improving
- AAD of latest 3 quarters = **0.50%**



REGRESSION ANALYSIS & CENSORED BACKTESTING



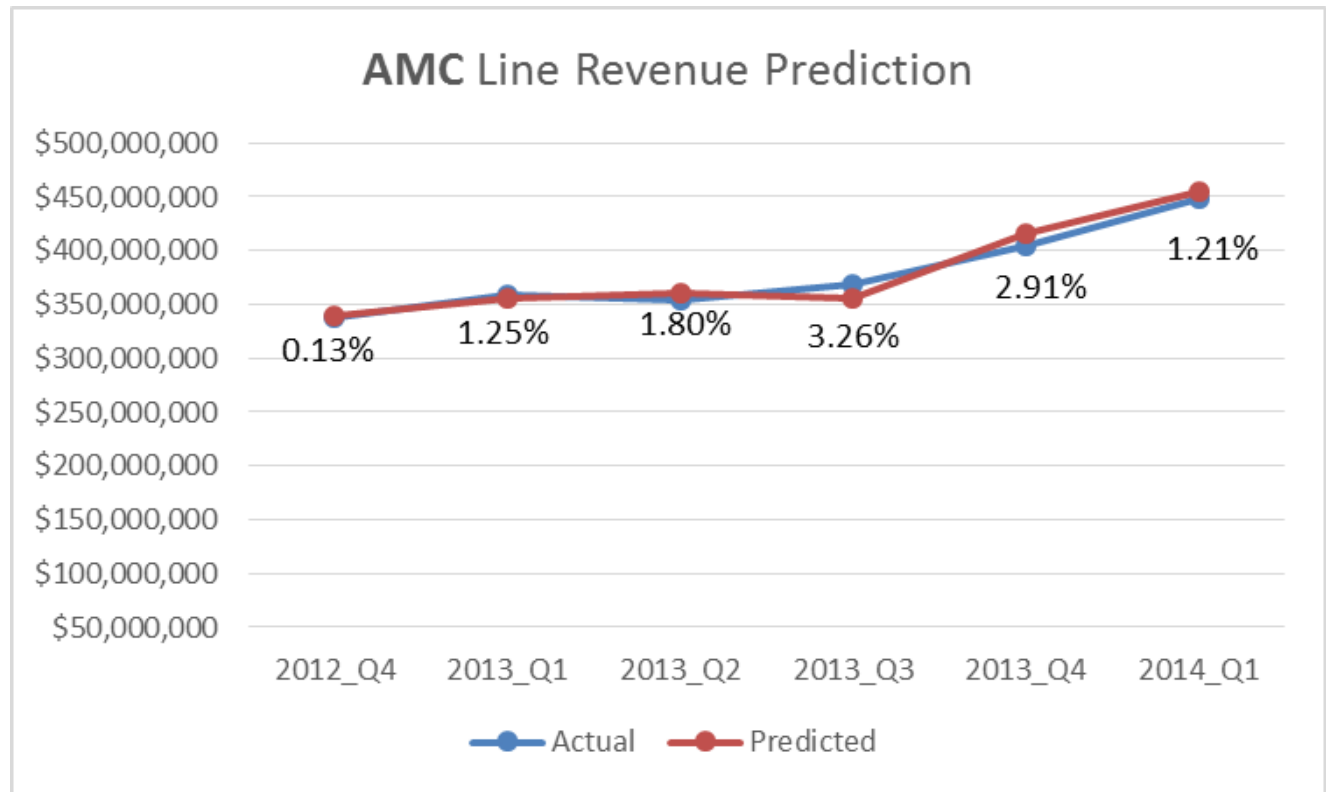
Historical Revenue	Financial Indices	SMI Data	Economic Indices
none	T_Bill_6Month, AvgStockPrice	TotSpend, Television_US, Digital_US, Magazines_US, Radio_US	Avg_Inflation rate

Average Absolute Deviation = 2.81%

- AAD of latest 4 quarters= 1.50%



REGRESSION ANALYSIS & CENSORED BACKTESTING



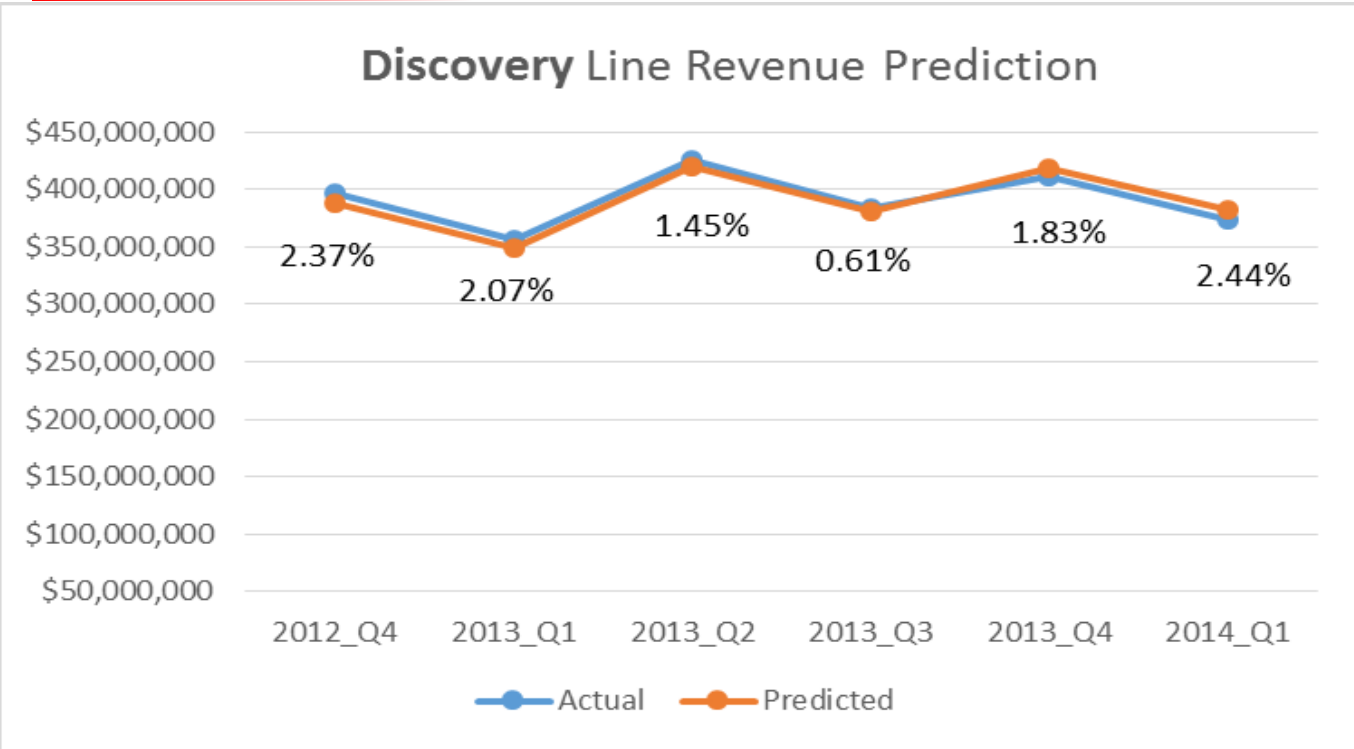
Historical Revenue	Financial Indices	SMI Data	Economic Indices
LAG_REV	AVG_DJ	Newspapers_US, TOTSPEND, PC_AUTO, MST_CABLETV	Lag_Avg_GDP

Average Absolute Deviation =1.76%

- Satisfying accuracy



REGRESSION ANALYSIS & CENSORED BACKTESTING



Historical Revenue	Financial Indices	SMI Data	Economic Indices
Lag_Rev	Avg_NasDAQ	TotSpend, MST_CableTV	Lag_Avg_GDP

Average Absolute Deviation = 1.80%

- High accuracy and stable over time

