Proiect final semestru

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Contents

Proiect final semestru

Contents

Facility

Facility Region	Facility State	Facility	Facility City
West	AZ	AZ00039	Scottsdale
West	CA	CA00014	Los Angeles
West	CA	CA00045	San Francisco
West	CA	CA00048	San Diego
West	WA	WA00042	Seattle
South	AL	AL00002	Mobile
South	AL	AL00027	Birmingham
South	AR	AR00024	Little Rock
South	LA	LA00021	New Orleans
South	TX	TX00005	Dallas
South	TX	TX00008	Corpus Christi
South	TX	TX00011	Houston
North	IL	IL00030	Chicago
North	IL	IL00033	Joliet
North	IL	IL00036	Elgin
North	OH	OH00017	Cincinnati
North	OH	OH00051	Cleveland
East	NH	NH00061	Manchester
East	NJ	NJ00064	Newark
East	NY	NY00058	New York
East	PA	PA00055	Philadelphia

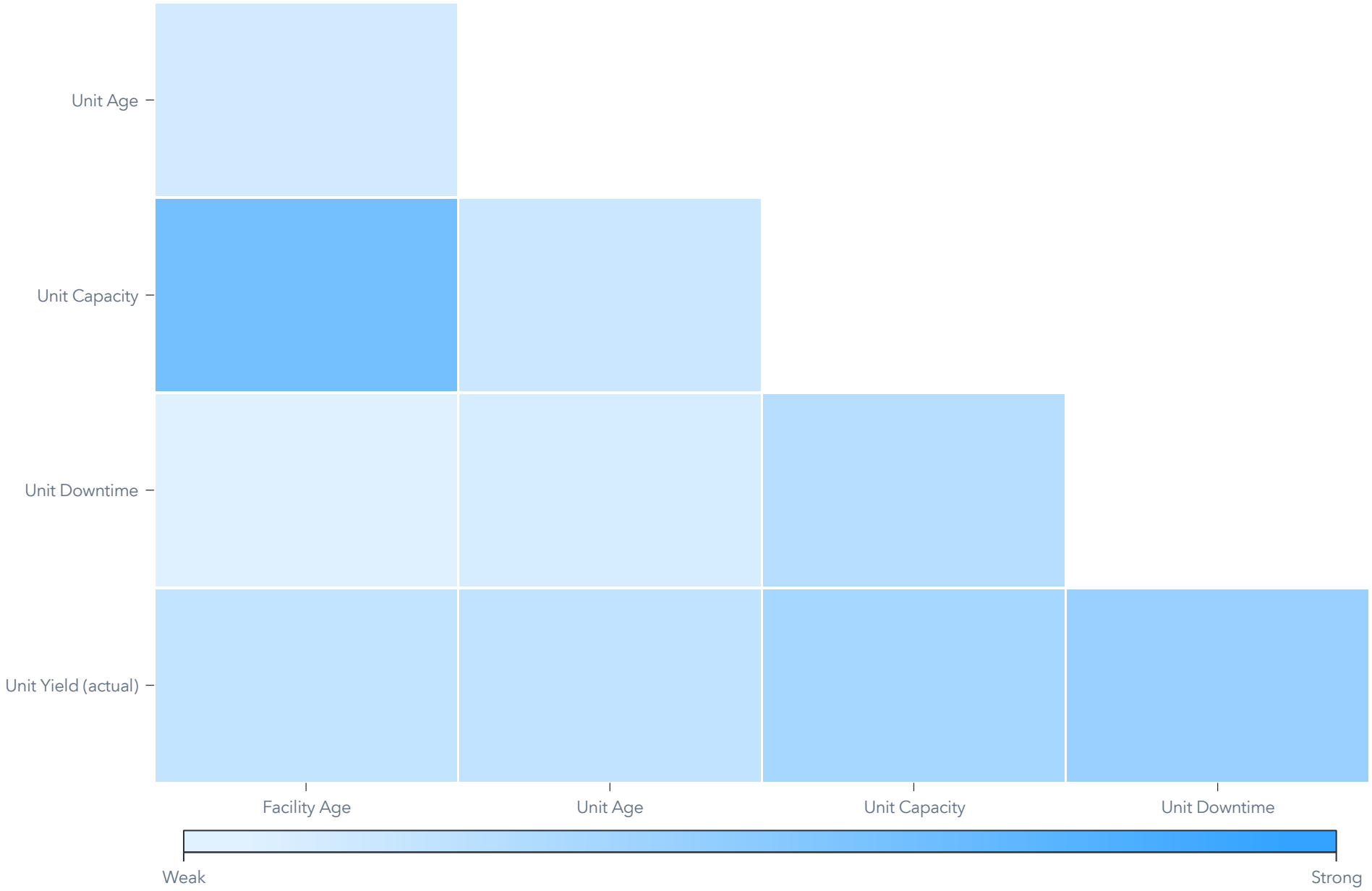
Frequency

A1.1

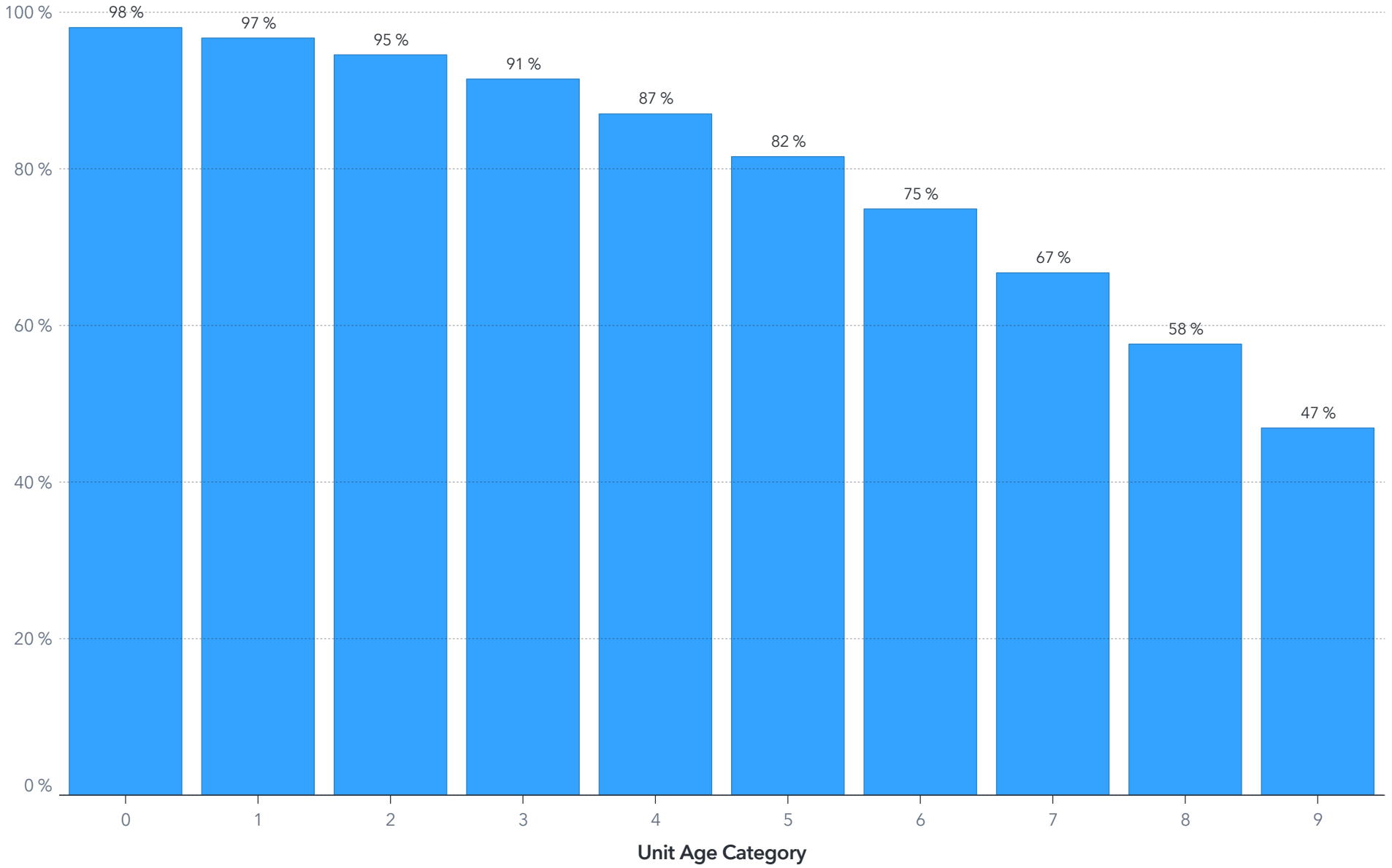
Unit Status ▲	Total		active		closed		failure	
Day of Week ▲	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**
Total	**2.229.087**	**100,00 %**	**2.165.929**	**97,17 %**	**26.983**	**1,21 %**	**17.027**	**0,76 %**
1	**26.290**	**1,18 %**	——	.	26.129	1,17 %	——	.
2	**479.712**	**21,52 %**	478.838	21,48 %	706	0,03 %	——	.
3	**428.622**	**19,23 %**	424.683	19,05 %	71	0,00 %	3.477	0,16 %
4	**418.729**	**18,78 %**	414.265	18,58 %	36	0,00 %	4.022	0,18 %
5	**419.392**	**18,81 %**	415.085	18,62 %	21	0,00 %	3.887	0,17 %
6	**392.819**	**17,62 %**	388.517	17,43 %	15	0,00 %	3.873	0,17 %
7	**63.523**	**2,85 %**	44.541	2,00 %	5	0,00 %	1.768	0,08 %

Correlation

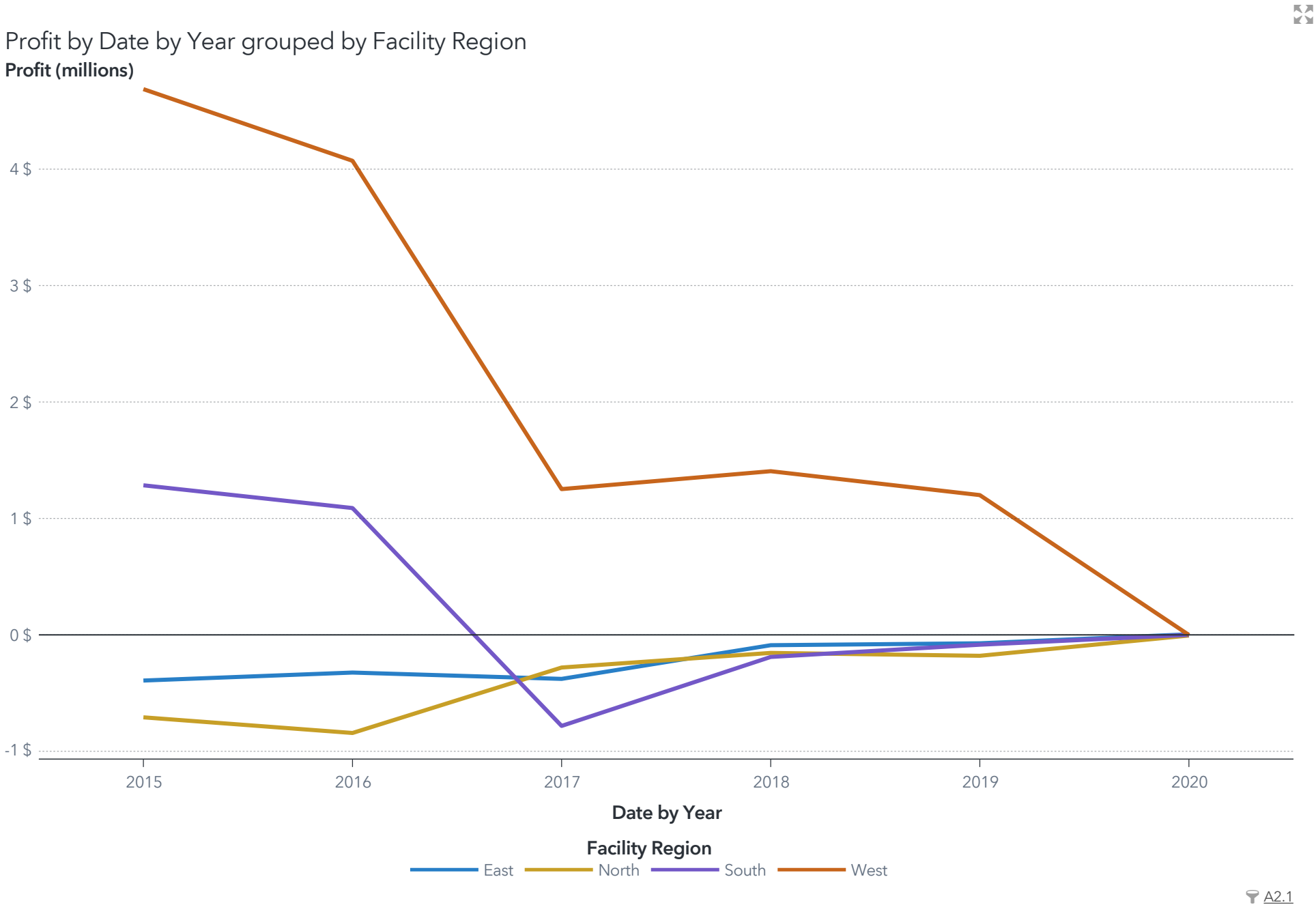
Correlation of Selected Measures



Bar chart Reab/Age



Line chart Profit/Date



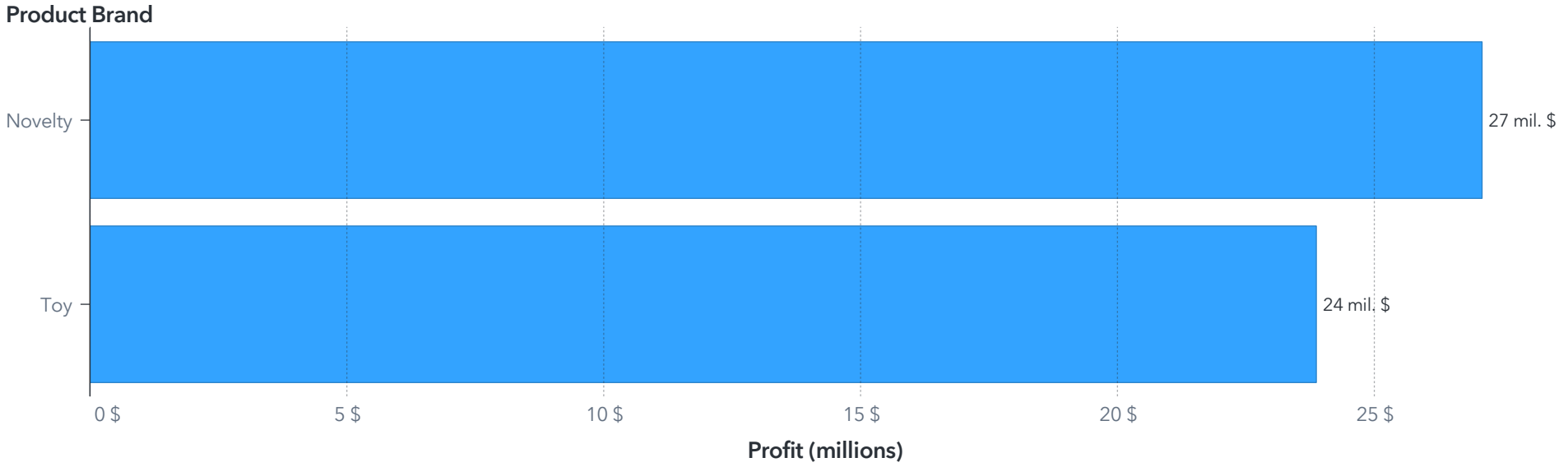
A2.1

Crosstab Profit/ Unit

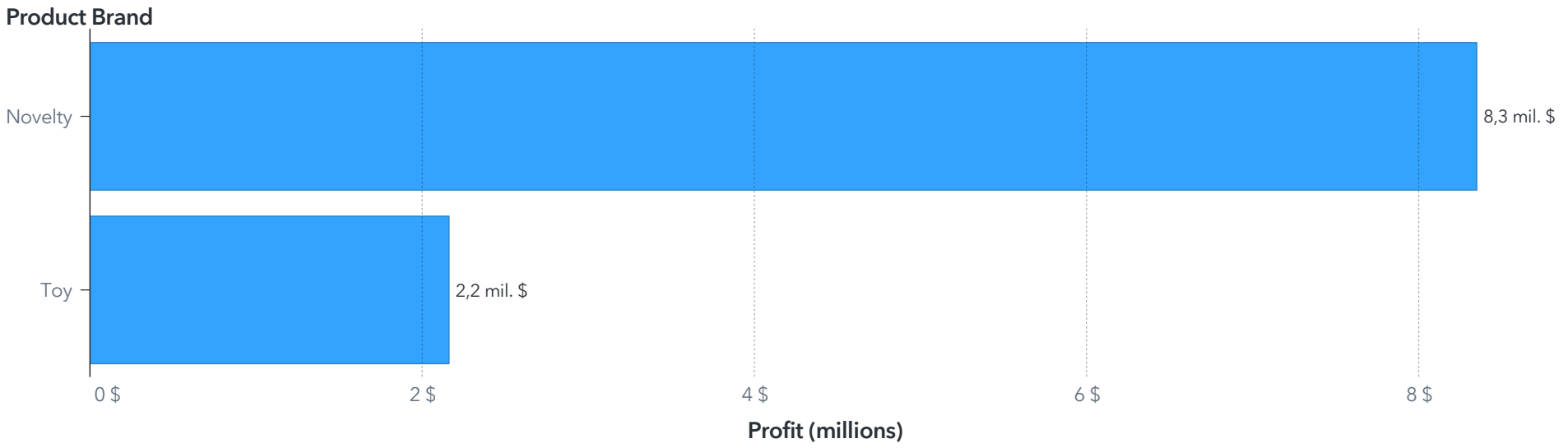
Date by Year ▲	Total		2008		2009		2010
Facility State ▲	**Unit Yield (rate-avg)**	**Profit ▲**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**
Total	**89,11 %**	**50.968.766 $**	**90,19 %**	**12.367.099 $**	**89,12 %**	**10.552.050 $**	**88,40 %**
AL	**88,07 %**	**-1.907.221 $**	86,41 %	-99.165 $	82,75 %	-156.906 $	77,35 %
LA	**89,26 %**	**-1.877.063 $**	78,46 %	-150.937 $	75,39 %	-174.970 $	97,32 %
PA	**89,46 %**	**-1.680.449 $**	93,96 %	-15.248 $	92,37 %	-34.962 $	90,70 %
NH	**88,40 %**	**-1.065.400 $**	—	—	—	—	—
NJ	**95,65 %**	**673.829 $**	—	—	—	—	—
OH	**89,61 %**	**1.745.698 $**	83,62 %	571.534 $	94,58 %	1.353.359 $	92,43 %
IL	**89,61 %**	**2.153.719 $**	95,26 %	2.193.274 $	93,52 %	1.667.699 $	90,31 %
NY	**93,00 %**	**3.262.094 $**	97,49 %	1.830.387 $	95,42 %	1.299.019 $	92,61 %
WA	**92,05 %**	**5.305.146 $**	93,47 %	707.916 $	90,97 %	532.131 $	88,41 %
AR	**88,73 %**	**6.937.930 $**	78,30 %	690.945 $	74,24 %	441.257 $	97,24 %
AZ	**89,43 %**	**7.057.147 $**	93,27 %	1.444.776 $	90,60 %	1.368.953 $	89,17 %
TX	**89,26 %**	**8.425.043 $**	92,95 %	2.552.663 $	91,01 %	2.304.088 $	86,97 %
CA	**88,12 %**	**21.938.294 $**	89,70 %	2.640.955 $	85,22 %	1.952.381 $	82,97 %

A3.1

Profit by Product Brand



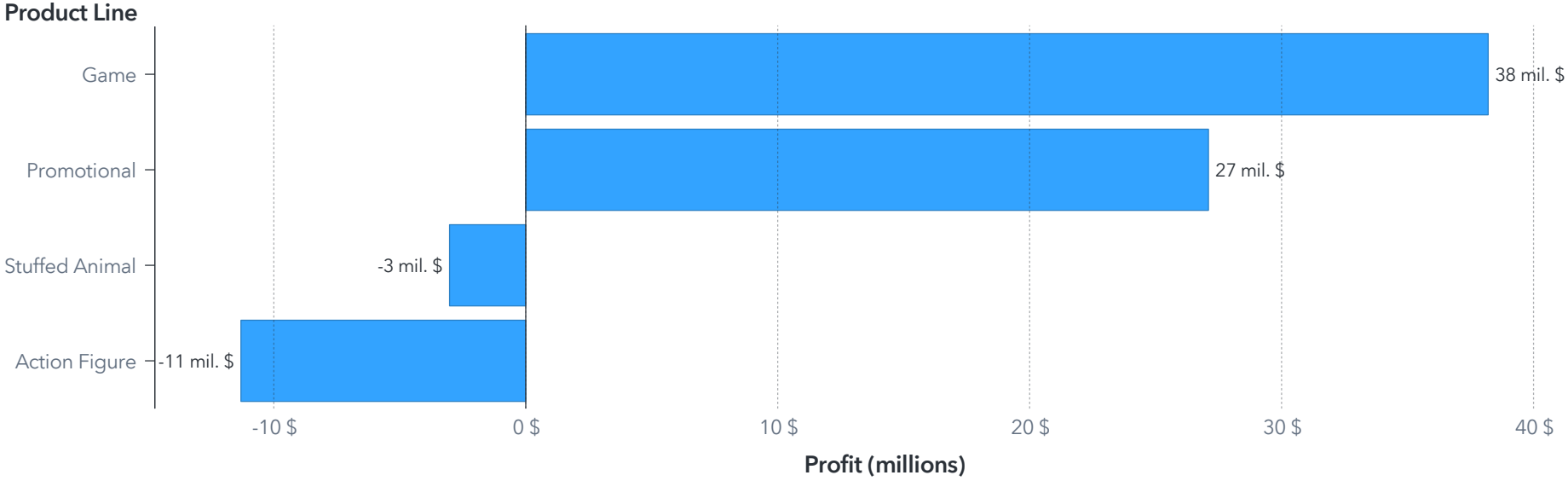
Profit by Product Brand for 2015-2019



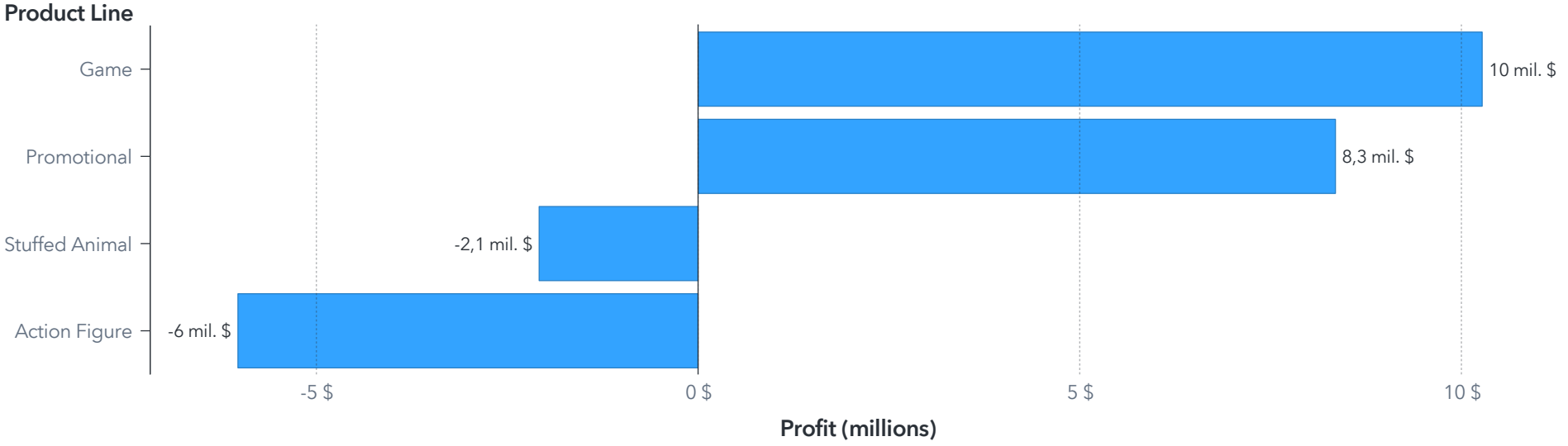
A4.1

Bar chart Profit/Prod Line

Profit by Product Line for All Years



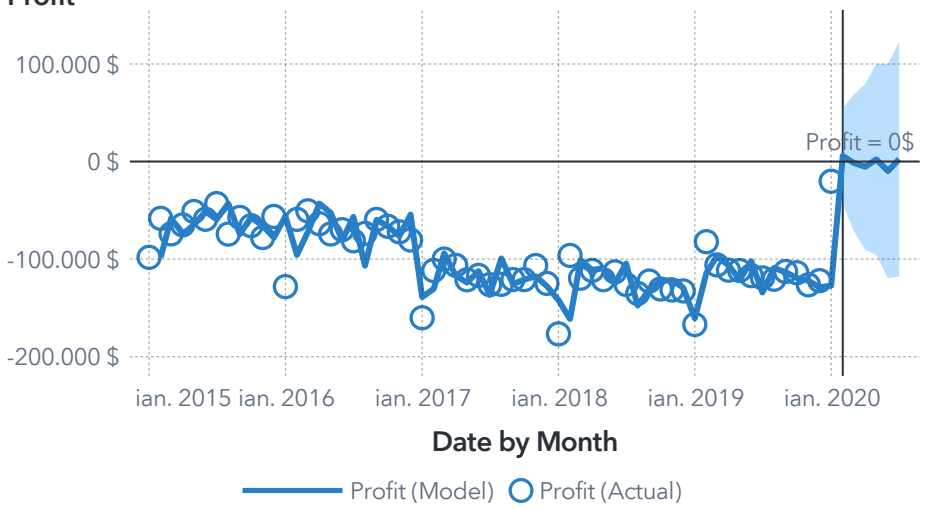
Profit by Product Line for 2015-2019



A5.1

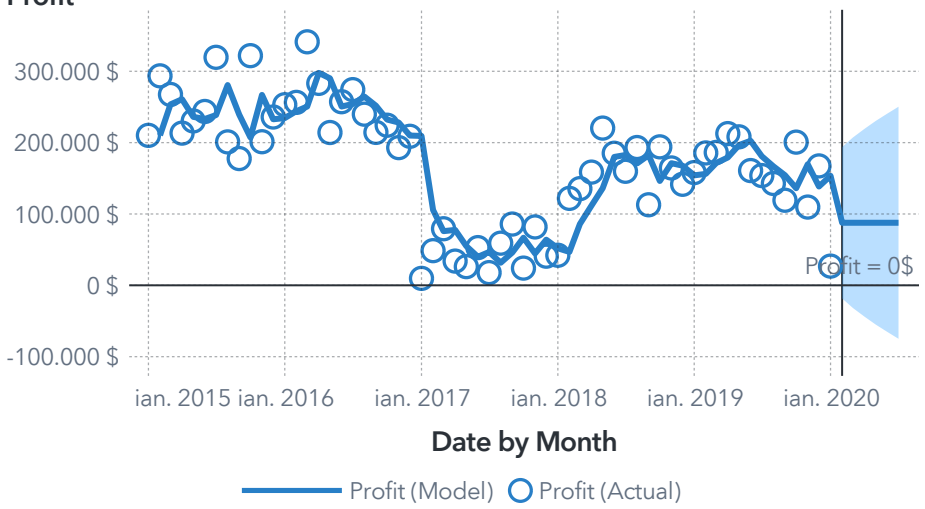
Profit Forecast

Action Figure Forecast



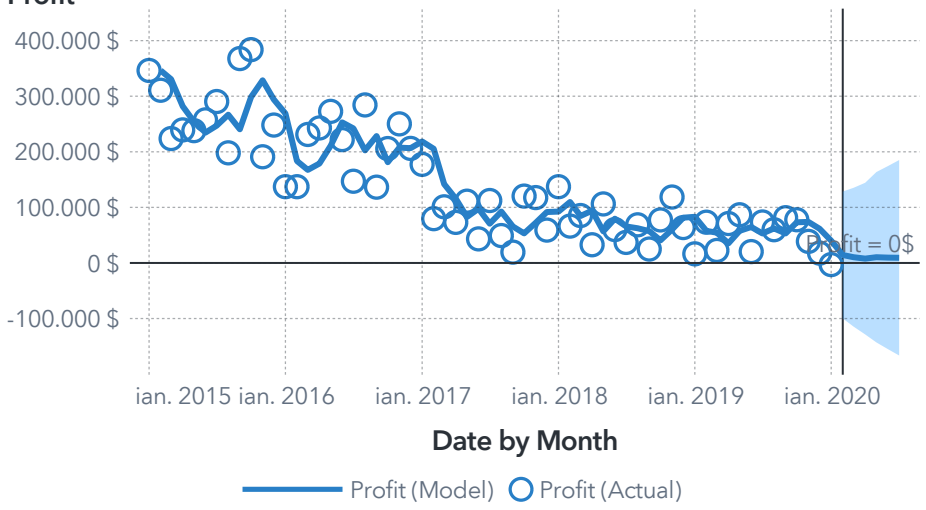
A6.1

Game Forecast



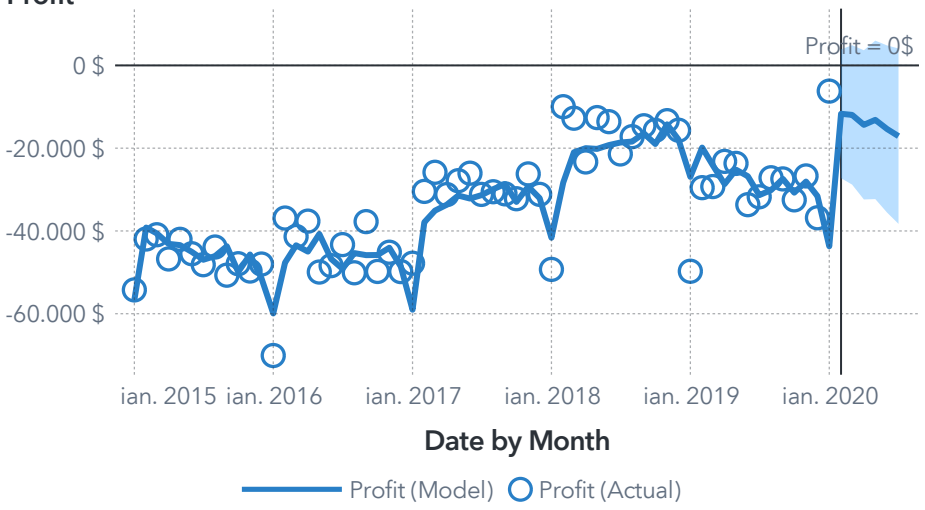
A6.2

Promotional Forecast



A6.3

Promotional Forecast



A6.4

Appendix

A1.1 Slider - Date 1

Warnings: The report object is incomplete.
The report object is not completely defined.

A2.1 Profit by Date by Year grouped by Facility Region

Filters: (2015 ≤ Date by Year ≤ 2020) OR Date by Year MISSING

A3.1 Crosstab - Date by Year 1

Filters: Date by Year IN { ALL }

A4.1 Profit by Product Brand for 2015-2019

Filters: (Date by Year IN { 2015; 2016; 2017; 2018; 2019 }) OR Date by Year MISSING

A5.1 Profit by Product Line for 2015-2019

Filters: (Date by Year IN { 2015; 2016; 2017; 2018; 2019 }) OR Date by Year MISSING

A6.1 Action Figure Forecast

Filters: (ian. 2015 ≤ Date by Month ≤ ian. 2020) OR Date by Month MISSING
(Product Line IN { 'Action Figure' }) OR Product Line MISSING

A6.2 Game Forecast

Filters: (ian. 2015 ≤ Date by Month ≤ ian. 2020) OR Date by Month MISSING
(Product Line IN { 'Game' }) OR Product Line MISSING

A6.3 Promotional Forecast

Filters: (ian. 2015 ≤ Date by Month ≤ ian. 2020) OR Date by Month MISSING
(Product Line IN { 'Promotional' }) OR Product Line MISSING

Filters:

(ian. 2015 ≤ Date by Month ≤ ian. 2020) OR Date by Month MISSING
(Product Line IN { 'Stuffed Animal' }) OR Product Line MISSING

Unit Status ▲	Total		active		closed		failure		upgrade
Day of Week ▲	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**	**Frequency**	**Frequency Percent**	**Frequency**
Total	**2.229.087**	**100,00 %**	**2.165.929**	**97,17 %**	**26.983**	**1,21 %**	**17.027**	**0,76 %**	**157**
1	**26.290**	**1,18 %**	——	.	26.129	1,17 %	——	.	——
2	**479.712**	**21,52 %**	478.838	21,48 %	706	0,03 %	——	.	7
3	**428.622**	**19,23 %**	424.683	19,05 %	71	0,00 %	3.477	0,16 %	15
4	**418.729**	**18,78 %**	414.265	18,58 %	36	0,00 %	4.022	0,18 %	17
5	**419.392**	**18,81 %**	415.085	18,62 %	21	0,00 %	3.887	0,17 %	32
6	**392.819**	**17,62 %**	388.517	17,43 %	15	0,00 %	3.873	0,17 %	38
7	**63.523**	**2,85 %**	44.541	2,00 %	5	0,00 %	1.768	0,08 %	48

Unit Status ▲	upgrade	upkeep	
Day of Week ▲	**Frequency Percent**	**Frequency**	**Frequency Percent**
Total	**0,01 %**	**18.991**	**0,85 %**
1	.	161	0,01 %
2	0,00 %	161	0,01 %
3	0,00 %	376	0,02 %
4	0,00 %	389	0,02 %
5	0,00 %	367	0,02 %
6	0,00 %	376	0,02 %
7	0,00 %	17.161	0,77 %

Correlation - Facility Age 1 Results

X Axis	Y Axis	Correlation
Facility Age	Unit Yield (actual)	0,1656
Facility Age	Unit Downtime	-0,0057
Facility Age	Unit Capacity	0,6194
Facility Age	Unit Age	0,0795
Unit Age	Unit Yield (actual)	-0,1787
Unit Age	Unit Downtime	0,0569
Unit Age	Unit Capacity	-0,1160
Unit Capacity	Unit Yield (actual)	0,3456
Unit Capacity	Unit Downtime	-0,2475
Unit Downtime	Unit Yield (actual)	-0,4132

Bar - Unit Age Category 1 Results

Unit Age Category	Unit Reliability (avg)
0	98,03 %
1	96,71 %
2	94,56 %
3	91,47 %
4	87,01 %
5	81,56 %
6	74,88 %
7	66,71 %
8	57,62 %
9	46,91 %

Line - Date by Year 1 Results

Date by Year ▲	Profit	Facility Region
2015	-392.351 $	East
2015	-708.298 $	North
2015	1.284.532 $	South
2015	4.687.245 $	West
2016	-323.843 $	East
2016	-842.721 $	North
2016	1.089.110 $	South
2016	4.071.750 $	West
2017	-378.203 $	East
2017	-280.658 $	North
2017	-782.061 $	South
2017	1.251.903 $	West
2018	-88.905 $	East
2018	-155.188 $	North
2018	-189.636 $	South
2018	1.405.699 $	West
2019	-72.404 $	East
2019	-179.838 $	North
2019	-84.589 $	South
2019	1.200.342 $	West
2020	4.777 $	East
2020	-5.782 $	North
2020	-302 $	South
2020	-1.038 $	West

Date by Year ▲	Total		2008		2009		2010	
Facility State ▲	**Unit Yield (rate-avg)**	**Profit ▲**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	
Total	**89,11 %**	**50.968.766 $**	**90,19 %**	**12.367.099 $**	**89,12 %**	**10.552.050 $**	**88,40 %**	
AL	**88,07 %**	**-1.907.221 $**	86,41 %	-99.165 $	82,75 %	-156.906 $	77,35 %	
LA	**89,26 %**	**-1.877.063 $**	78,46 %	-150.937 $	75,39 %	-174.970 $	97,32 %	
PA	**89,46 %**	**-1.680.449 $**	93,96 %	-15.248 $	92,37 %	-34.962 $	90,70 %	
NH	**88,40 %**	**-1.065.400 $**	—	—	—	—	—	–
NJ	**95,65 %**	**673.829 $**	—	—	—	—	—	–
OH	**89,61 %**	**1.745.698 $**	83,62 %	571.534 $	94,58 %	1.353.359 $	92,43 %	
IL	**89,61 %**	**2.153.719 $**	95,26 %	2.193.274 $	93,52 %	1.667.699 $	90,31 %	
NY	**93,00 %**	**3.262.094 $**	97,49 %	1.830.387 $	95,42 %	1.299.019 $	92,61 %	
WA	**92,05 %**	**5.305.146 $**	93,47 %	707.916 $	90,97 %	532.131 $	88,41 %	
AR	**88,73 %**	**6.937.930 $**	78,30 %	690.945 $	74,24 %	441.257 $	97,24 %	
AZ	**89,43 %**	**7.057.147 $**	93,27 %	1.444.776 $	90,60 %	1.368.953 $	89,17 %	
TX	**89,26 %**	**8.425.043 $**	92,95 %	2.552.663 $	91,01 %	2.304.088 $	86,97 %	
CA	**88,12 %**	**21.938.294 $**	89,70 %	2.640.955 $	85,22 %	1.952.381 $	82,97 %	

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Date by Year ▲	2010	2011		2012		2013		2014
Facility State ▲	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**
Total	**6.587.502 $**	**86,73 %**	**1.217.150 $**	**89,84 %**	**2.902.703 $**	**91,88 %**	**3.072.218 $**	**91,95 %**
AL	-318.221 $	89,38 %	-260.569 $	96,53 %	15.607 $	94,31 %	2.034 $	92,64 %
LA	-52.946 $	95,54 %	-101.433 $	93,19 %	-119.400 $	89,81 %	-137.940 $	87,38 %
PA	-138.136 $	86,69 %	-176.777 $	80,23 %	-197.418 $	75,50 %	-220.003 $	68,74 %
NH	—	—	—	97,42 %	-106.922 $	94,99 %	-101.143 $	92,90 %
NJ	—	—	—	—	—	—	—	—
OH	775.391 $	89,23 %	67.598 $	85,43 %	-102.963 $	79,58 %	-284.947 $	91,65 %
IL	904.519 $	87,00 %	25.488 $	82,87 %	-163.347 $	78,91 %	-416.413 $	72,12 %
NY	687.081 $	88,33 %	182.165 $	81,57 %	23.227 $	75,52 %	-104.051 $	66,19 %
WA	320.579 $	83,94 %	59.457 $	97,22 %	314.877 $	96,35 %	366.957 $	93,93 %
AR	1.365.577 $	95,62 %	650.555 $	93,13 %	730.102 $	90,71 %	631.990 $	87,42 %
AZ	899.251 $	83,91 %	265.870 $	79,04 %	138.931 $	72,75 %	-5.343 $	96,98 %
TX	1.269.765 $	82,74 %	170.838 $	78,70 %	-40.332 $	94,05 %	407.989 $	92,99 %
CA	874.643 $	77,59 %	333.958 $	90,53 %	2.410.341 $	96,38 %	2.933.088 $	94,29 %

A3.1

Date by Year ▲	2014	2015		2016		2017		2018
Facility State ▲	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**
Total	**3.760.501 $**	**90,77 %**	**4.871.128 $**	**87,94 %**	**3.994.296 $**	**85,76 %**	**-189.019 $**	**87,18 %**
AL	749 $	90,10 %	-13.376 $	85,83 %	-121.159 $	81,39 %	-355.969 $	77,93 %
LA	-138.416 $	85,06 %	-173.092 $	80,95 %	-202.345 $	73,74 %	-260.897 $	96,98 %
PA	-228.900 $	93,79 %	-138.265 $	90,84 %	-137.135 $	85,35 %	-138.531 $	78,18 %
NH	-85.333 $	90,39 %	-91.194 $	88,39 %	-75.410 $	82,25 %	-177.877 $	79,05 %
NJ	——	——	——	——	——	——	——	96,80 %
OH	14.571 $	90,68 %	-62.199 $	89,16 %	-60.202 $	92,01 %	-143.691 $	89,58 %
IL	-533.861 $	65,03 %	-646.098 $	59,36 %	-782.518 $	96,05 %	-136.967 $	94,77 %
NY	-171.982 $	96,15 %	-162.891 $	100,00 %	-111.298 $	100,00 %	-61.795 $	.
WA	521.890 $	90,89 %	575.603 $	87,46 %	616.585 $	85,12 %	95.011 $	97,37 %
AR	426.747 $	84,66 %	498.075 $	80,93 %	404.480 $	73,92 %	-105.075 $	97,30 %
AZ	675.917 $	95,32 %	827.669 $	93,13 %	941.662 $	90,41 %	237.003 $	86,44 %
TX	351.962 $	94,20 %	972.926 $	91,40 %	1.008.134 $	88,46 %	-60.121 $	84,61 %
CA	2.927.158 $	92,66 %	3.283.972 $	89,76 %	2.513.503 $	85,90 %	919.888 $	82,29 %

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Date by Year ▲	2018	2019		2020	
Facility State ▲	**Profit**	**Unit Yield (rate-avg)**	**Profit**	**Unit Yield (rate-avg)**	**Profit**
Total	**971.970 $**	**87,79 %**	**863.511 $**	**89,17 %**	**-2.345 $**
AL	-388.048 $	90,26 %	-207.174 $	91,59 %	-5.026 $
LA	-136.894 $	95,39 %	-226.317 $	97,16 %	-1.475 $
PA	-143.095 $	98,73 %	-109.530 $	100,00 %	-2.449 $
NH	-197.764 $	75,06 %	-226.941 $	64,28 %	-2.815 $
NJ	320.552 $	94,62 %	341.289 $	93,27 %	11.988 $
OH	-147.075 $	87,17 %	-233.361 $	85,97 %	-2.315 $
IL	-8.112 $	92,50 %	53.523 $	88,53 %	-3.467 $
NY	-68.598 $	.	-77.222 $	.	-1.948 $
WA	540.804 $	95,70 %	647.148 $	95,10 %	6.187 $
AR	521.167 $	94,84 %	667.099 $	89,58 %	15.010 $
AZ	153.435 $	81,83 %	110.892 $	78,97 %	-1.869 $
TX	-185.862 $	78,91 %	-318.198 $	87,48 %	-8.810 $
CA	711.460 $	75,94 %	442.302 $	83,01 %	-5.356 $

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Bar - Product Brand 1 Results

Product Brand	Profit
Novelty	27.097.544 $
Toy	23.871.222 $

Bar - Product Brand 2 Results

Product Brand	Profit
Novelty	8.349.772 $
Toy	2.162.115 $

Bar - Product Line 1 Results

Product Line	Profit
Game	38.199.643 $
Promotional	27.097.544 $
Stuffed Animal	-3.024.132 $
Action Figure	-11.304.288 $

Bar - Product Line 2 Results

Product Line	Profit
Game	10.271.953 $
Promotional	8.349.772 $
Stuffed Animal	-2.082.213 $
Action Figure	-6.027.626 $

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2015	.	-98.175 $	.	.
feb. 2015	-98.175 $	-58.204 $	.	.
mar. 2015	-58.204 $	-74.132 $	.	.
apr. 2015	-74.132 $	-64.950 $	.	.
mai 2015	-64.950 $	-51.195 $	.	.
iun. 2015	-51.195 $	-59.183 $	.	.
iul. 2015	-59.183 $	-43.092 $	.	.
aug. 2015	-43.092 $	-74.370 $	.	.
sept. 2015	-74.370 $	-57.255 $	.	.
oct. 2015	-57.255 $	-65.727 $	.	.
nov. 2015	-65.727 $	-77.926 $	.	.
dec. 2015	-77.926 $	-56.237 $	.	.
ian. 2016	-56.237 $	-128.196 $	.	.
feb. 2016	-95.702 $	-59.267 $	.	.
mar. 2016	-72.215 $	-50.500 $	.	.
apr. 2016	-43.036 $	-63.674 $	.	.
mai 2016	-52.491 $	-74.261 $	.	.
iun. 2016	-80.755 $	-69.836 $	.	.
iul. 2016	-56.754 $	-81.260 $	.	.
aug. 2016	-106.687 $	-73.603 $	.	.
sept. 2016	-59.689 $	-59.325 $	.	.
oct. 2016	-66.213 $	-66.338 $	.	.
nov. 2016	-76.255 $	-72.061 $	.	.
dec. 2016	-54.429 $	-80.450 $	.	.
ian. 2017	-138.947 $	-160.097 $	.	.
feb. 2017	-130.477 $	-111.703 $	.	.
mar. 2017	-94.050 $	-99.965 $	.	.
apr. 2017	-116.742 $	-106.356 $	.	.
mai 2017	-124.053 $	-121.186 $	.	.
iun. 2017	-112.309 $	-116.702 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
iul. 2017	-136.623 $	-126.178 $	.	.
aug. 2017	-99.283 $	-125.873 $	.	.
sept. 2017	-125.577 $	-120.965 $	.	.
oct. 2017	-121.067 $	-121.086 $	.	.
nov. 2017	-117.676 $	-106.588 $	.	.
dec. 2017	-127.741 $	-124.911 $	.	.
ian. 2018	-142.104 $	-176.643 $	.	.
feb. 2018	-161.380 $	-96.232 $	.	.
mar. 2018	-101.041 $	-119.593 $	.	.
apr. 2018	-111.150 $	-111.573 $	.	.
mai 2018	-109.242 $	-121.137 $	.	.
iun. 2018	-124.708 $	-113.109 $	.	.
iul. 2018	-104.618 $	-125.933 $	.	.
aug. 2018	-147.549 $	-135.177 $	.	.
sept. 2018	-131.427 $	-122.508 $	.	.
oct. 2018	-122.523 $	-130.612 $	.	.
nov. 2018	-121.598 $	-131.694 $	.	.
dec. 2018	-129.393 $	-132.649 $	.	.
ian. 2019	-160.727 $	-167.012 $	.	.
feb. 2019	-114.051 $	-82.143 $	.	.
mar. 2019	-97.225 $	-105.951 $	.	.
apr. 2019	-106.295 $	-111.326 $	.	.
mai 2019	-120.996 $	-111.671 $	.	.
iun. 2019	-102.242 $	-116.945 $	.	.
iul. 2019	-134.273 $	-119.208 $	.	.
aug. 2019	-109.150 $	-120.635 $	.	.
sept. 2019	-113.384 $	-112.693 $	.	.
oct. 2019	-119.269 $	-113.938 $	.	.
nov. 2019	-122.145 $	-126.350 $	.	.
dec. 2019	-128.997 $	-122.070 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2020	-127.180 $	-20.165 $	.	.
feb. 2020	5.774 $	.	-43.325 $	54.873 $
mar. 2020	-1.320 $	.	-70.756 $	68.116 $
apr. 2020	-5.410 $	.	-90.451 $	79.631 $
mai 2020	2.170 $	.	-96.027 $	100.368 $
iun. 2020	-9.783 $	.	-119.570 $	100.005 $
iul. 2020	2.464 $	.	-117.802 $	122.730 $

Action Figure Forecast Dependent Variables Results

Dependent Variable	Algorithm
Profit	ARIMA: Profit ~ D = (1) Q = (12) NOINT

Forecast Summary

Forecasting uses statistical trends in your data to predict future values. It automatically tests multiple forecasting models against the specified data items and then selects the best model for each one. Some forecasting models include delayed effects, in which case the predicted values will not begin at the start of the Date by Month axis.

Forecast: Profit
- By iul. 2020 (6 time periods), Profit is forecast to be 2,5 K $ with a 95 % confidence interval between -118 K $ and 123 K $. The forecast represents an approximate increase of 23 K $ (112,22 %) from the ian. 2020 value of -20 K $.
- The selected model is ARIMA: Profit ~ D = (1) Q = (12) NOINT.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2015	.	210.189 $	.	.
feb. 2015	210.189 $	293.610 $	.	.
mar. 2015	253.567 $	267.526 $	.	.
apr. 2015	260.826 $	213.321 $	.	.
mai 2015	236.124 $	230.403 $	.	.
iun. 2015	233.149 $	243.675 $	.	.
iul. 2015	238.623 $	319.579 $	.	.
aug. 2015	280.719 $	201.031 $	.	.
sept. 2015	239.282 $	177.681 $	.	.
oct. 2015	207.250 $	321.928 $	.	.
nov. 2015	266.881 $	201.274 $	.	.
dec. 2015	232.766 $	235.930 $	.	.
ian. 2016	234.411 $	253.133 $	.	.
feb. 2016	244.146 $	256.424 $	.	.
mar. 2016	250.530 $	341.330 $	.	.
apr. 2016	297.745 $	283.042 $	.	.
mai 2016	290.100 $	214.194 $	.	.
iun. 2016	250.630 $	257.340 $	.	.
iul. 2016	254.119 $	274.288 $	.	.
aug. 2016	264.607 $	239.871 $	.	.
sept. 2016	251.744 $	214.361 $	.	.
oct. 2016	232.305 $	224.389 $	.	.
nov. 2016	228.189 $	193.021 $	.	.
dec. 2016	209.902 $	208.904 $	.	.
ian. 2017	209.383 $	9.754 $	.	.
feb. 2017	105.578 $	48.585 $	.	.
mar. 2017	75.943 $	79.290 $	.	.
apr. 2017	77.683 $	33.991 $	.	.
mai 2017	54.964 $	26.197 $	.	.
iun. 2017	40.006 $	52.897 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
iul. 2017	46.709 $	17.827 $	.	.
aug. 2017	31.691 $	59.103 $	.	.
sept. 2017	45.945 $	85.904 $	.	.
oct. 2017	66.723 $	24.156 $	.	.
nov. 2017	44.588 $	81.851 $	.	.
dec. 2017	63.964 $	40.834 $	.	.
ian. 2018	51.937 $	42.143 $	.	.
feb. 2018	46.844 $	121.866 $	.	.
mar. 2018	85.855 $	135.508 $	.	.
apr. 2018	111.674 $	158.677 $	.	.
mai 2018	136.115 $	220.406 $	.	.
iun. 2018	179.945 $	185.104 $	.	.
iul. 2018	182.628 $	159.851 $	.	.
aug. 2018	170.784 $	193.167 $	.	.
sept. 2018	182.423 $	112.921 $	.	.
oct. 2018	146.283 $	194.100 $	.	.
nov. 2018	171.147 $	164.537 $	.	.
dec. 2018	167.710 $	141.631 $	.	.
ian. 2019	154.149 $	158.025 $	.	.
feb. 2019	156.165 $	185.582 $	.	.
mar. 2019	171.461 $	186.288 $	.	.
apr. 2019	179.171 $	212.651 $	.	.
mai 2019	196.580 $	208.150 $	.	.
iun. 2019	202.596 $	160.853 $	.	.
iul. 2019	180.891 $	153.857 $	.	.
aug. 2019	166.833 $	142.775 $	.	.
sept. 2019	154.323 $	119.247 $	.	.
oct. 2019	136.084 $	200.720 $	.	.
nov. 2019	169.694 $	109.713 $	.	.
dec. 2019	138.505 $	167.349 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2020	153.503 $	26.961 $	.	.
feb. 2020	87.703 $	.	-18.362 $	193.769 $
mar. 2020	87.703 $	.	-31.845 $	207.251 $
apr. 2020	87.703 $	.	-43.954 $	219.360 $
mai 2020	87.703 $	.	-55.039 $	230.445 $
iun. 2020	87.703 $	.	-65.324 $	240.730 $
iul. 2020	87.703 $	.	-74.959 $	250.365 $

Game Forecast Dependent Variables Results

Dependent Variable	Algorithm
Profit	ARIMA: Profit ~ D = (1) Q = 1 NOINT

Forecast Summary

Forecasting uses statistical trends in your data to predict future values. It automatically tests multiple forecasting models against the specified data items and then selects the best model for each one. Some forecasting models include delayed effects, in which case the predicted values will not begin at the start of the Date by Month axis.

Forecast: Profit
- By iul. 2020 (6 time periods), Profit is forecast to be 88 K $ with a 95 % confidence interval between -75 K $ and 250 K $. The forecast represents an approximate increase of 61 K $ (225,29 %) from the ian. 2020 value of 27 K $.
- The selected model is ARIMA: Profit ~ D = (1) Q = 1 NOINT.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2015	.	346.334 $	.	.
feb. 2015	346.334 $	310.749 $	.	.
mar. 2015	330.564 $	223.862 $	.	.
apr. 2015	281.940 $	239.415 $	.	.
mai 2015	254.434 $	238.071 $	.	.
iun. 2015	234.581 $	257.447 $	.	.
iul. 2015	247.025 $	290.423 $	.	.
aug. 2015	266.781 $	198.146 $	.	.
sept. 2015	240.541 $	367.726 $	.	.
oct. 2015	298.449 $	383.790 $	.	.
nov. 2015	328.632 $	191.078 $	.	.
dec. 2015	294.005 $	248.108 $	.	.
ian. 2016	268.871 $	137.233 $	.	.
feb. 2016	183.428 $	137.204 $	.	.
mar. 2016	167.436 $	231.166 $	.	.
apr. 2016	178.855 $	242.883 $	.	.
mai 2016	210.752 $	272.715 $	.	.
iun. 2016	252.911 $	221.911 $	.	.
iul. 2016	242.070 $	147.030 $	.	.
aug. 2016	202.570 $	284.310 $	.	.
sept. 2016	228.277 $	136.377 $	.	.
oct. 2016	181.337 $	205.786 $	.	.
nov. 2016	207.453 $	250.214 $	.	.
dec. 2016	206.561 $	206.104 $	.	.
ian. 2017	218.558 $	177.398 $	.	.
feb. 2017	205.403 $	79.654 $	.	.
mar. 2017	141.903 $	101.032 $	.	.
apr. 2017	115.766 $	73.006 $	.	.
mai 2017	82.785 $	111.141 $	.	.
iun. 2017	97.544 $	43.300 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
iul. 2017	70.682 $	112.351 $	.	.
aug. 2017	92.390 $	49.290 $	.	.
sept. 2017	65.586 $	19.486 $	.	.
oct. 2017	53.267 $	120.294 $	.	.
nov. 2017	72.284 $	117.624 $	.	.
dec. 2017	91.638 $	59.121 $	.	.
ian. 2018	92.424 $	137.218 $	.	.
feb. 2018	109.676 $	66.336 $	.	.
mar. 2018	84.521 $	85.329 $	.	.
apr. 2018	94.070 $	32.753 $	.	.
mai 2018	56.852 $	106.223 $	.	.
iun. 2018	79.642 $	60.085 $	.	.
iul. 2018	65.753 $	36.965 $	.	.
aug. 2018	62.412 $	68.640 $	.	.
sept. 2018	57.304 $	25.051 $	.	.
oct. 2018	40.690 $	77.442 $	.	.
nov. 2018	60.149 $	118.611 $	.	.
dec. 2018	81.410 $	63.696 $	.	.
ian. 2019	83.054 $	16.388 $	.	.
feb. 2019	57.695 $	73.322 $	.	.
mar. 2019	54.513 $	22.537 $	.	.
apr. 2019	35.299 $	70.941 $	.	.
mai 2019	57.829 $	86.707 $	.	.
iun. 2019	64.737 $	20.489 $	.	.
iul. 2019	53.064 $	73.723 $	.	.
aug. 2019	62.127 $	59.826 $	.	.
sept. 2019	53.056 $	81.440 $	.	.
oct. 2019	73.192 $	77.736 $	.	.
nov. 2019	73.908 $	38.837 $	.	.
dec. 2019	61.506 $	17.699 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2020	40.070 $	-2.935 $	.	.
feb. 2020	14.315 $	.	-99.885 $	128.514 $
mar. 2020	10.333 $	.	-114.579 $	135.245 $
apr. 2020	7.849 $	.	-128.594 $	144.292 $
mai 2020	10.317 $	.	-142.961 $	163.596 $
iun. 2020	9.620 $	.	-155.112 $	174.352 $
iul. 2020	9.336 $	.	-166.523 $	185.195 $

Promotional Forecast Dependent Variables Results

Dependent Variable	Algorithm
Profit	ARIMA: Profit ~ P = 2 D = (1) NOINT

Forecast Summary

Forecasting uses statistical trends in your data to predict future values. It automatically tests multiple forecasting models against the specified data items and then selects the best model for each one. Some forecasting models include delayed effects, in which case the predicted values will not begin at the start of the Date by Month axis.

Forecast: Profit
- By iul. 2020 (6 time periods), Profit is forecast to be 9,3 K $ with a 95 % confidence interval between -167 K $ and 185 K $. The forecast represents an approximate increase of 12 K $ (418,14 %) from the ian. 2020 value of -2,9 K $.
- The selected model is ARIMA: Profit ~ P = 2 D = (1) NOINT.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2015	-56.669 $	-54.244 $	.	.
feb. 2015	-39.178 $	-41.943 $	.	.
mar. 2015	-40.587 $	-40.912 $	.	.
apr. 2015	-43.124 $	-46.771 $	.	.
mai 2015	-43.425 $	-42.020 $	.	.
iun. 2015	-45.058 $	-45.500 $	.	.
iul. 2015	-46.964 $	-48.164 $	.	.
aug. 2015	-46.081 $	-43.885 $	.	.
sept. 2015	-43.694 $	-50.690 $	.	.
oct. 2015	-49.913 $	-47.920 $	.	.
nov. 2015	-45.692 $	-49.683 $	.	.
dec. 2015	-51.420 $	-47.993 $	.	.
ian. 2016	-59.941 $	-70.102 $	.	.
feb. 2016	-47.657 $	-36.883 $	.	.
mar. 2016	-43.467 $	-41.340 $	.	.
apr. 2016	-44.993 $	-37.628 $	.	.
mai 2016	-40.739 $	-49.930 $	.	.
iun. 2016	-46.753 $	-48.379 $	.	.
iul. 2016	-49.149 $	-43.301 $	.	.
aug. 2016	-45.351 $	-50.108 $	.	.
sept. 2016	-45.844 $	-37.743 $	.	.
oct. 2016	-45.816 $	-49.787 $	.	.
nov. 2016	-44.064 $	-45.139 $	.	.
dec. 2016	-48.582 $	-49.821 $	.	.
ian. 2017	-59.040 $	-47.797 $	.	.
feb. 2017	-37.896 $	-30.445 $	.	.
mar. 2017	-35.085 $	-25.826 $	.	.
apr. 2017	-33.659 $	-31.211 $	.	.
mai 2017	-31.447 $	-27.855 $	.	.
iun. 2017	-32.173 $	-26.039 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
iul. 2017	-31.357 $	-31.168 $	.	.
aug. 2017	-29.905 $	-30.527 $	.	.
sept. 2017	-28.681 $	-31.038 $	.	.
oct. 2017	-32.983 $	-32.215 $	.	.
nov. 2017	-29.271 $	-26.216 $	.	.
dec. 2017	-32.082 $	-31.158 $	.	.
ian. 2018	-41.638 $	-49.290 $	.	.
feb. 2018	-28.307 $	-9.973 $	.	.
mar. 2018	-20.996 $	-12.759 $	.	.
apr. 2018	-19.997 $	-23.327 $	.	.
mai 2018	-20.173 $	-12.609 $	.	.
iun. 2018	-19.255 $	-13.590 $	.	.
iul. 2018	-18.636 $	-21.394 $	.	.
aug. 2018	-18.402 $	-17.213 $	.	.
sept. 2018	-16.430 $	-14.576 $	.	.
oct. 2018	-18.990 $	-15.691 $	.	.
nov. 2018	-14.230 $	-13.349 $	.	.
dec. 2018	-17.941 $	-15.662 $	.	.
ian. 2019	-26.942 $	-49.734 $	.	.
feb. 2019	-19.854 $	-29.542 $	.	.
mar. 2019	-24.132 $	-29.276 $	.	.
apr. 2019	-28.671 $	-23.189 $	.	.
mai 2019	-25.198 $	-23.679 $	.	.
iun. 2019	-26.780 $	-33.651 $	.	.
iul. 2019	-31.348 $	-31.748 $	.	.
aug. 2019	-30.137 $	-27.146 $	.	.
sept. 2019	-27.420 $	-27.428 $	.	.
oct. 2019	-30.749 $	-32.484 $	.	.
nov. 2019	-28.071 $	-26.706 $	.	.
dec. 2019	-31.581 $	-36.817 $	.	.

Date by Month	Profit (Model)	Profit (Actual)	Lower Confidence Interval	Upper Confidence Interval
ian. 2020	-43.704 $	-6.206 $	.	.
feb. 2020	-11.685 $	.	-27.253 $	3.882 $
mar. 2020	-11.957 $	.	-28.801 $	4.888 $
apr. 2020	-14.363 $	.	-32.395 $	3.669 $
mai 2020	-13.158 $	.	-32.304 $	5.988 $
iun. 2020	-15.373 $	.	-35.571 $	4.825 $
iul. 2020	-17.097 $	.	-38.296 $	4.102 $

Stuffed Animal Forecast Dependent Variables Results

Dependent Variable	Algorithm
Profit	Seasonal Exponential Smoothing

Forecast Summary

Forecasting uses statistical trends in your data to predict future values. It automatically tests multiple forecasting models against the specified data items and then selects the best model for each one.

Forecast: Profit
- By iul. 2020 (6 time periods), Profit is forecast to be -17 K $ with a 95 % confidence interval between -38 K $ and 4,1 K $. The forecast represents an approximate decrease of 11 K $ (175,48 %) from the ian. 2020 value of -6,2 K $.
- The selected model is Seasonal Exponential Smoothing.