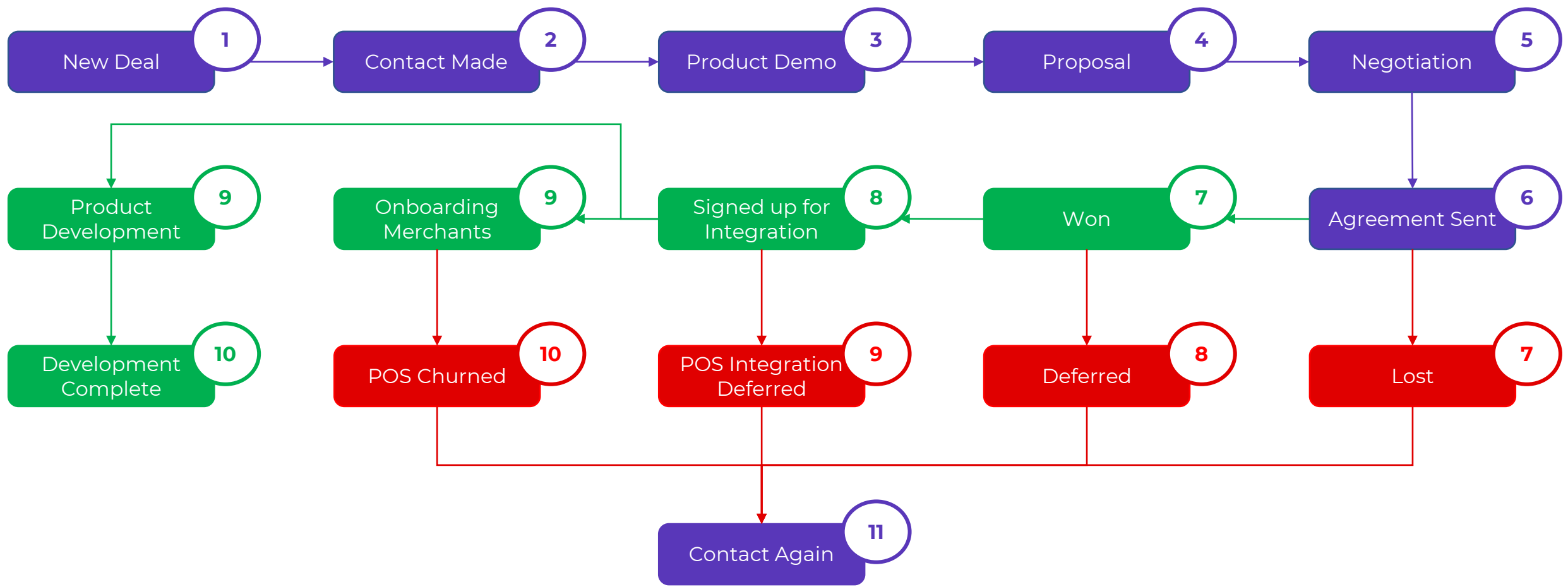


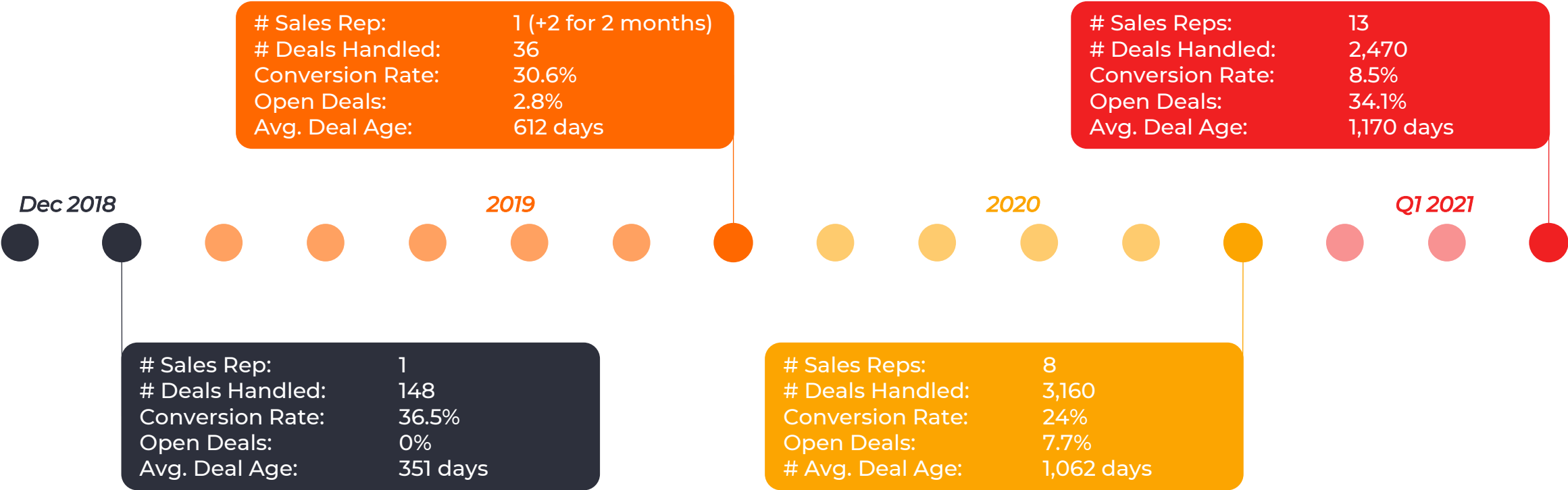
# Sales CRM Analysis

- ❖ Sales Cycle
- ❖ Data Exploration: Summary Statistics
- ❖ Q1: Which cities to focus on?
- ❖ Q2: Monthly Volume Recommendation
- ❖ Q3: # Sales Reps Required to acquire 10,000 Outlets

# Sales Cycle at UrbanPiper



# 17.8% Conversion Rate over ~5k deals since Dec 2018



**Which cities should we be focusing more on and why?**

# Top 10 focus cities out of 60 based on Potential Outlets (YTD 2021) that could be acquired assuming performance remains consistent from last year

$$\text{YTD 2021 Potential Outlets that could be acquired} = \text{Volume of Open Deals} \times \text{Outlets per Deals Handled in 2020*} \times \text{Past Conversion Rate}$$

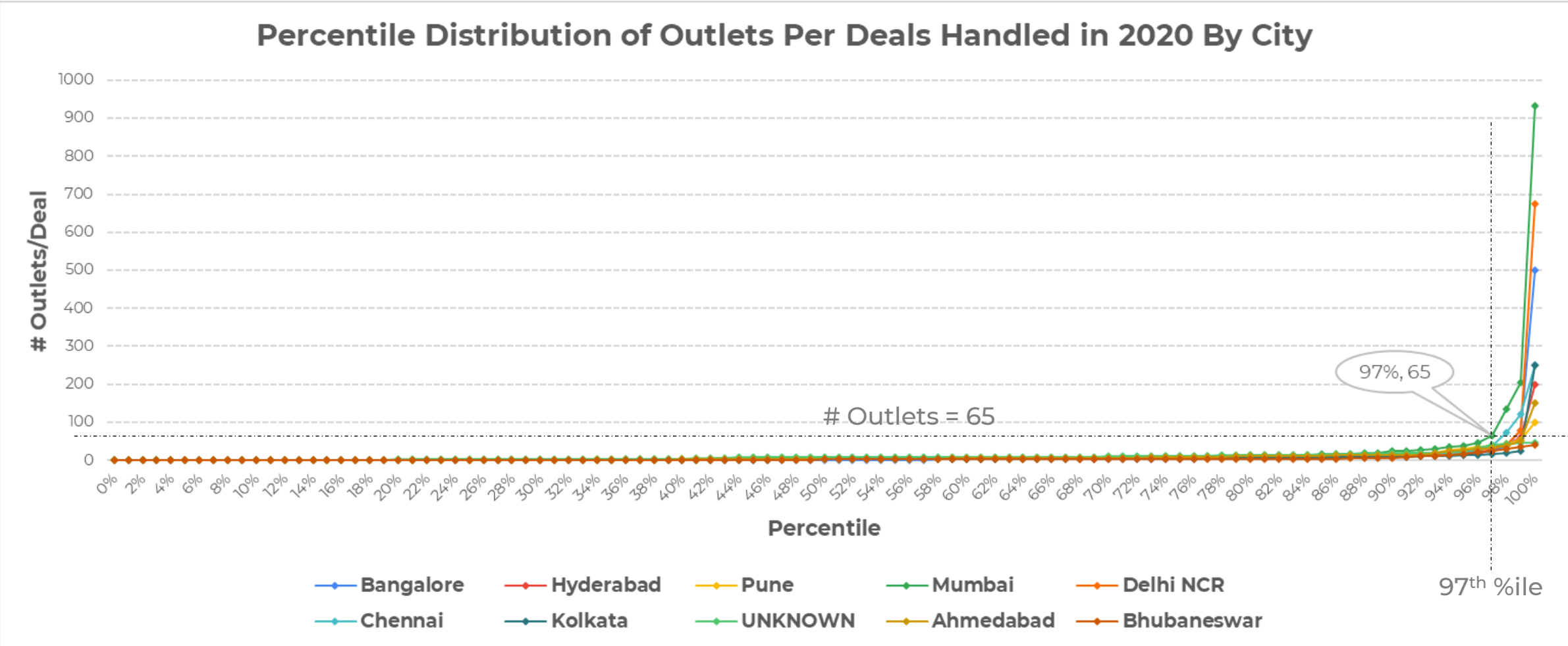
City	Potential Outlets (YTD 2021)	# Open Deals (2021)	Outlets per Deal (2020)	% Deals Won (2020)
Delhi NCR	1337	134	34	29%
Mumbai	1312	85	65	24%
Bangalore	930	153	25	24%
Chennai	821	92	39	23%
Kolkata	587	68	17	52%
Hyderabad	471	65	31	24%
Pune	370	37	39	26%
UNKNOWN	151	80	40	5%
Ahmedabad	114	24	33	14%
Bhubaneswar	99	9	26	43%

Priority

High  
Medium  
Low

\*Outlets per Deal handled in 2020: 97<sup>th</sup> percentile is chosen as the cut-off for each city (refer next slide)

97<sup>th</sup> percentile provides a balanced assumption on outlets handled per deal considering the outliers present in the data



%ile cut-off or median provides a better representation of outlets per deal handled considering the average would be skewed by the few deals with very high outlets (right tailed distribution)

Note: Only top 10 cities from the previous slide are filtered in this chart

**How many deals should be assigned to a sales rep to close 10-15 deals in a month?**

# Monthly Performance of sales reps show that some have very few datapoints captured to be analysed and few variation amongst the rest

- Deals handled per month is fairly consistent for DS and MJ hence their average deals handled per month is close to the 50<sup>th</sup> percentile
- Everyone else handles exceptionally greater volume of deals in a few odd months than their usual monthly performance skewing their overall performance

## Deals Handled Per Month by Sale Rep

Statistic	AIB	AR	AS	DJ	DS	JHM	JM	KS	MJ	MPS	PN	SG	SS	UNKNOWN
Average	28	112	4	36	69	25.333	67	75	74	13	127	3	132	7
0 %ile	2	112	4	1	2	5	1	1	1	1	55	3	6	1
25 %ile	3	112	4	2	14	18.5	4	2	12	4	74.5	3	73	1
50 %ile	8	112	4	8	60	32	19	2	89	7	94	3	94	1
99 %ile	134	112	4	336	163	39	339	349	159	38	229	3	371	19

- Most reps meet their monthly target <25% of the time, with the exception of DS (60%) and SS (90%)

## Monthly Targets by Sale Rep

KPI	AIB	AR	AS	DJ	DS	JHM	JM	KS	MJ	MPS	PN	SG	SS	UNKNOWN
# Months Worked	9	1	1	20	10	3	13	7	10	8	3	1	10	3
# Months Target Achieved	2	0	0	2	6	0	3	1	2	0	1	0	9	0
% Months Target Achieved	22%	0%	0%	10%	60%	0%	23%	14%	20%	0%	33%	0%	90%	0%



# By excluding the sales reps with insufficient data, we have a sample set that can be further analysed

Step 1/3: Highlight cells with Conversion Rate greater than 18%

Month	# Deals Handled (% Conversion Rate)														Grand Total
	AIB	AR	AS	DJ	DS	JHM	JM	KS	MJ	MPS	PN	SG	SS	UNKNOWN	
Dec 2018				129 (42%)										19 (0%)	148 (36%)
Jan 2019				20 (15%)											20 (15%)
Feb 2019				1 (100%)											1 (100%)
Mar 2019				2 (50%)											2 (50%)
May 2019							1 (100%)								1 (100%)
Jun 2019				1 (100%)			1 (100%)								2 (100%)
Aug 2019				4 (25%)			2 (50%)							1 (0%)	7 (29%)
Sep 2019				1 (100%)										1 (0%)	2 (50%)
Oct 2019				1 (0%)											1 (0%)
Jan 2020				11 (45%)											11 (45%)
Feb 2020				385 (10%)											385 (10%)
Mar 2020				1 (100%)			129 (22%)			5 (0%)					135 (21%)
Apr 2020										1 (0%)					1 (0%)
Jun 2020					2 (100%)			3 (100%)	1 (100%)	38 (0%)			71 (92%)		115 (62%)
Jul 2020	4 (100%)			11 (0%)	8 (88%)		364 (0%)	2 (100%)	5 (80%)	32 (0%)			6 (17%)		432 (4%)
Aug 2020	26 (100%)			19 (5%)	14 (79%)		101 (0%)	1 (100%)	13 (46%)	1 (0%)			48 (65%)		223 (34%)
Sep 2020	141 (87%)			2 (0%)	14 (93%)		159 (22%)	361 (38%)	11 (82%)				99 (41%)		787 (45%)
Oct 2020	3 (100%)			33 (0%)	33 (70%)		19 (11%)	2 (100%)	162 (16%)				100 (28%)		352 (24%)
Nov 2020	2 (100%)			23 (0%)	114 (6%)		18 (22%)	1 (100%)	114 (4%)				77 (23%)		349 (10%)
Dec 2020	2 (100%)			16 (0%)	86 (6%)		27 (56%)		106 (4%)				133 (12%)		370 (11%)
Jan 2021	14 (0%)			56 (2%)	120 (14%)	5 (0%)	47 (0%)	156 (0%)	124 (4%)	7 (0%)	232 (13%)		376 (3%)		1137 (6%)
Feb 2021	50 (4%)			2 (0%)	131 (11%)	39 (3%)	5 (20%)		71 (13%)	7 (0%)	55 (16%)	3 (33%)	317 (8%)		680 (9%)
Mar 2021	8 (100%)	112 (4%)	4 (50%)	2 (0%)	166 (15%)	32 (25%)	4 (50%)		132 (11%)	10 (0%)	94 (6%)		89 (16%)		653 (13%)
Grand Total	250 (68%)	112 (4%)	4 (50%)	720 (15%)	688 (18%)	76 (12%)	877 (10%)	526 (28%)	739 (11%)	101 (0%)	381 (12%)	3 (33%)	1316 (19%)	21 (0%)	5814 (18%)

- Setting the Overall Conversion Rate (18%) as the benchmark to compare individual sales reps' monthly performance leaves us with the above highlighted datapoints

# By excluding the sales reps with insufficient data, we have a sample set that can be further analysed

Step 2/3: Highlight cells with Conversion Rate greater than 10%

Month	# Deals Handled (% Conversion Rate)														Grand Total
	AIB	AR	AS	DJ	DS	JHM	JM	KS	MJ	MPS	PN	SG	SS	UNKNOWN	
Dec 2018				129 (42%)										19 (0%)	148 (36%)
Jan 2019				20 (15%)											20 (15%)
Feb 2019				1 (100%)											1 (100%)
Mar 2019				2 (50%)											2 (50%)
May 2019							1 (100%)								1 (100%)
Jun 2019				1 (100%)			1 (100%)								2 (100%)
Aug 2019				4 (25%)			2 (50%)							1 (0%)	7 (29%)
Sep 2019				1 (100%)										1 (0%)	2 (50%)
Oct 2019				1 (0%)											1 (0%)
Jan 2020				11 (45%)											11 (45%)
Feb 2020				385 (10%)											385 (10%)
Mar 2020				1 (100%)			129 (22%)			5 (0%)					135 (21%)
Apr 2020										1 (0%)					1 (0%)
Jun 2020					2 (100%)			3 (100%)	1 (100%)	38 (0%)			71 (92%)		115 (62%)
Jul 2020	4 (100%)			11 (0%)	8 (88%)		364 (0%)	2 (100%)	5 (80%)	32 (0%)			6 (17%)		432 (4%)
Aug 2020	26 (100%)			19 (5%)	14 (79%)		101 (0%)	1 (100%)	13 (46%)	1 (0%)			48 (65%)		223 (34%)
Sep 2020	141 (87%)			2 (0%)	14 (93%)		159 (22%)	361 (38%)	11 (82%)				99 (41%)		787 (45%)
Oct 2020	3 (100%)			33 (0%)	33 (70%)		19 (11%)	2 (100%)	162 (16%)				100 (28%)		352 (24%)
Nov 2020	2 (100%)			23 (0%)	114 (6%)		18 (22%)	1 (100%)	114 (4%)				77 (23%)		349 (10%)
Dec 2020	2 (100%)			16 (0%)	86 (6%)		27 (56%)		106 (4%)				133 (12%)		370 (11%)
Jan 2021	14 (0%)			56 (2%)	120 (14%)	5 (0%)	47 (0%)	156 (0%)	124 (4%)	7 (0%)	232 (13%)		376 (3%)		1137 (6%)
Feb 2021	50 (4%)			2 (0%)	131 (11%)	39 (3%)	5 (20%)		71 (13%)	7 (0%)	55 (16%)	3 (33%)	317 (8%)		680 (9%)
Mar 2021	8 (100%)	112 (4%)	4 (50%)	2 (0%)	166 (15%)	32 (25%)	4 (50%)		132 (11%)	10 (0%)	94 (6%)		89 (16%)		653 (13%)
Grand Total	250 (68%)	112 (4%)	4 (50%)	720 (15%)	688 (18%)	76 (12%)	877 (10%)	526 (28%)	739 (11%)	101 (0%)	381 (12%)	3 (33%)	1316 (19%)	21 (0%)	5814 (18%)

- Relaxing the Conversion Rate to 10% helps include instances where a Sales Rep handled an extremely large volume of Deals which seems to impact the quality of Monthly Conversion Rate but still meets the monthly target of 10 Deals

# By excluding the sales reps with insufficient data, we have a sample set that can be further analysed

Step 3/3: Highlight cells with Conversion Rate between 10% and 18% with at least 10 deals won

# Deals Handled (% Conversion Rate)															
Month	AIB	AR	AS	DJ	DS	JHM	JM	KS	MJ	MPS	PN	SG	SS	UNKNOWN	Grand Total
Dec 2018				129 (42%)										19 (0%)	148 (36%)
Jan 2019				20 (15%)											20 (15%)
Feb 2019				1 (100%)											1 (100%)
Mar 2019				2 (50%)											2 (50%)
May 2019							1 (100%)								1 (100%)
Jun 2019				1 (100%)			1 (100%)								2 (100%)
Aug 2019				4 (25%)			2 (50%)							1 (0%)	7 (29%)
Sep 2019				1 (100%)										1 (0%)	2 (50%)
Oct 2019				1 (0%)											1 (0%)
Jan 2020				11 (45%)											11 (45%)
Feb 2020				385 (10%)											385 (10%)
Mar 2020				1 (100%)			129 (22%)			5 (0%)					135 (21%)
Apr 2020										1 (0%)					1 (0%)
Jun 2020					2 (100%)			3 (100%)	1 (100%)	38 (0%)			71 (92%)		115 (62%)
Jul 2020	4 (100%)			11 (0%)	8 (88%)		364 (0%)	2 (100%)	5 (80%)	32 (0%)			6 (17%)		432 (4%)
Aug 2020	26 (100%)			19 (5%)	14 (79%)		101 (0%)	1 (100%)	13 (46%)	1 (0%)			48 (65%)		223 (34%)
Sep 2020	141 (87%)			2 (0%)	14 (93%)		159 (22%)	361 (38%)	11 (82%)				99 (41%)		787 (45%)
Oct 2020	3 (100%)			33 (0%)	33 (70%)		19 (11%)	2 (100%)	162 (16%)				100 (28%)		352 (24%)
Nov 2020	2 (100%)			23 (0%)	114 (6%)		18 (22%)	1 (100%)	114 (4%)				77 (23%)		349 (10%)
Dec 2020	2 (100%)			16 (0%)	86 (6%)		27 (56%)		106 (4%)				133 (12%)		370 (11%)
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Grand Total	250 (68%)	112 (4%)	4 (50%)	720 (15%)	688 (18%)	76 (12%)	877 (10%)	526 (28%)	739 (11%)	101 (0%)	381 (12%)	3 (33%)	1316 (19%)	21 (0%)	5814 (18%)

✓ **Recommendation:** Assuming 10-18% conversion rate, every sales rep should aim to handle at least 90-130 Deals in a month to hit their monthly targets

**Assuming one person can close up to 10-15 deals in a month, how many salespeople will you need to close 10,000 outlets in a year? to perform this job efficiently. From a company point of view, it is desirable to have the least amount of salespeople**

# To determine this we need to identify the factors that influence the number of outlets acquired in a given month/year

The following factors could be considered:

- Deals Per Rep per Month
- Outlets per Deal
- Proportion of Restaurant Segments Won
- Avg. Deal Handling Time
- City
- Seasonality (Monthly/Quarterly)

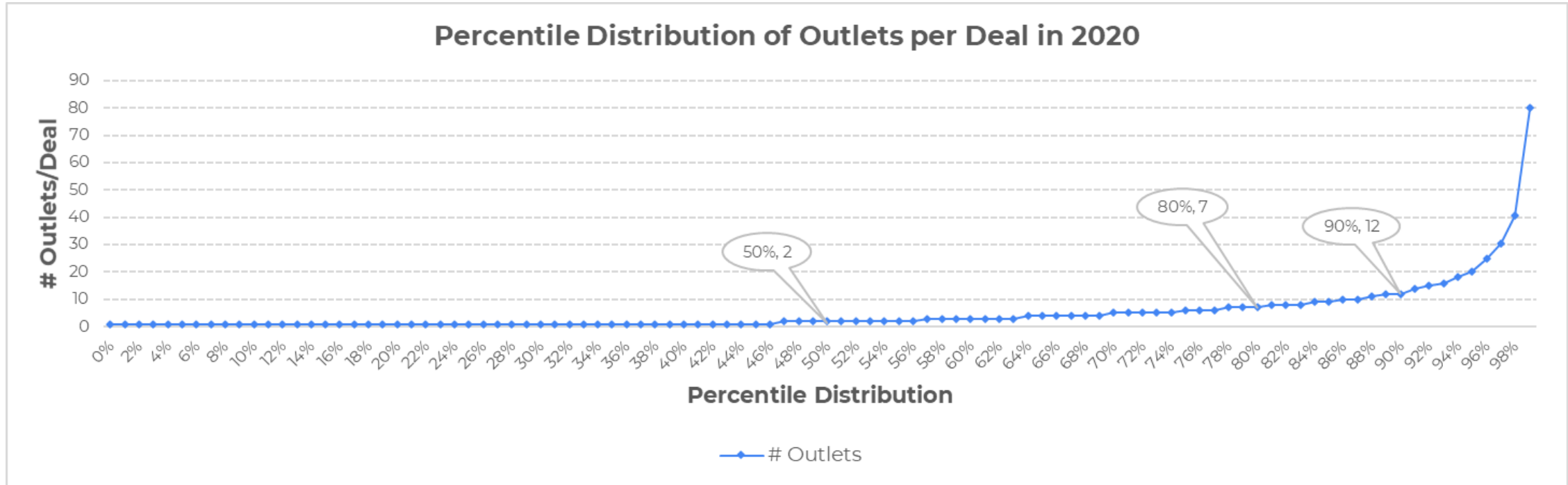
**Objective:** The objective is to optimize the above mentioned parameters to achieve the target of 10,000 deals in a year by minimizing the estimation of number of sales reps required

## Constraints:

1. # Deals Won per Rep: 10 to 15 per month (*Given Assumption*)
2. Outlets per Deal: Upper and Lower bounds for simulation to be determined (*To be calculated using outlets distribution*)
3. # Large, Medium, Small Segment Deals: To be determined based on what is the proportion of Large Segment Deals in 2020
4. # Outlets per Restaurant Segment: To be determined based on the distribution of Outlets per deal in 2020 split by Restaurant Segment

# Sample Estimation using 2 Parameters: # Outlets per deal & # Deals won in a month

- As a simple simulation we can use the below graph to determine the aggregate outlets per deal to consider while calculating minimum number of sales reps required to acquire 10,000 outlets in a year



KPIs	Percentile		
	50%	80%	90%
# Outlets/deal	2	7	12
# Deals/rep/month	15	15	15
Target Outlets	10,000	10,000	10,000
# Sales Reps	28	8	5

This estimate can be improved by adding additional granularity like:

- Restaurant Segment
- City
- Seasonality (Monthly/Quarterly)
- Avg Deal Handling Time... etc.,